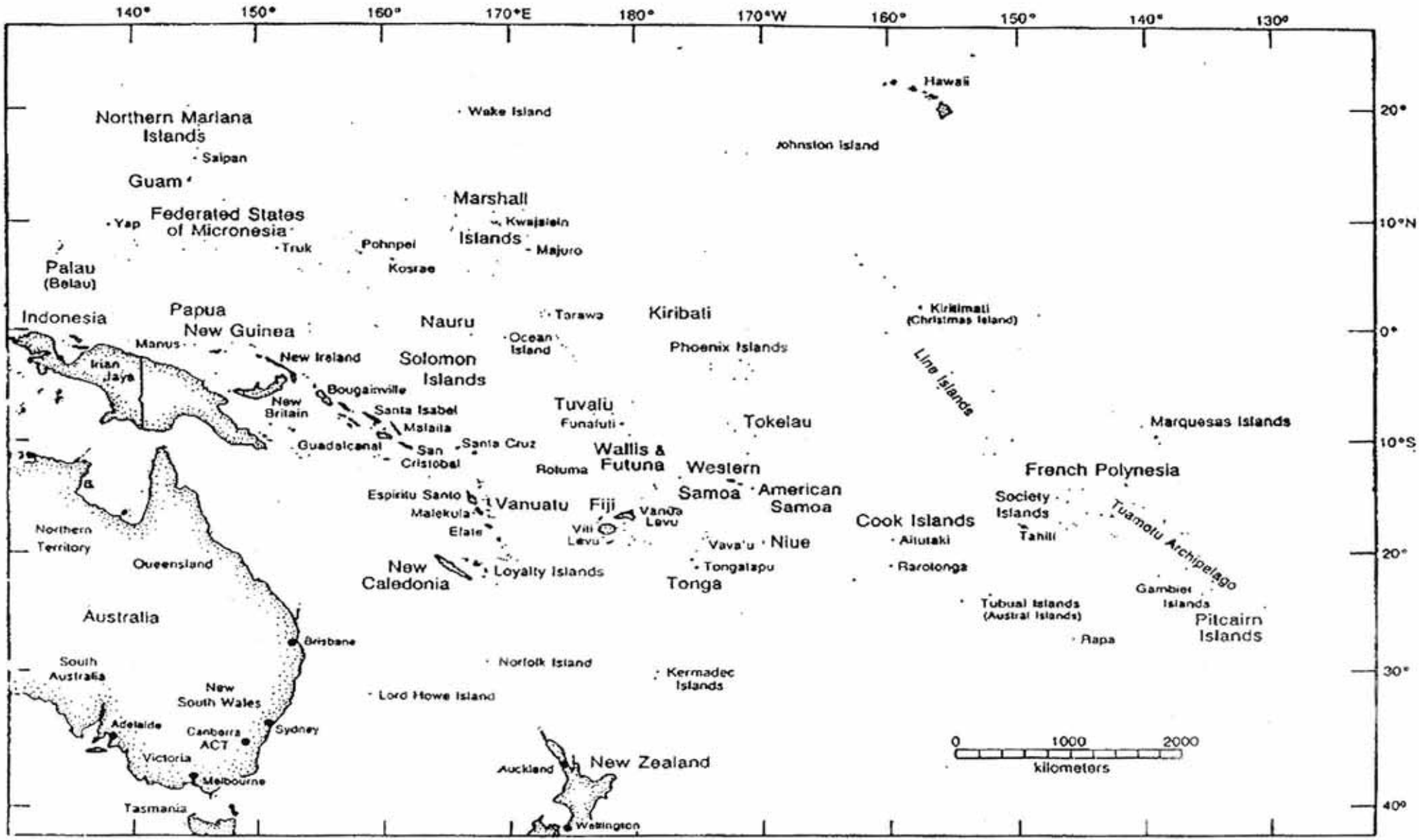
ISSN 1015-7867

PACIFIC MENTAL HEALTH AND ADDICTIONS

Pacific Health Dialog

Journal of Community Health and Clinical Medicine for the Pacific
Volume 15. Number 1. February 2009

The Pacific Region



Pacific Health Dialog

Journal of Community Health and Clinical Medicine for the Pacific

PACIFIC MENTAL HEALTH AND ADDICTIONS

February 2009

Volume 15. Number 1

SUPPORTED BY

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Pacific Health Dialog

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Journal of Community Health and Clinical Medicine for the Pacific

Volume 15. Number 1 February 2009
ISSN 1015-7867

This issue

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FINANCIAL ASSISSTANCE	We thank and acknowledge the main funding is from NZAid with assistance from the Fiji School of Medicine, Massey University and HRCP.

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Subscription information: See inside back cover

Acid Free paper: This journal has been printed on paper that meets the American Standard Permanence of Paper for Publications and Documents in Libraries and Archives (ANSI/NISO Z39.49. 1992 (R1997) and the International Standard Information and Documentation – paper for documents –Requirements for Permanence (ISO 9706: 1994).

Cover: *The Le Va symbol on the cover was designed by graphic designer Sam Ikenasio and Bettina Ikenasio-Thorpe, directors of Ethnic Word. The symbol is a collection of Pacific motifs portraying the strong and respectful relationships between people, organisations, communities and societies that are maintained by Va, and it conveys Le Va as a Pacific organisation. It also draws upon the colours and shapes from the natural environments of the Pacific Islands.*

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Guest Editorial

Dr Monique Faleafa[1]

"So'o le fau ile fau"
- weave and thread fau with fau

Le Va is honoured to sponsor this Pacific Mental Health and Addictions edition of the Pacific Health Dialog (PHD) Journal. The first Pacific woman ever elected into the New Zealand Parliament, Honourable Luamanuvao Winnie Laban, delivered a great speech where she said:

"there is a Samoan proverb that springs to mind: E so'o le fau ile fau - Each thread derives its strength from being interwoven with others to create a strong fine mat".[2]

Each of the papers in this edition represents a thread woven together making up this unique edition of the PHD Journal. The result is a collectively threaded and woven 'ie toga or fine mat, that we humbly present to you, the people, community and sector that we serve.

Original Papers

To set the scene and introduce a broad, evidence based view and perspective is the Kokaua, Schaaf, Foliaki & Wells paper. This paper describes an investigation that looked at the differences in 12-month prevalences of mental disorders and 12-month treatment contact amongst migrants to New Zealand in separate ethnic groups in Te Rau Hinengaro: The New Zealand Mental Health Survey (NZMHS). A major ground-breaking finding now evidenced for us is that Pacific people have higher rates of mental disorder than the general population in New Zealand. The burden of prevalence and severity of mental disorder is highest among NZ-born Pasifika and young Pacific migrants. The authors allude to the suggestion that early exposure to the New Zealand environment is strongly associated to mental disorder – which raises a plethora of adjustment and acculturation questions.

Suaalii-Sauni, et al's qualitative investigation exploring Pacific models of mental health service delivery complements the NZMHS results nicely. An interesting question arose in their discussions as to how to work best with Pacific youth when current Pacific models of service delivery seem to bias the Island-born traditional or adult perspective – a pertinent issue for the future. A key message in their results for our services is that we need to start specifically articulating and documenting the way in which we work, particularly in regards to what makes our way of working uniquely Pacific.

Each of the papers in this edition represents a thread woven together making up this unique edition of the PHD Journal. The result is a collectively threaded and woven 'ie toga or fine mat, that we humbly present to you, the people, community and sector that we proudly serve.

My paper presents a particular field of study in the area of Traumatic Brain Injury (TBI) – an area where Pasifika feature strongly. My study found that there appears to be universalities in TBI experience and global rehabilitation outcomes that transcends individual cultures. However, I also argue that there are micro-level cultural variations that have valuable implications when assessing and treating Pacific peoples in neuro-rehabilitation. For instance, to have the best outcomes for Pacific people, Neuropsychologists need to take into account formal education levels and language abilities when assessing Pacific peoples.

[1] Dr Faleafa is the National Manager of Le Va, the Pacific programme within Te Pou which is the National Centre of Mental Health Research, Information and Workforce Development in New Zealand.
[2] Community Workers Training and Support Trust Forum, 3 September 2007.

Cowley-Malcolm, et al report on the Pacific Islands Families (PIF) study, a longitudinal investigation of a cohort of Pacific infants born in New Zealand (N=1376), and their mothers and fathers. Their account aimed to determine: (1) the prevalence of disciplinary and nurturing parenting practices used with children at 12 months of age, and (2) the demographic, maternal and lifestyle factors associated with parenting practices. Results indicated that there are a number of common underlying lifestyle issues that need to be considered when dealing with parenting problems in families with young children. While results need to be interpreted with caution, interesting findings to ponder were that there was a strong association between parenting behaviour and ethnicity – i.e. Tongan mothers rated higher on discipline than Samoan mothers. The authors suggest immigration patterns as a potential contributing factor, because Samoan's have been residing in New Zealand for a lot longer than the Tongan population in New Zealand, which again gives rise to acculturation questions.

Including addictions research with mental health research was an important priority for Le Va in this edition. While health systems and supporting structures may separate these areas of well-being, I believe in a holistic approach that acknowledges synergies, collaboration and also our unique differences. Alcohol related papers by Sundborn, et al, Nosa & Ofanoa, and Gray & Nosa are diverse covering Pacific adult drinking patterns, social, cultural and medicinal use of kava in Tongan males as well as drinking patterns of Niuean women respectively. Sundborn, et al found that middle-aged and older Pacific adults are less likely to consume alcohol than Europeans, however those who do drink, consume more on a typical occasion but drink less regularly. Nosa & Ofanoa argued that kava drinking is strongly linked to many of the ceremonial, social and cultural obligations that are deeply embedded within the Tongan culture. The positive uses of kava include medicinal purposes, male bonding, alternative to alcohol consumption and reaffirming and establishing relationships amongst other Tongan men. Gray & Nosa's paper explored the binge drinking behaviours and attitudes of nine New Zealand born Niuean women aged 18 to 45 plus years living in Auckland who are heavy binge drinkers. The study highlighted the important role of supportive friends and women within a drinking circle compared to the cultural and gender restrictions when drinking with males.

Gambling amongst Pacific mothers in New Zealand presented in a paper by Perese, et al includes data about gambling activity from the two-year data collection point for a cohort of mothers, again utilising PIF study. This article highlights the importance of this type of prospective study in examining the development of the risk and protective factors in relation to the development of problem gambling.

Tautolo, Schluter & Sundborn investigate the prevalence of potential psychological distress amongst a cohort of Pacific fathers in New Zealand over their child's first 6-years of life. Analysis was based on the PIF study using the 12-item General Health Questionnaire (GHQ12). Results show that prevalence in father's was low, but it tended to increase as the child grew older.

Kokaua presents a second paper along with co-author Wells using the NZMHS in addition to an extract from the Mental Health Information National Collection (MHINC) focussing on the Cook Island population in New Zealand. The study paints a fairly grim picture for our Cook Island families, confirming high prevalence rates, particularly substance use, yet relatively low levels of access to treatment – and when they do access, its at the serious end of the continuum to inpatient and forensic services.

Vaka, et al in their paper look at mental health-related beliefs and practices of Tongan traditional healers and Tongan workers in Western-style mental health services in Tonga. Their contribution speaks of traditional healers having a negative view of Western methods, in that it fails to address the real issues in mental health that are considered more culturally and spiritually-based. This study aimed to inform efforts to foster more synergy and collaboration between traditional and western healing approaches in Tonga and amongst Tongans elsewhere and may also be relevant for other Pacific peoples.

Discussion Papers

A theoretical paper introducing the concept of the "negotiated space" by Mila-Schaaf & Hudson is a description of a model developed by Linda Tuhiwai Smith, Maui Hudson and colleagues describing the interface between different worldviews and knowledge systems. The authors argue that this is primarily a conceptual space of intersection in-between different ways of knowing and meaning making, such as, the Pacific indigenous reference and the dominant Western mental health paradigm of the bio-psycho-social. This discussion paper theorises multiple patterns of possibility of resolutions and relationships within the negotiated space relevant to research, evaluation, model, service development and quality assurance within Pacific mental health.

Samu & Suaalii-Sauni describe cultural competency as 'the ability of individuals and systems to respond respectfully and effectively to the cultural needs of peoples of all cultures' – a fairly well-rounded description given the complexities surrounding simply defining cultural competency. It is fitting that this paper sits next to Mila-Schaaf's article because in mental health Pacific cultural competencies can be seen as a blending of cultural and clinical beliefs and practices. Pacific cultural competencies then exist in the conceptual "negotiated space", at the interface of two knowledge systems. The authors go on to identify some important factors to be considered in order to build and strengthen the capacity and capability of mental health services to provide culturally relevant services.

Pacific Mental Health and Addiction services in the Auckland metropolitan region employ staff in a range of Pacific cultural roles. Parsonage, et al

describe how these roles have emerged over time in response to local community needs and the titles, nature and function of the roles vary. Recognising that cultural responsiveness is critical to improving health outcomes for Pacific peoples, the Northern District Health Board (DHB) Support Agency (NDSA), in collaboration with Moana Pasifika, undertook a project to define a practice framework for Pacific cultural roles within the mental health and addiction sector. This discussion paper outlines the processes and findings of the project, presenting a draft Mental Health and Addiction Pacific Cultural Practice Framework for the Auckland metropolitan area that is supported by Pacific stakeholders.

Bush, et al describe the development of a Pacific child, adolescent and family mental health service based in Porirua, New Zealand. Particular reference is made to the social and demographic characteristics of the population served, and referrals to the service, as well as emphasising the Samoan relational concept of 'self' when working with Pacific people and their families and the implications involved for engagement, assessment and treatment processes in mental health.

Infant mental health is a relatively new area of development for the mental health sector at present. Healthy social and emotional development and attachment for 0-3 year olds can serve as a strong protective factor for mental illness and behavioural problems arising later in life. Masoe & Bush's discussion paper highlights why this developmental stage of life is so important for Pacific communities in New Zealand and elsewhere. Masoe provides a personal perspective on her Samoan reflection on attachment ideas, as well as a discussion of Samoan concepts and research that may inform infant mental health theory and practice.

Despite the emergence of dedicated Pacific mental health services in New Zealand in the last 10 years, there have been few published Pacific models of mental health assessment to guide clinicians working with Pacific clients and their families. Kupa's discussion paper speaks of Vaka Atafaga, a Tokelau model consisting of six core concepts which are considered key aspects of health for Tokelau people. The author relates the personal and professional journey that he has taken to develop Vaka Atafaga over a twenty year period from conceptualisation, through to application in clinical practice in a mental health setting in New Zealand. Similarly, Fotu and Tafa's paper describe the Popao or outrigger canoe model, which is used metaphorically for mental health service users' (primarily Tongan) and professionals' shared understanding of the treatment process as a 'journey' towards recovery and strength within a Pacific paradigm. The Popao model was developed collaboratively by the 'Popao Group' involving a number of key stakeholders in the Pacific mental health sector including service users, community support workers, Matua, clinicians and service providers, particularly Isa Lei – Takanga a Fohe (Waitemata District Health Board).

What binds us all is that every one of us shares a passion for improving mental health and addictions outcomes for Pacific peoples everywhere.

Viewpoints

With regard to viewpoints and perspectives, Alefaio's paper is a personal reflection of her work as a Registered Psychologist working amongst Pacific peoples as well as in and through mainstream and Pacific theories and practices. She presents some very real challenges to the discipline of psychology.

Organizational News and Information

Hughes presents an account of work being undertaken by the World Health Organisation Pacific Islands Mental Health Network (PIMHnet) since its inception in 2006. The author also outlines mental health issues that present particular challenges in the Pacific region, and the innovative approaches which have been taken to address those issues. The article underlines the need for an increased focus on mental health issues in the Pacific.

I would like to sincerely thank all of the contributors and peer reviewers to this edition of the Pacific Health Dialog Journal. I would particularly like to acknowledge Professor Sitaleki Finau and his editorial team for this wonderful opportunity to showcase the Pacific Mental Health and Addictions sector. I also acknowledge and thank my project team led by Manase Lua for bringing people and knowledge together, and making it all happen. The authors and contributors to this edition have dedicated much time, effort and countless hours into these papers and articles. Many of the authors work in the Mental Health and Addictions sector. What binds us all is that every one of us shares a passion for improving mental health and addictions outcomes for Pacific peoples everywhere. It is my privilege to now share these thoughts, journeys and insights with you.

Dr Monique Faleafa
National Manager, Le Va

LeVa

Pasifika within Te Pou

About Le Va

Le Va is the Pacific mental health workforce development programme within Te Pou, New Zealand's National Centre of Mental Health Research, Information and Workforce Development.

Our vision is clear:

Vibrant Pacific Leadership and Well Pacific Families

Well Pacific families require effective health services from a clinically and culturally competent workforce.

Le Va will progress the delivery of effective health services through a series of projects focussing on Pacific mental health workforce development, information use and applied research for Pacific communities and the wider mental health sector.

The concept of Va refers to the "space between". It is fundamentally different from western notions of space defined by open areas, expanses or distances that separate. Va refers to the space that relates, and to the context connected to the individual. It refers to relationships that are collective.

Visit our website for more information:

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Pasifika within Te Pou

Focus on service users

Just as we are trying to infuse Pasifika throughout the mental health and addiction services workforce, so too are we trying to infuse service user input and participation throughout Le Va.

First and foremost is our reference group, Le Leo o Le Va. This group includes a number of people who identify as having personal and lived experience - but it's not only for this experience that they are in Le Leo o Le Va, but for their wisdom and leadership as well.

We don't make a big thing of it, but many of our projects are led by people with personal experience. All achievers in their own right, they have been employed for their knowledge and abilities in project management or research.

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Twelve-month prevalence, severity, and treatment contact of mental disorders in New Zealand born and migrant Pacific participants in Te Rau Hinengaro: The New Zealand Mental Health Survey

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Abstract

Objective: *To investigate differences in 12-month prevalences of mental disorders and 12-month treatment contact among New Zealand born and migrants in separate ethnic groups in Te Rau Hinengaro: The New Zealand Mental Health Survey (NZMHS).*

Data: *The NZMHS is a nationally representative face-to-face household survey, carried out in 2003-2004 with a response rate of 73.3%. It surveyed 12,992 New Zealand adults aged 16 and over. Pacific people were over sampled. This paper focuses on the 2374 Pacific participants but includes for comparison 8160 non-Maori-non-Pacific participants (Others).*

Method: *Multiple logistic regression models were used to produce estimates weighted to account for different probabilities of selection and taking account of the complex survey design.*

Results: *The prevalence of mental disorder was lowest among those who migrated as adults compared with those who migrated as young children (child migrants) or New Zealand-born (NZ born) migrant descendants in both Pacific and other ethnic groups. While Pacific people have higher rates of disorder than Others, many of the observed differences between Pacific and Others were explained by population differences in age and sex.*

Service use in the last 12 months by people with a disorder was low among Pacific peoples overall, but specifically among older migrants. Older Pacific migrants with a disorder had particularly low use of specialist mental health services.

Conclusion: *An interesting picture has emerged regarding need for and use of mental health services. The burden of mental disorder is highest while service use was lower among Pacific peoples generally. Those born in or who migrated as children to New Zealand had higher levels of disorder but were also more likely to use services than older migrants.*

Key words**:** *cross-sectional studies, epidemiology, mental disorders, migration, Pacific, ethnicity.*

Introduction

The social and cultural fabric of Pacific peoples in New Zealand society is diverse, complex and heterogenous. There are differences between cultural groups and also within cultural groups in terms of norms, customs, language, cultural values and behaviours.

Since the early 1950's demand for workers in the manufacturing and service industries culminated in increasing numbers of Pacific peoples emigrating to urban centres of New Zealand. This accelerated dramatically with the economic boom of the 1960's and early 1970's[1, 2]. The establishment of South Pacific Work Schemes recruited labourers from Fiji, Samoa, Tonga, Tuvalu and Kiribati throughout the 1970's. However the economic downturn in

that started in the 1970's and characterised New Zealand's economy in the 1980's and 90's led many Pacific peoples in the manufacturing industries to be laid off or in underemployment.

This created adverse consequences in general living conditions for many Pacific migrants and their families. This alongside pressures of adjustment and acculturation has been speculated to have had a negative impact on the mental health of Pacific peoples living in New Zealand. In addition two distinctive sub-cultures have emerged; a younger New Zealand born and raised population and an older Island Born and raised[3]. This has fostered issues such as shifts and tensions in traditional customs, norms, beliefs and values, which affects individuals' sense of belonging and identity, and social cohesion. Issues of identity for young Pacific peoples are significant, in a bicultural and multicultural environment, balancing the desires to retain a cultural heritage while living in a contemporary society.

There is general recognition that the transition from Island culture to urban and largely palagi (European) dominated cultural norms in New Zealand is difficult and issues of successful adjustment and adaptation to the New Zealand environment and culture need to be considered more thoroughly.

There has been much international evidence of an association between migration and psychiatric disorder or mental wellbeing. These include separate analyses of refugees as well as immigrant worker populations.[4-7]

In addition, there is the emerging notion of a "healthy migrant" in spite of apparent high risk as observed initially among Hispanic or Mexican migrants to the US[8]. This is counter to results from some other studies that pointed to worse mental health among migrants. In a meta-analysis of schizophrenia[9] showed that first generation migrants had high rates but 2nd generation migrants were higher . Higher rates among migrants were influenced by risk factors prevalent in the communities from which individuals had migrated and the ease of their transition into their host country.

Bhugra[10-12] also observed that prevalence of mental disorder was associated with migration but these differences were dependent upon the predisposition of the individual to stress as well as the cultural and social factors from which they came from and arrived to. The European experience tends to highlight the heterogeneity of the groups broadly called migrants[6].

There is a lack of information and research on Pacific peoples' immigration experiences and mental health although there has been some social and historical analysis.[13, 14] Most research has been undertaken on the immigration experiences of refugees, which does not include Pacific peoples.

Only a few Australian or New Zealand based migration studies have been undertaken on the prevalence of mental disorders among immigrants. The Australian experience is different from that of New Zealand Pacific peoples as many publications deal with early European,[15] recent middle eastern immigrants[16, 17] or recent issues among those detained under Australian migration regulations.[18] Within New Zealand, one study focused upon Chinese immigrants[19] and another on a general population comparison which included a small Pacific sample[20]. These focused on general mental disorder or feelings of anxiety or depression with a non clinical rating and seemed to point to aspects of migration as the main influences on disorders, more so than ethnic differences as pointed out in the latter paper. A commentary on the mental health of Tongan migrants[21] pointed to growing concerns about increasing mental illness and substance issues compared with those resident in the Kingdom of Tonga.

Among New Zealand-born Pacific people, 31.4% had a mental disorder which was twice as that of people who migrated at age 18 and over (15.1%).

Prior to the New Zealand Mental Health Survey (NZMHS) estimates about the prevalence of mental disorders among Pacific people in New Zealand had been drawn from the few prevalence studies performed in the Island nations[22] or from Pacific people's use of mental health services in New Zealand. [23,24] In 2006, using NZMHS data, Foliaki et al[25, 26] reported the 12 month prevalence of mental disorder among Pacific people by age at migration and showed that among New Zealand-born Pacific people, 31.4% had a mental disorder which was twice as that of people who migrated at age 18 and over (15.1%). That observation supported international studies that pointed towards migrants having a lower lifetime prevalence of mental disorders.[27-29]

In this paper we compare the 12 month prevalence, severity and treatment contact of mental disorders among New Zealand's Pacific migrant population with their New Zealand born counterparts.

Method

Sample

The NZMHS was a nationally representative household survey of 12 992 adults aged 16 years and over, with a stratified multistage clustered sample design. Face-to-face interviews were carried out between October 2003 and December 2004 by specially trained interviewers, in English. The response rate achieved was 73.3%. More detail regarding survey methods is provided elsewhere.[30]

Pacific people were oversampled. In total, there were 2374 Pacific people, of whom 138 reported both Pacific and Maori ethnicity. This paper includes all 2374 Pacific participants. Some comparisons are made with the 8160 'Others' (non-Maori non-Pacific). All participants answered questions relating to service use as well as mood, substance and some anxiety disorders while a subset of participants went on the answer questions about other anxiety disorders in the long form of the interview. [31, 32: section 13.4.2]

Definitions

Socio-demographic correlates include age at interview, sex and ethnicity and are assessed using 2001 Census of Population and Dwellings questions when possible.

Questions about age at arrival and years since migrating to New Zealand were asked of those who were born outside New Zealand. In earlier analyses[25] age at migration was grouped into four categories: those who migrated to New Zealand at ages less than 12, between 12 and 18 years and 18 years and older and those who did not migrate to New Zealand (NZ born). In this paper, three groups have been used combining those who migrated at 12-18 years and those who migrated at 18 years and older, thus forming one group who migrated at age 12 or more (older migrants). This was to increase the numbers of respondents aged under 45 years of age who migrated at older ages. The other migrant group were those also born in the islands that migrated to New Zealand at age below 12 years (young migrants).

Mental disorders were defined in terms of 12 month prevalence, using the Composite International Diagnostic Interview (CIDI) version 3.0, a widely used computer assisted structured interview that produces valid and reliable psychiatric diagnoses. The CIDI generates DSM IV diagnoses by determining whether the respondent has ever in their lifetime met the criteria for the disorder, then determines the last time the person had an episode or key symptoms of the disorder (irrespective of treatment). If this was within 12 months of interview, this is classified as a 12 month disorder. Prevalence of rare conditions such as schizophrenia and other psychotic disorders could not be reliably estimated from this household survey. Organic brain syndromes such as dementia were also excluded from data collection.[30]

Serious mental disorder was assigned if in the past 12 months there was either: an episode of bipolar I disorder; substance dependence with serious role impairment; a suicide attempt and any mental disorder; at least two areas of severe role impairment due to a mental disorder in the Sheehan Disability Scale domains; or overall functional impairment found in the National Comorbidity Study Replication[33] to be associated with a Global Assessment of Functioning [34] score of 50 or less in conjunction with a mental disorder.[30]

Analyses

Data were weighted to account for the clustered sample design, different probabilities of selection and differential non-response and post-stratified to the 2001 New Zealand Census of Population and Dwellings by age sex and ethnicity. All prevalence estimates reported are the population-weighted estimates. Multivariable models were analysed by multiple logistic regression using SUDAAN and SAS (version 9.1.2).

The first 'unadjusted' model regresses the logit of the (prevalence or service) variable of interest on ethnicity (Pacific and Other) and migration (NZ born, young and older migrants). The second, 'adjusted' model is the same as the 'unadjusted' model but also includes age at interview (16-24, 25-44, 45-64, 65+ years) and sex alongside ethnicity and migration.

Results

Age at Migration of those sampled

Table 1. Place of birth or age at migration for Pacific and Others by age group: percentage (95%CI).

Pacific	Age Group (Years)	NZ Born n=889	Young migrants n=307	Older migrants n=1178
	16 to 24	69.0 (62.5,75.5)	16.8 (12.2,21.4)	14.2 (9.0,19.4)
	25 to 44	44.8 (40,49.6)	15.7 (12.5,18.9)	39.5 (34.7,44.3)
	45 to 64	12.2 (8.8,15.7)	7.3 (4.6,10.0)	80.4 (76.3,84.6)
	65+	2.4 (0.0,5.1)	3.2 (0.6,5.7)	94.4 (90.6,98.2)
	Total	42.1 (38.6,45.6)	13.5 (11.5,15.6)	44.3 (40.7,48)
Others[1]	**Age Group (Years)**	**NZ Born n=6182**	**Young migrants n=402**	**Older migrants n=1576**
	16 to 24	70.2 (66.1,74.3)	11.1 (8.5,13.6)	18.8 (15.2,22.4)
	25 to 44	73.1 (70.9,75.3)	5.4 (4.5,6.3)	21.5 (19.4,23.7)
	45 to 64	76.9 (74.9,79)	4.5 (3.7,5.4)	18.5 (16.7,20.4)
	65+	74.5 (72.2,76.8)	2.5 (1.7,3.3)	23.0 (20.8,25.2)
	Total	74.1 (72.6,75.6)	5.4 (4.8,6.0)	20.5 (19.1,21.8)

[1] *Non-Maori Non-Pacific*

Table 1 is the weighted percentage in different age

groups for Pacific and Other' participants, by place of birth and age at migration. For Pacific participants, 42.1% (n=889) were born in New Zealand (NZ born), 13.5% (n=307) migrated under 12 years of age (young migrants) and 44.3% (n=1178) migrated to New Zealand when they were 12+ years and older (older migrants). Other participants comprised of people from non-Maori and non-Pacific ethnic groups of whom three quarters (74.1%), were born in New Zealand (n=6182), 5.4% (n=402) migrated under 12 years of age (young migrants), and 20.5% (n=1576) migrated to New Zealand when they were 12+ years and older (older migrants).

Among Pacific participants, much higher proportions of people in the two younger age groups were NZ born. On the other hand a higher proportion (74.1%), of Other participants were born in New Zealand compared with 42.1% of Pacific participants, which reflects our recent migration history. Interestingly, only 5.4% of Other participants were young migrants compared with 13.5% in Pacific participants. Both however are small compared with the other two categories in both ethnic groups.

Twelve month prevalence and severity of mental disorders in migrant and New Zealand born Pacific people

Table 2 shows the twelve month prevalence and severity of diagnosed mental disorders for Pacific and Other participants by place of birth and age at migration. The prevalence of any mental disorder among Pacific participants, not adjusted for age or sex, was 31.9% for NZ born, 31.0% for young migrants and 16.6% for older migrants. Among Other participants the prevalences for any mental disorder were; 20.6% for NZ born, 18.9% for young migrants and 14.7% for older migrants.

Overall, for Pacific participants, the prevalence of mental disorder was higher for NZ born, followed by their young migrants and than their older migrants counterparts. These differences were dependent on age and sex as when they were adjusted or controlled for, the differences were much reduced and often were no longer statistically significant. Other participants showed the same pattern as Pacific participants whereby the NZ born showed higher prevalence of mental disorders, followed by the young migrants then older migrants. As for Pacific participants, these differences were reduced following adjustment for age and sex but with larger sample sizes in the Other participants group they remained statistically significant.

A similar overall pattern was shown for severity of mental disorders. However the difference among NZ born and the migrant groups changed little with adjustment for age and sex.

Table 3 is the odds ratios for mental disorders by

Table 2. 12-month prevalence and severity of diagnosed mental disorders† among Pacific and 'Other' participants by place of birth and age at migration.

	Pacific			Other		
	NZ Born	Young migrants	Older migrants	NZ Born	Young migrants	Older migrants
	% (95%Ci)	% (95%Ci)	% (95%Ci)	% (95%Ci)	% (95%Ci)	% (95%Ci)
Mental Disorder						
Any mental disorder‡						
Unadjusted	31.9 (26.3, 37.6)	31.0 (21.4, 40.6)	16.6 (13.3, 19.9)	20.6 (19.1, 22.1)	18.9 (13.9, 23.8)	14.7 (12.2, 17.3)
Adjusted for Age and Sex	24.1 (19.1, 29.1)	24.7 (16.2, 33.3)	17.2 (13.7, 20.7)	20.8 (19.3, 22.3)	17.0 (12.5, 21.5)	15.4 (12.8, 18.0)
Any mood disorder						
Unadjusted	11.6 (7.8, 15.4)	13.3 (8.3, 18.4)	4.6 (3.3, 5.9)	7.7 (6.9, 8.5)	10.5 (7.2, 13.8)	6.0 (4.4, 7.5)
Adjusted for Age and Sex	8.3 (5.5, 11.0)	10.3 (6.3, 14.2)	4.8 (3.4, 6.2)	7.8 (7.0, 8.6)	9.3 (6.3, 12.2)	6.2 (4.6, 7.8)
Any Anxiety disorder‡						
Unadjusted	20.5 (16.2, 24.8)	17.9 (11.2, 24.6)	11.7 (8.8, 14.5)	15.1 (13.9, 16.3)	12.8 (9.0, 16.6)	10.8 (8.7, 12.9)
Adjusted for Age and Sex	16.6 (12.7, 20.6)	14.4 (8.7, 20.1)	11.8 (8.9, 14.7)	15.2 (13.9, 16.4)	12.0 (8.4, 15.6)	11.3 (9.1, 13.5)
Any Substance disorder						
Unadjusted	8.1 (5.9, 10.4)	4.2 (1.7, 6.7)	3.0 (1.4, 4.6)	3.0 (2.5, 3.6)	4.5 (2.0, 7.1)	1.2 (0.5, 1.9)
Adjusted for Age and Sex	4.1 (2.9, 5.3)	2.6 (1.1, 4.2)	3.5 (1.6, 5.4)	3.2 (2.6, 3.8)	3.3 (1.4, 5.1)	1.2 (0.5, 1.9)
Severity						
Serious mental disorder‡						
Unadjusted	7.0 (4.6, 9.4)	7.9 (3.9, 11.8)	4.2 (2.7, 5.6)	4.4 (3.8, 5.0)	4.4 (2.3, 6.5)	2.9 (1.9, 3.9)
Adjusted for Age and Sex	4.9 (3.1, 6.6)	6.0 (2.9, 9.2)	4.3 (2.8, 5.9)	4.5 (3.8, 5.1)	3.8 (2.0, 5.7)	3.0 (2.0, 4.1)
2 or more disorders‡						
Unadjusted	4.7 (3.1, 6.2)	5.4 (2.3, 8.5)	1.8 (1.0, 2.6)	4.1 (3.5, 4.6)	5.1 (2.7, 7.5)	2.5 (1.6, 3.4)
Adjusted for Age and Sex	3.4 (2.1, 4.6)	4.1 (1.6, 6.6)	1.9 (1.1, 2.7)	4.1 (3.5, 4.7)	4.6 (2.4, 6.8)	2.6 (1.7, 3.6)

†DSM-IV CIDI 3.0 disorders with hierarchy [32: section 13.4.1]; ‡Assessed in the subsample who did the long form interview [32: section 13.4.2];

Table 3. Odds ratios and the severity of mental disorders† by ethnicity, place of birth and age at migration.

	Pacific vs Other‡‡ (Reference Group)	Pacific only	
		NZ Born vs Older migrants†† (Reference Group)	Young migrants vs Older migrants†† (Reference Group)
	OR (95% CI) p-value	OR (95% CI) p-value	OR (95% CI) p-value
Mental Disorder			
Any mental disorder‡			
Unadjusted	1.2 (1.0, 1.5) 0.04	2.4 (1.6,3.4) <0.0001	2.3 (1.4,3.7) 0.001
Adjusted for Age and Sex	1.1 (0.9, 1.4) 0.4	2.2 (1.5,3.3) 0.0001	2.1 (1.2,3.4) 0.005
Any mood disorder			
Unadjusted	1.0 (0.8, 1.3) 0.9	2.7 (1.7,4.4) <0.0001	3.2 (1.9,5.4) <0.0001
Adjusted for Age and Sex	0.9 (0.7, 1.1) 0.3	2.6 (1.6,4.3) 0.0001	3.1 (1.8,5.2) <0.0001
Any anxiety disorder‡			
Unadjusted	1.1 (0.9, 1.4) 0.4	2.0 (1.3,2.9) 0.0006	1.7 (1,2.8) 0.07
Adjusted for Age and Sex	1.0 (0.8, 1.2) 0.8	1.9 (1.2,3.1) 0.006	1.5 (0.9,2.7) 0.2
Any Substance disorder			
Unadjusted	1.4 (1.0, 2.0) 0.04	2.9 (1.5,5.4) 0.001	1.4 (0.6,3.3) 0.4
Adjusted for Age and Sex	1.2 (0.8, 1.7) 0.4	1.7 (0.9,3.5) 0.1	1 (0.4,2.3) 0.9
Severity			
Any serious mental disorder‡			
Unadjusted	1.3 (0.9, 1.7) 0.1	1.7 (1,2.9) 0.04	2.0 (1,3.8) 0.04
Adjusted for Age and Sex	1.0 (0.7, 1.3) 0.8	1.4 (0.8,2.5) 0.2	1.7 (0.8,3.2) 0.1
2 or more disorders‡			
Unadjusted	0.8 (0.6, 1.1) 0.2	2.6 (1.5,4.6) 0.0007	3.0 (1.4,6.5) 0.004
Adjusted for Age and Sex	0.7 (0.5, 0.9) 0.02	3.0 (1.4,6.4) 0.004	3.1 (1.4,6.9) 0.007

†DSM-IV CIDI 3.0 disorders with hierarchy [32: section 13.4.1]; ‡Assessed in the subsample who did the long form interview [32: section 13.4.2]; ‡‡ These results are taken from a logistic regression using both Pacific and other participants and also account for place of birth and age at migration; †† These results are taken from a logistic regression for Pacific participants only.

ethnicity, place of birth and age at migration. The first column in Table 3 reports the odds ratios from logistic regressions on responses from both Pacific and Other participants. It compares the two ethnic groups (Other is the reference ethnic group), having taken into account age at migration of respondents. This was the model used to estimate the prevalence rates shown in table 2. Table 3 showed that Pacific participants reported an odds ratio that was 20% higher for any mental disorder (p=0.04) compared with that for Other participants. The odds ratio for any substance disorder among Pacific participants was 40% higher than Other participants (p=0.04). In terms of severity, there were no ethnic differences. However, after adjustment for age at interview and sex, these ethnic differences were no longer statistically significant. Interestingly, the odds ratio reported by Pacific participants was 30% less than Other participants for multiple disorders (p=0.02).

Columns 2 and 3 in Table 3 report the odds ratios from the logistic regressions on the Pacific participants only. They show a comparison for Pacific participants between older migrants with 1) NZ born and 2) young migrants.

The odds ratio of NZ born Pacific participants having any mental disorder in the 12 months prior to the survey were 2.4 times that of older migrants (p<0.0001). Moreover, they had 2.7 times the odds ratio of being diagnosed with any mood disorder (p<0.0001), twice that of having any anxiety disorder (p=0.0006), and nearly three times that of having any substance disorder (p=0.001).

In terms of severity, the odds ratio for NZ born Pacific participants was 70% higher for any serious mental disorder (p=0.04), and 2.6 times higher for two or more disorders (p=0.0007).

Overall for Pacific participants, the differences between NZ born and older migrants were largely independent of age and sex as the odds ratios were reduced very little after adjustment and remained significant, except for substance use disorder and severity. For substance use disorder the odds ratio decreased from 2.9 to 1.7 and became non-significant (p=0.1). For severity, there was only a small decreaseof 1.7 (p=0.04) down to 1.4 (p=0.2). The odds ratio of NZ born having 2 or more disorders was three times higher than their older migrants counterparts (p=0.004).

The third column of Table 3 is the comparison between young migrants and older migrants for Pacific participants only. Pacific people that were young migrants had odds ratios that were over twice that for older migrants for any mental disorder (p=0.001) and over three times for any mood disorder (p<0.0001). In terms of severity, the odds ratios of young migrants having any serious mental disorder was two times more than that of older migrants (p=0.04), and three times higher for two or more disorders (p=0.004).

Overall for Pacific participants, the differences between young and older migrants were also independent of age and sex as the odds ratios were reduced very little after adjustment and remained significant. After adjustment for age and sex the odds ratios for any mental disorder was 2.1 (p=0.005) and 3.1 for any mood disorder (p<0.0001). In terms of severity, only young migrants with two or more disorders remained independent of age and sex (OR=3.1, p=0.007) compared to older migrants.

Table 4. Prevalence of health service use in the past 12 months among 'Pacific' and 'Other' participants, who had a 12 month mental disorder, by place of birth and age at migration.

	Pacific			Other		
	NZ Born	Young migrants	Older migrants	NZ Born	Young migrants	Older migrants
	% (95%CI)	% (95%CI)	% (95%CI)	% (95%CI)	% (95%CI)	% (95%CI)
Visits to any health service for a mental health problem‡						
Unadjusted	54.6 (45.4, 63.7)	44.6 (31.5, 57.8)	39.4 (30.2, 48.7)	75.5 (72.6, 78.3)	70.2 (59.4, 81.0)	62.1 (54.6, 69.7)
Adjusted for Age and Sex	62.5 (54.2, 70.7)	48.8 (35.2, 62.5)	36.8 (27.9, 45.7)	74.9 (71.9, 77.8)	72.2 (61.9, 82.6)	62.7 (55.1, 70.3)
Mental health specialist service use‡						
Unadjusted	38.7 (30.2, 47.1)	32.1 (19.4, 44.9)	12.9 (6.7, 19.2)	51.4 (48.3, 54.4)	53.0 (41.4, 64.5)	34.3 (27.2, 41.4)
Adjusted for Age and Sex	40.6 (31.9, 49.3)	32.3 (19.5, 45.0)	12.9 (6.6, 19.1)	51.1 (48.0, 54.2)	53.8 (42.2, 65.4)	34.8 (27.7, 42.0)

‡ Assessed for those who had a mental disorder

Service use

Table 4 is the prevalence of health service use in the past 12-months among Pacific and Other participants who had a mental disorder by place of birth and age at migration.

The percentage of Pacific participants diagnosed with a mental disorder in 12 months that visited any health service for their mental health problem was 54.6% for NZ born, 44.6% for young migrants and 39.4% for older migrants. Mental health specialist service use by Pacific participants was 38.7% for NZ born, 32.1% for young migrants and 12.9% for older migrants. This difference remained even after adjustment for age and sex. Interestingly the difference in visits to any health service for a mental health problem became statistically significant after adjusted for age and sex among NZ born and older migrants Pacific participants.

Use of health services for mental health disorder was much higher for Other participants with disorder than for Pacific participants with disorder but showed a similar pattern. It was highest for NZ born (75.5%), followed by young migrants (70.2%) and older migrants (62.1%) when looking at any health service use. For mental health specialist service use NZ born (51.4%) were highest, followed by young migrants' (53.0%) and older migrants (34.3%). Only NZ born and older migrants were statistically significantly different and this remained significant after adjusted for age and sex.

Over all, the ethnic pattern of service utilisation is different from that for the prevalence of mental disorders. Other participants have lower prevalence of mental disorder than Pacific participants but were more likely to use any health service or specialist mental health services if they had a mental disorder.

Table 5 shows the odds ratios for health service use in the past 12 months by ethnicity, place of birth and age at migration.

Column 1 in Table 5, shows that Pacific participants were 60% less likely to visit any health service for a mental health problem with odds ratio of 0.4, (p<0.0001), compared with Other participants. The same pattern was found for mental health specialist service use. Pacific participants were 50% less likely to visit a mental health specialist with odds ratio of 0.5 (p<0.0001), compared with Other participants. These odds ratios remained statistically significant after adjustment for age and sex.

Columns 2 and 3 of Table 5 show the odds ratios for service use in the past 12 months for Pacific participants only who were diagnosed with any mental illness 12 months prior to participating in the survey. The odds ratio for NZ born participants diagnosed with a mental disorder in the past 12 months and visited any health service for a mental health problem was two and a half times more than that of their older migrants counterparts (p<0.0001). The same pattern was found for mental health specialist service use. NZ born participants had odds ratio of visiting a mental health specialist that were nearly six times that of older migrants (p<0.0001). These differences remained statistically significant and increased after adjustment for age and sex.

Finally, young migrants who were diagnosed with a mental disorder in the past 12 months prior to taking part in the survey, had odds ratio of 4.6 (p=0.0007), nearly five times that of their older migrants counterparts, to visit a mental health specialist. A

similar pattern was found in terms of visits to any health service for a mental health problem where the odds ratio for young migrants was 1.9 (p=0.04), nearly double the odds ratio for their older migrants counterparts for visits to any health service for a mental health problem.

Overall Pacific participants were less likely to use any health services or see a mental health specialist for a mental disorder compared to Other participants. This finding remained after adjustment for age and sex. Pacific older migrants were less likely than their NZ born or young migrants counterparts to use any health provider or mental health specialist for a mental health disorder.

Table 5. Odds ratios for health service use in the past 12 months by ethnicity, place of birth and age at migration

	Pacific vs Other‡‡ (Reference Group)	Pacific only	
		NZ Born vs Older migrants †† (Reference Group)	Young migrants vs Older migrants†† (Reference Group)
	OR (95% CI) p-value	OR (95% CI) p-value	OR (95% CI) p-value
Visits to any health service for a mental health problem‡			
Unadjusted	0.4 (0.3, 0.6) <0.0001	2.5 (1.6,4) <0.0001	1.9 (1,3.6) 0.04
Adjusted for Age and Sex	0.5 (0.3, 0.6) <0.0001	3.1 (1.9,5.1) <0.0001	2.2 (1.1,4.2) 0.02
Mental health specialist service Use‡			
Unadjusted	0.5 (0.4, 0.7) <0.0001	5.7 (2.9,11.2) <0.0001	4.6 (1.9,11.2) 0.0007
Adjusted for Age and Sex	0.5 (0.4, 0.7) <0.0001	6.6 (3.1,13.8) <0.0001	4.7 (1.8,12.1) 0.001

‡ Assessed for those who had a 12 month mental disorder; ‡‡ These results are taken from a logistic regression using both Pacific and other participants and also account for place of birth and age at migration; †† These results are taken from a logistic regression for Pacific participants only.

Discussion

This paper confirmed previous results for Pacific and Other ethnic groups that showed Pacific people had a higher 12 month prevalence of any disorder and serious disorder compared with Others.[35] A similar pattern was shown in terms of severity of mental disorders. However these ethnic differences in prevalence were mostly explained by age and sex except for the prevalence of multiple disorders. The paper also showed that Pacific people also were less likely to utilise health services if they had a mental disorder. These ethnic differences remained after adjustment for both age and sex. This is the classic 'Inverse Care Law', where the "availability of good medical care tends to vary inversely with the need for it in the population served".[36]

This paper also showed that the prevalence of mental disorders was higher among NZ born followed by young migrants than older migrants for both Pacific and Other participants. This pattern was found for diagnosis of mental disorders as well as severity. For Pacific participants the difference between NZ born and older migrants changed little with adjustment for age and sex, except for substance disorder. This may suggest that early exposure to the New Zealand environment is strongly associated with high levels of mental disorder among Pacific people. In addition, among Pacific participants, NZ born were more likely to use any health care service compared to their older migrants counterparts.

These findings ask questions around pressures of adjustment and acculturation. These might include social, geographic, cultural, and economic pressures. These are important factors that require further investigation in terms of their actual impact on mental health of Pacific people. Furthermore, are these symptoms of a health system failure or are there societal and wider cultural issues at play?

The authors acknowledge that while these results highlight some important issues about Pacific migrants and their descendants, as a cross-sectional study a direct link to migration as a cause of mental disorders among Pacific people cannot be ascertained. The issues around migration of Pacific people would need further study to be better understood.

Acknowledgements

Te Rau Hinengaro: The New Zealand Mental Health Survey was funded by the Ministry of Health, Alcohol Advisory Council and Health Research Council of New Zealand. The survey was carried out in conjunction with the World Health Organization World Mental Health (WMH) Survey Initiative. We thank the WMH staff for assistance with instrumentation, fieldwork and data analysis. These activities were supported by the US National Institute of Mental Health (R01MH070884), the John D and Catherine T MacArthur Foundation, the Pfizer Foundation, the US Public Health Service (R13-MH066849, R01-MH069864, and R01 DA016558), the Fogarty International Center (FIRCA R01-TW006481), the Pan American Health Organization, Eli Lilly and Company, Ortho-McNeil Pharmaceutical, Inc., GlaxoSmithKline, and Bristol-Myers Squibb. WMH publications are listed at http://www.hcp.med.harvard.edu/wmh/

Other members of the Te Rau Hinengaro Research Team are M Oakley-Browne, J Baxter, T K Kingi, R Tapsell, M H Durie, K M Scott and C Gale.

We particularly acknowledge the input by the Pacific Advisory Group: Fuimaono Karl Pulotu-Endemann, Francis Agnew, Vito Malo, Reverend Feiloaiga Taule-ale-ausumai, Hemiquaver Lesatele, Lina-Jodi Vaine Samu Tuiloma and Sefita Hao'uli.

We thank the Kaitiaki Group for their input and support for this survey and we thank all the participants.

References

1. Spoonley P. Pacific Communities: Transforming the Politics of Place and Identity, In: Macpherson C, Spoonley P, and Anae M, eds. Tangata 0 Te Moana Nui: evolving identities of Pacific Peoples in Aotearoa New Zealand. Palmerston North, N.Z.: Dunmore Press 2001.
2. Krishnan V, Schoeffel P, Warren J. The Challenge of change: Pacific Island communities in New Zealand, 1986-1993. Wellington, NZ: NZ Institute for Social Research & Development, 1994.
3. Tiatia J, Coggan C, Young Pacific suicide attempts: a review of emergency department medical records, Auckland, New Zealand. Pacific Health Dialog 2001; 8:124-128.
4. Lindencrona F, Ekblad S, Hauff E, Mental health of recently resettled refugees from the Middle East in Sweden: the impact of pre-resettlement trauma, resettlement stress and capacity to handle stress. Social Psychiatry & Psychiatric Epidemiology 2008; 43:121-31.
5. Abhary S, Koopowitz LF, Psychiatric aspects of detention: illustrative case studies. Australian & New Zealand Journal of Psychiatry 2004; 38:495-500.
6. Lindert J, BrÃ¤hler E, Wittig U, Mielck A, Priebe S, [Depression, anxiety and posttraumatic stress disorders in labor migrants, asylum seekers and refugees. A systematic overview]. Psychotherapie, Psychosomatik, medizinische Psychologie 2008; 58:109-22.
7. Fazel M, Wheeler J, Danesh J, Prevalence of serious mental disorder in 7000 refugees resettled in western countries; a systematic review. Lancet 2005; 365:1309-1314.
8. Flores G, Brotanek J, The healthy immigrant effect. Archive of Podiatry and Adolescent Medicine 2005; 159:295-297.
9. Cantor-Graae E, Selten JP, Schizophrenia and Migration: a meta-analysis and review. American Journal of Psychiatry 2005; 162:12-24.
10. Bhugra D, Migration and Depression. Acta Psychiatrica Scandinavica 2003; 418:67-72.
11. Bhugra D, Migration and mental health. Acta Psychiatrica Scandinavica 2004; 109:243-258.
12. Bhugra D, Cultural identities and cultural congruency: A new model for evaluating mental distress in immigrants. Acta Psychiatrica Scandinavica 2005; 111:84-93.
13. Macpherson C. Pacific Islands identity and community, In: Spoonley P, Pearson D, and Macpherson C, eds. Nga Patai: Racism and ethnic relations in Aotearoa/New Zealand. Palmerston North: Dunmore Press, 1996.
14. Macpherson C. From Pacific Islanders to Pacific People: The past, present, and future of the Pacific population in Aotearoa, In: Spoonley P, Macpherson C, and Pearson D, eds. Tangata, Tangata: The changing contours of ethnicity in Aotearoa New Zealand. Palmerston North: Dunmore Press, 2004:135-156.
15. Morrell S, Taylor R, Slaytor E, P. F, Urban and rural suicide differentials in migrants and the Australian-born, New South Wales, Australia 1985-1994. Social Science and Medicine 1999; 49:81-91.
16. Khavarpour F, Rissel C, Mental health status of Iranian migrants in Sydney. Australian & New Zealand Journal of Psychiatry 1997; 316:828-834.
17. McGrath J, El-Shaadi O, Cardy S, Chapple B, Chant D, Mowry B, Urban birth and migrant status as risk factors for psychosis: an Australian case control study. Social Psychiatry & Psychiatric Epidemiology 2001; 36:533-536.
18. Koopowitz LF, Sotoodeh A, Paychiatric aspects of detention:illustrative case studies. Australian & New Zealand Journal of Psychiatry 2004; 38:495-500.
19. Abbott MW, Wong S, Williams M, Au M, Young W, Chinese migrants' mental health and adjustment to life in New Zealand. Australian and New Zealand Journal of Psychiatry 1999; 33:13-21.
20. Pernice R, Brook J, Refugees and immigrants mental health: association of demographic and post immigration factors. Journal of Social Psychology 1996; 136:511-519.
21. Foliaki S, Mental health among Tongan migrants. Pacific Health Dialog 1999; 6:288-294.
22. Allen J, Laycock J, Major mental illness in the Pacific: a review. Pacific Health Dialog 1997; 4:105–118.
23. Ministry of Health. Te orau ora: Pacific mental health profile. Wellington: Ministry of Health, 2005.
24. Bridgeman G. Mental illness and people from the island nations of the Pacific. Wellington: Mental Health Foundation of New Zealand, 1996.
25. Foliaki S, Kokaua J, Schaaf D, Tukuitonga C, for the New Zealand Mental Health Survey Research Team. Twelve-month and lifetime prevalences of mental disorders and treatment contact among Pacific people in Te Rau Hinengaro: the New Zealand Mental Health Epidemiology Survey (NZMHS), In: Oakley Browne MA, Wells JE, and Scott KM, eds. Te Rau Hinengaro: the New

Zealand Mental Health Survey. Wellington: Ministry of Health, 2006.

26. Foliaki SA, Kokaua J, Tukuitonga C, Schaaf D, for the New Zealand Mental Health Survey Research Team, Twelve-month and lifetime prevalence of mental disorders and treatment contact among Pacific people in Te Rau Hinengaro: the New Zealand Mental Heatlh Survey (NZMHS). Australian and New Zealand Journal of Psychiatry 2006; 40:924-934.
27. Vega WA, Kolody B, Aguilar-Gaxiola S, Alderete E, Catalano R, Caraveo-Anduaga J, Lifetime prevalence of DSM-III-R psychiatric disorders among urban and rural Mexican Americans in California. Archives of General Psychiatry 1998; 55:771–778.
28. Escobar JI, Hoyos Nervi C, Gara M, Immigration and mental health: Mexican Americans in the United States. Harvard Review of Psychiatry 2000; 8:64-72.
29. Breslau J, Kendler KS, Su M, Gaxiola-Aguilar S, Kessler RC, Lifetime risk and persistence of psychiatric disorders across ethnic groups in the United States. Psychological Medicine 2005; 35:317-27.
30. Wells JE, Oakley Browne MA, Scott KM, McGee MA, Baxter J, Kokaua J, for the New Zealand Mental Health Survey Research Team, Te Rau Hinengaro: the New Zealand Mental Health Survey (NZMHS): overview of methods and findings. Australian and New Zealand Journal of Psychiatry 2006; 40:835-844.
31. Wells JE, McGee MA, Oakley Browne MA. Methods, In: Oakley Browne MA, Wells JE, and Scott KM, eds. Te Rau Hinengaro: the New Zealand Mental Health Survey. Wellington: Ministry of Health, 2006.
32. Wells JE, McGee MA, Oakley Browne MA. Methods, In: Oakley Browne MA, Wells JE, and Scott KM, eds. Te Rau Hinengaro: The New Zealand Mental Health and Wellbeing Survey. Wellington: Ministry of Health, forthcoming.
33. Kessler RC, Chiu WT, Demler O, Merikangas KR, Walters EE, Prevalence, severity, and comorbidity of 12-month DSM-IV disorders in the National Comorbidity Survey Replication. Archives of General Psychiatry 2005; 62:617-627.
34. Endicott J, Spitzer RL, Fleiss JL, Cohen J, The Global Assessment Scale: a procedure for measuring overall severity of psychiatric disorders. Archives of General Psychiatry. 1976; 27:766-771.
35. Baxter J, Kokaua J, Wells JE, McGee MA, Oakley Browne MA, Ethnic comparisons of the 12 month prevalence of mental disorders and treatment contact in Te Rau Hinengaro: The New Zealand Mental Health Survey. *Australian & New Zealand Journal of Psychiatry 2006; 40:905-913.*
36. Hart J, The inverse care law. Lancet 1971; 7696:405–412.

Exploration of Pacific perspectives of Pacific models of mental health service delivery in New Zealand

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Abstract

There is increasing concern about the inequalities, overall health outcomes, and mental health of Pacific peoples residing in New Zealand. The New Zealand Mental Health Survey (Te Rau Hinengaro), conducted in 2003/2004, identified Pacific peoples as having a higher 12-month prevalence of mental disorders than the general population. The burden of mental health amongst Pacific peoples was identified as high and associated with other socioeconomic correlates. Pacific peoples were also more likely not to access professional mental health assistance.

The aim of this study was to provide indepth qualitative data that explored Pacific perceptions and experience of the theory, practice, and utilisation of Pacific mental health services in New Zealand. This paper documents: (i) the different models of care practiced in the Pacific mental health sector, and (ii) the specific components that: (a) make these models uniquely Pacific, and (b) that consumers and families identified as integral to the recovery process.

Pacific peoples' views of mental health from the following three perspectives were studied: (i) the service provider, (ii) the mental health consumer, and (iii) the family member, using focus group interviews in Auckland, Hamilton, Wellington, and Christchurch.

The results report the different perceptions of the Pacific focus group and interview participants. Our findings indicate that firstly, having appropriate family and community support networks (psycho-social and community), appropriate living environments and meaningful work for consumers, and secondly, access to culturally competent mental health staff, contributes towards consumer recovery and assisting families.

In conclusion, Pacific models of care (service delivery) were found to be informed by Pacific models of health belief and existed in implicit rather than explicit forms. To develop clearer or specific articulations of Pacific models of service delivery, the first step for services is to develop written expositions (a theory) of how these models might be framed taking into equal account cultural, clinical, and service management issues.

Introduction

Mental illness has been acknowledged by the New Zealand (NZ) Government as a major public health issue.[1-3] In NZ, there has been increasing concern about the inequalities in overall health outcomes and the mental health of Māori (who comprise about 15% of the population), and Pacific people living in NZ who comprise about 6.5% of the population.[1, 2, 4-8] In terms of prevalence, Te Rau Hinengaro found while the burden of mental disorder was found to be high among Pacific peoples, the excess burden was attributable to the age, gender structure, and socioeconomic correlates of the Pacific population.[8] Pacific peoples were less likely to access any professional health service for mental health problems.[7, 8] Only in the last 10-20 years, with deinstitutionalisation and greater advocacy by Māori, have mental health services begun to recognise the significance of ethnic culture in service delivery.

Pacific peoples often view mental disorder as 'spiritual possession' caused by the breach of a sacred covenant between peoples or between peoples and their gods.

Pacific peoples generally do not consider mental illness to necessarily originate entirely from within a person.[9] Pacific peoples often view mental disorder as 'spiritual possession' caused by the breach of a sacred covenant between peoples or between peoples and their gods.[10-13] The traditional Pacific approach to healing is to seek the input of traditional healers believed to have the spiritual powers necessary to restore spiritual, physical, mental and social balance.

Pacific health experts have proposed a variety of metaphorical frameworks for thinking through how Pacific health is conceptualised and how Pacific service approaches should be framed. These frameworks include the: (i) Samoan Fonofale[12, 14] and Faafaletui models[11], (ii) Tongan Kakala model[15], and (iii) Cook Islands Tivaevae model.[16] These models all point to the importance of focusing on the process of interventions and understanding of Pacific concepts such as the use of Pacific languages, spirituality, gender, familial and community responsibilities and intergenerational ethnic concepts of care.

As with many other indigenous and ethnic minority populations there is a paucity of indepth information, qualitative or quantitative, regarding Pacific mental health service delivery in NZ. The need for ethnic specific research is global. In the United Kingdom there is a call for more "ethnographic inputs into policy".[17] In the United States and Canada similar sentiments underline calls for the development of cultural competency frameworks or approaches.[18-21] These calls for culturally specific ethnographic information are premised on the recognition, in social and health governance circles, that there exist real disparities in the health outcomes of ethnic minorities compared with their mainstream counterparts.[21-23]

The aim of this article is to provide some indepth data exploring Pacific perceptions and experience of the theory, practice and utilisation of Pacific mental health services in NZ and how these informed their Pacific models of service delivery. This paper summarises key findings from the 2004 "Pacific Models of Mental Health Service Delivery in New Zealand" study. (see http://www.crrc.co.nz/publications.php).

Methods

The 2004 study provides a snapshot of Pacific peoples' views of mental health from three perspectives: (i) the service provider, (ii) the mental health consumer, and (iii) the family member. Data collection involved qualitative focus group interviews with Pacific service providers, relevant community and consumer advisors, and Pacific mental health consumers and their family members in Auckland, Hamilton, Wellington and Christchurch.

Ethical approval was obtained for the study utilising the national process via lead application to the Auckland Region Ethics Committee.

Data collection

Pacific principles such as the Samoan *va fealoaloa'i* (caring for interpersonal relationships) and the Tongan *feveitokai'aki* (respect) were adopted throughout the process of organising the focus groups, collecting, and

feedback of data.[24] Adopting these principles involved ensuring that cultural, ethical, and professional concerns surrounding the relationship between the researchers and the participants were considered.

All consumer, family, and service provider focus group sessions were held simultaneously for the Wellington (n=6), Christchurch (n=3) and Auckland (n=11) sites. An additional two individual interviews were conducted at the request of a service provider in Wellington and another in Hamilton.

The focus groups were conducted using a topic guide. Discussions were unstructured i.e. aside from general areas that needed to be covered, the specific discussion direction was guided by how people responded to each other, rather, than by set questions. This is generally referred to as the inductive qualitative grounded theory approach. [25, 26]

Each taped focus group was transcribed verbatim by one of four Pacific researchers. Non-English discussions were firstly transcribed verbatim in the language of origin and then translated using a double-checking process. The first stage involved transcribers fluent in the Pacific language. Their transcriptions were double-checked for spelling, meaning, and nuance by an 'expert' in the ethnic language. All Samoan, Tongan, Niuean and Cook Island data underwent this process. The bulk of the data gathered was in English. All original verbatim transcriptions, language translations, and meeting and observational notes were included in the material analysed.

Data analysis

Themes arising from the data were analysed and discussed following compilation of verbatim transcriptions. Twenty-three themes arose in total (Table 1). A draft report was compiled and the research team together with the Reference Group organised feedback forums to participants from each of the three main sites. All three forum attendees affirmed the key findings and were appreciative of the feedback process.

Results

The results are presented in a four-part summary format with specific research questions being addressed.

Part I: This section presents discussions about: (a) models of 'mental health care' known to participants, and (b) what participants thought were the uniquely Pacific 'styles' within these models.

Participants explicitly raised eight different "models" (Table 2). Whilst most of these models were offered in passing and by only a few participants, one model, the *Fonofale* model, was frequently mentioned.
What was uniquely 'Pacific' about these eight models (Table 2) was expressed in terms of the emphasis these models placed on the 'holistic' context of care, where the 'spiritual' sat alongside the 'physical'.

The resource implications of these noted models were acknowledged by participants as "huge". To deliver a holistic Pacific model of care required access to a large pool of resources. In such a resource competitive environment, a case for 'appropriate' funding of these models is likely to be difficult. Participants argued, however, this was no reason not to look for ways to find some accommodation from "both sides" (i.e. the "capitalist" side and the "holistic" side to use their words).

As suggested by one opinion leader participant, there are many different Pacific models of care available today for Pacific service providers. This person doubted that "*we can ever find one that can apply all across the board*" and suggested that, "*there is a number of things…that can assist us*" and that "*if we can have a collection of these [models], some understanding [of these models], then we may use [them in our] practice*". This supports the value of having a range of model frameworks perspectives. Providing cost-effective services requires (among other things) building better understanding of what each model refers to and how they might play out in different mental health service practice settings.

Part II: This section presents a summary of the discussion about how participants perceived Pacific mental health services to be delivered to Pacific consumers and families today and what participants thought were uniquely Pacific "styles" within those delivery approaches.

Cultural assessments, holistic models of care, an inviting atmosphere using Pacific motifs and hospitality practices, use of Pacific languages and recognition of co-existing 'spiritualities', were each raised by participants as uniquely Pacific elements in the service delivery approaches adopted by Pacific services.

In terms of Pacific practice standards, Pacific opinion leaders advocated for the review of Pacific alongside mainstream practice standards to ensure that the logic between them is consistent and that expectations of Pacific mental health services are not unrealistic and standards set were culturally and/or professionally safe.

In terms of documentation and reporting requirements, some Pacific service provider managers and service workers argued that the expectations from funders was merely a "number crunching" exercise that could not capture the 'extra mile' tasks they carried out as part of their 'holistic' Pacific models of care. They

argued that these tasks are done "from the heart" rather than because of a 'job description'. A review of reporting requirements for Pacific service workers was therefore requested by these participants, alongside a survey of Pacific service worker competencies in this area.

In terms of Pacific mental health workforce competencies, participants argued that these were twofold: either 'clinical' or 'cultural'. From their discussions it seems that Pacific cultural competence is measured largely in terms of an ethnic 'island-born' Pacific (Christian and pre-Christian) understanding of 'culture'. From this ethnic language, traditional protocols, values, and philosophies were cited as key indicators of 'cultural' competence. Actual discussion on clinical competence was minimal but where it was offered it assumed a bio-medical understanding of what constituted 'the clinical'. Participants identified that there was still work to be done on how these two parts of competency may come together and what other aspects of both parts needed to be incorporated within a Pacific model of mental health care and service delivery.

To work with Pacific consumers often meant also working with their families. Families were understood to comprise both extended and immediate family members. Families were recognised as important to the Pacific consumer's healing process.[27] Some participants argued, however, that service workers needed to be mindful of the fact that not all Pacific families were the same and that while family involvement was desirable, it may not necessarily be appropriate in the circumstances. Notwithstanding, the 'extended' family was still perceived by many participants to be characteristic of Pacific cultures, forming part of what they described as the 'uniquely Pacific' aspects of working with Pacific consumers.

Despite participant acknowledgement that Pacific cultures are not homogenous, it was generally agreed that there were a number of core values, such as the centrality of kin-based relationships and belief in an ancestral spirituality that were shared. This made it possible to speak generally about a *Pacific* philosophy, *Pacific* values and practices. From this it was noted that there was within this the spiritual and cultural concept of *tapu* (the sacred and taboo) that was implicit in a Pacific philosophy and psychology of self.[28]

Pacific social relationships were also identified as socio-centric in nature. This socio-centrism was defined as much by secular political relations between people as by the spiritual connections they had with each other (as individuals and collectives), with nature, and with their god(s).

When talking about the term 'spirituality' in particular, participants conceived this in two ways i.e. as Christian or indigenous spirituality. Ideas of *tapu* were implicit in their discussions of the indigenous self and of spirituality.

Within these frameworks of self and spirituality sit principles of reciprocity, love and compassion (e.g. *ofa* in Tongan*)*; respect and deference (e.g. *faaaloalo* in Samoan); and notions of family interconnectedness (e.g. *magafaoa* in Niuean; or *kopu tangata* in Cook Islands Maori). The self was understood within this framework to be a relational self; time and space, rights and responsibilities were similarly relationally situated.[28, 29] For many participants, this philosophical framework and its value system underpinned holistic Pacific models of health care and service delivery. This was what was for them the uniquely Pacific aspects of Pacific mental health services.

When exploring the "Pacific for Pacific by Pacific" mantra closely some Pacific health worker participants asserted that in practice it promoted an island-born adult matrix of care that seemed exclusive of the cultural values of NZ-born on the one hand, and NZ-born Pacific youth on the other. This was raised by Pacific opinion leaders and Pacific youth consumers to be a fundamental barrier to Pacific youth participation in Pacific specific services. The question of how to work best with Pacific youth challenges current models of Pacific service delivery that seem to bias the 'island-born' Pacific adult perspective. The institutionalisation of the role of *matua* (elders) in Pacific mental health services, most whom are adult and 'island-born', is something that was considered by participants as also uniquely Pacific to Pacific health services. It was perceived a necessary role for the formal development of Pacific cultural competence in health services. However, in light of claims of 'elder' bias, a tension point arises.

Part III: This section presents a summary of the discussion about what helps Pacific mental health consumers "get well". The views and perspectives of the consumer informed this section. Some information was also offered by families and service providers.

The participants upheld that a range of things from medication to 'spirit lifting' activities (e.g. engaging in Pacific group therapy; exercise; holding a 'normal job'; looking after grandchildren') helped Pacific mental health consumers "get well". While some noted the benefits of medication, others cautioned against adopting a naive belief that doctors would always get the medication right. A suggestion was raised by a consumer that Pacific consumers visit psychologists rather than psychiatrists if they wished to avoid the over-prescription of medication and/or be listened to in the terms of the 'spiritual warfare' they believed they were experiencing at times when they were 'unwell'.

Family involvement in consumer recovery was important to many of the consumers of this study in terms of "what makes them well". One opinion leader suggested that this was not necessarily the case for all Pacific consumers, especially youth consumers.

Pacific family caregivers often had multiple caregiving responsibilities and some had found it difficult to juggle these and look after their mentally unwell family member. Asking for help was not easy for these family members and usually only occurred in times of crisis. Family participants recognised that drawing on extended family help was also not necessarily possible, for both practical and cultural (shame) reasons. Turning to the State for help, was often seen as a last resort, something they initiated out of desperation or something imposed on them by the Court.

Asking for help and receiving appropriate help meant that communication between services, hospitals, families, and consumers needed to be kept open at all times. Ensuring that there were culturally and clinically competent workers, who were able to follow up on tasks where necessary, was important in keeping these communication lines open and ultimately to assisting the Pacific consumer to get well.

Helping consumers get well meant dealing with issues of stigma. Many of the Pacific consumer participants noted that destigmatisation needed to begin at home with many of our Pacific families. How best to promote these messages within the Pacific family or home in culturally appropriate ways was considered important to getting the recovery model, the model of care, right. To begin with, some consumers pointed to the need for the promotion of positive messages, such as those promoted by the 'Like Minds Like Mine' campaign, not only in Pacific settings such as with families and churches, using where appropriate ethnic specific Pacific languages, but also within the workplace. Within the mental health workforce there existed stereotypes about consumer capability levels (or lack thereof) that caused unfair discrimination. Limiting career opportunities was one example. Such discriminatory practices contributed to creating and/or perpetuating barriers to consumer recovery.

Getting the appropriate frontline community support worker (CSW) was for many Pacific consumers the key to their successful recovery. These CSWs provided the 'people-interface' between stressed families, unwell consumers, and unfeeling bureaucracies.

Part IV: This section presents a summary of the discussion about how Pacific families supported family members with mental health problems to "get well".

Pacific family members of this study adopted a range of support mechanisms to assist mentally unwell family members 'get well'. These included gaining access to key community support workers for their family member; utilising respite care for themselves 'stay well'; assisting in the administration of appropriate medication where necessary; engaging and/or transporting their family member to appropriate treatment processes and/or community (or church) support networks; and/or generally keeping their family member's 'spirit lifted'.

Most family caregivers who participated in the study, whose mentally unwell family member was of the 'older' generation (e.g. their mother or aunt), found that the traditional ethnic-specific approach of many Pacific mental health services well suited the needs of their older family members. For younger consumers the fit was not as neat. Finding a service and/or service worker who could relate to the consumer at his/her 'youth' level was important to the mother of one youth consumer.

Extended family assistance was relatively uncommon despite the perception that Pacific families can easily draw on the resources of extended family members for support. It was often logistically more convenient for primary family caregivers to organise for State rather than extended family assistance.

Not knowing how to access support mechanisms such as appropriate CSWs respite care, appropriate medication, treatment processes and community and/or church support was a common barrier to Pacific consumers and/or families accessing these services.

Discussion

This study raised some core issues about how models of health belief inform models of health service delivery. A number of ambiguities arose when discussing these models, however, what was clear from participant commentaries was that there existed many different types of health models and that often they overlapped or were used interchangeably. Tracing the evolution of the different health models or explicating in detail each health model was not within the purpose of this research. Rather, we sought to document what Pacific peoples believed to be their models of health care and what they thought was unique about these models. In summary, the following key themes emerged from this study.

What is unique about Pacific models of care?

To talk about 'what is uniquely' Pacific about Pacific approaches is to inevitably highlight the philosophical value system adopted by these approaches. This value system is inherent in many of the different service techniques adopted by the Pacific service providers of this study. These include understandings of spirituality, the cultural value of group therapy and

use of Pacific language and hospitality practices. More specifically, these involved the privileging of interpersonal relations, of building trust and rapport between consumer, families and service workers, of understanding the importance of the spirit of a person to his/her mental health. Literature examining indigenous and ethnic minority health issues overseas, however, suggests that similar value frameworks operate in other indigenous and/or ethnic minority communities.[30-32]

The claim of 'going the extra mile' was suggested by other studies to be a situation that arose more out of systemic failures to address the holistic needs of consumers than anything else.[30, 31] The Alaskan Southcentral Foundation system provides an excellent example of how, with right support and skills, the holistic value-based service delivery model they adopt can operate and operate successfully without having to exploit people who want to go 'the extra mile'.[30, 31]

In Pacific philosophy there needs to be balance in mind, body and soul if there is to be health and wellbeing, encapsulated in the Tongan and Samoan metaphorical saying: *piki piki hama* (Samoans would say *ama*)*, vae vae manava* (lit. *piki piki hama* means "hold onto the outrigger"; *vae vae manava* means sharing the womb/sharing breath).[33] This idea of cosmic balance is also implicit in Asian principles of yin and yang.[31, 34, 35] Moreover, the Niuean idea of *fakalilifu* (respect) is similar to the Hispanic principles of *respeto*. And, Cook Island Māori concept of *kopu tangata* and Māori concepts of *whanau* come from the same family tree. Knowing both what is shared in common and what makes people unique is what provides balance and idiosyncrasy. These principles of cosmic balance, respect and family, while perhaps expressed in different – uniquely – Pacific ways, they are principles shared by many other ethnic indigenous groups. In terms of Pacific health service delivery in New Zealand, for Pacific health services it is important to recognise that while they do share some points in common with other ethnic health services, to claim their uniqueness they must equally understand where and how they might differ.

In Pacific philosophy there needs to be balance in mind, body and soul if there is to be health and wellbeing.

Like the need to recognise the difference between a health belief model and a service delivery model, there is also a need to recognise that the 'Pacific for Pacific by Pacific' approach to service delivery is more a strategic tool for political leverage than an ideological goal. So long as Pacific peoples are over-represented in lower socioeconomic and health statistics, there is always value in interrogating the appropriateness of those strategies set up to address Pacific health and wellbeing.

Models of health-belief and models of service delivery.

Mandiberg notes, "whole models cannot and should not ever be lifted out of social, cultural and economic contexts and imposed somewhere else".[36] What can be transported, he argues, are principles of what works. Models themselves do not necessarily influence systems; rather it is the principles upon which models are based that make the difference. The term 'model' was employed in this project in line with the funders (the then Mental Health Research and Development Strategy) research terms of reference.

When participants referred to a model they did not elaborate on what they understood these models to mean possibly because within the focus group setting it was assumed that participants implicitly understood these models without need for detailed discussion. Alternatively, perhaps those participants who raised it/them were themselves not sure of the details of the model/s and so discussion was limited. Thus, when exploring the question of Pacific models of service delivery the ambiguity associated with what was meant by the concept 'model of service delivery' stood out. It became clear that many of the Pacific models that *fono* participants referred to, including the commonly referenced *Fonofale* model, were more models of health belief rather than of service delivery.

The question of what constituted a 'service delivery model' as opposed to a 'health belief model' raised considered discussion with the Reference Group. What emerged from this was an understanding that a Pacific 'service delivery' model required address not only of what the health beliefs or values adopted by the Pacific service were but also of how these values or beliefs were to be explicitly implemented within the clinical and service management arms of the service. At this point issues of workforce competency and service performance also came to light, particularly how competence and/or performance criteria might be defined and/or assessed. Models that failed to address these issues could therefore technically not be considered models of service delivery. They would more accurately be termed models of health belief.

Of the models raised by participants the '*faafaletui* model' coined by Tamasese et al,[11] did not fit comfortably within either the definition of health belief model or service delivery model. It seemed more accurate to refer to the *faafaletui* model as a process model. The Samoan notion of *faafaletui* (meaning to form a gathering or meeting group to discuss an issue of importance) speaks more to the task of forming an appropriate process or method for discussion and interaction than to the task of delivering a service. It is of course part of the process of determining the key

components of a service and its styles of delivery, but it is not in and of itself a model of service delivery.

The traditional healing model is perhaps the only model of those raised by *fono* participants that might well be perceived as a 'service delivery' model. Implicit within traditional healing practices are traditional codes of conduct and service management, as well as accepted 'treatment' practices based on cultural and medicinal knowledge that suggest that within the traditional healing model there do exist frames for measuring traditional healing competency and performance.[37] More recent Pacific work in New Zealand, such as the "Seitapu"[38] and the CRRC "Exploring Cultural Competency" publication[27] has begun this.

Pacific youth consumers and the Pacific matrix of care

For the Pacific mental health sector to agree that there are key differences between NZ-born and island-born peoples and key differences between Pacific youth and Pacific adults, the Pacific mental health service sector has to 'come of age'. With an increasing NZ-born Pacific population[39], Pacific born values and worldviews must find some accommodation with NZ born Pacific values. A Pacific matrix of care must accordingly take account of what could be competing values between them.

It is useful to note that stigma attaches differently according to age, gender, class, religion and ethnicity.[40] It is wrong to assume that Pacific youth consumers experience the same stigma as those Pacific consumers considered mature adults and/or elderly. In this case, the Pacific youth consumer may feel more in sync with non-Pacific youth consumers than older Pacific consumers. Participants of this study hinted at the likelihood of each of the above. These issues of stigma and cultural and generational differences reinforce the need for the Pacific mental health sector to constantly review current models and matrices of care for their appropriateness to the Pacific population as a whole.

Family versus state help

Within Pacific cultures, even in NZ, the extended family is touted as the model support network. Responsibility for the care of mentally unwell family members is ideally shared between extended family members. In NZ, participants recognise that with travel costs the ideal is often not achievable. The importance placed by Pacific peoples on the extended family as key support networks for unwell members is something also characteristic of non-Polynesian groups such as the Hispanics in the USA.[31]

The low socioeconomic status of many Pacific peoples in NZ, coupled with the high levels of cultural obligation imposed on some to act as carers/caregivers to immediate and/or extended family members, means that the knowledge and ability of when and how to access help when it is needed is imperative. Ensuring that Pacific communities are well informed of the various respite care services available for families with members who have high caring responsibilities is essential.

The spirituality of evangelism and the Pacific matrix of care

Culture and religion are inextricably linked in Pacific communities, whether in the island homelands or in the metropolitan settings of NZ. Evangelical spirituality has its roots in Christianity and is growing rapidly in different Pacific population groups, but particularly within its youth population. The spirituality of Christianity is differentiated from the spirituality of ancient Pacific cosmologies. Evangelical spirituality moves away from the ritualistic basis of traditional Christian worship towards a more charismatic approach to worship that can challenge holding on to traditional spiritual beliefs and practices (whether traditionally Christian or indigenous). This third form of spirituality adds another layer to the dimensions of 'the spiritual' that participants refer to in their suggested Pacific matrix of care and/or models of Pacific health service delivery.

Developing workforce competencies

In developing workforce competencies for health and social service workers working with NZ-based Pacific consumers and their families, the participants of this study argued that there needed to be a complement of cultural, clinical and management-type skills. An understanding of the heterogeneity of Pacific peoples in New Zealand is a prerequisite to achieving balance in operationalising those skills. Moreover, in working with Pacific families workers must understand their pressures and have the skills to communicate effectively with them. Being open to understanding notions of spiritual possession is but one example of the complexities of the Pacific cultural worldview that workers must grapple with.

The need to review Pacific practice standards alongside mainstream practice standards, as advocated by a number of participants, is a useful step forward. Within these practice standards the complex relationship between NZ born Pacific youth and Island born Pacific adults and between "cultural" and "clinical" models of care and/or service delivery needs to be accounted for. From participant narratives there are misperceptions surrounding what constitutes the clinical and the cultural. In terms of the clinical: first, there is the idea that the clinical is synonymous with the bio-medical. Second, that the bio-medical is an actual model of practice and/or is *the* model of practice under which the medical profession train. This is problematic and unsurprisingly creates misperceptions. In relation to the cultural: the idea that the cultural is ethnic only and based only on a traditional value system permeates

a number of participant responses. Each of these misperceptions needs address within workforce training programmes.

It is recognised that the development of mental health workforce competencies for working with Pacific consumers and families is far from straightforward. This study provides a starting point for debate. Each of these points combines to form a compelling argument for taking the necessary time to tease out the theoretical and practical implications of different workforce competency equations.

Pacific NGO and DHB-based mental health services

Those participants who were part of an NGO service suggested that they had more relative autonomy to carry out Pacific specific service delivery and care approaches compared to their DHB-based colleagues. Whether this was and is indeed the case is a question for further research. Given the small Pacific workforce population of New Zealand (compared with Māori and Pakeha communities), and the competitive environment of contract services, gaining real inter-institutional, inter-service collaboration is not easy. Nevertheless, given the complexities of Pacific mental health in New Zealand, all services, whether DHB-based or NGO, would do better by working together than apart.

Conclusion

In conclusion, we found that by and large Pacific models of service delivery raised by our participants were in fact, in their current form, models of health belief. The process for translating those health models into Pacific models of service delivery is yet to come.

Limitations of the study

The qualitative research findings, on which the primary study is based, is not representative of all Pacific mental health consumer, family member or service worker perspectives.

Acknowledgements

We acknowledge Fuimaono Karl Pulotu-Endemann and Helen Schmidt-Sopoaga for their contributions as part of the research team. We thank all those who took part in this research: the members of the initial Fickling Centre fono in Auckland 2002; the consumers, their family members, and Pacific mental health service providers (from our matua, through to community support workers and managers) who gave generously of their time and knowledge; the Reference Group members for your wise counsel: Fuimaono Karl Pulotu-Endemann, Hemi Lesatele, Vito Malo (Nonumalo), Dr Francis Agnew, Helen Sopoaga-Schmidt, Dr Sandy Simpson, Karlo Mila-Schaaf; the matua who supported the team and to Auimatagi Epa who undertook the formal blessing of the project; the translators and translation editors, whose work contributed immensely to the rigor of our findings; and finally to the research staff and other CRRC staff for their support and assistance.

This research was undertaken for the Mental Health Research and Development Strategy, funded by the NZ Ministry of Health and supported by the NZ Mental Health Commission.

References

1. Ministry of Health. The New Zealand Health Strategy. Wellington, New Zealand: Ministry of Health 0-478-23994-7, 2000.
2. Ministry of Health. A Portrait of Health: Key Results of the 2002/03 New Zealand Health Survey. Wellington: Ministry of Health, 2004.
3. Murray CJ, Lopez AD. Global mortality, disability, and the contribution of risk factors: Global Burden of Disease Study. Lancet 1997;349(9063):1436-42.
4. Ajwani S, Blakely T, Robson B, Tobias M, Bonne M. Decades of disparity: ethnic mortality trends in New Zealand 1980-1999. Wellington, New Zealand: Ministry of Health and University of Otago 0-478-25661-2, 2003.
5. Mental Health Commission. Blueprint for Mental Health Services in New Zealand : How Things Need to Be. Wellington: Mental Health Commission, 1998.
6. Wells JE, Oakley Browne MA, Scott KM, McGee MA, Baxter J, Kokaua J. Te Rau Hinengaro: The New Zealand Mental Health Survey: overview of methods and findings. Aust N Z J Psychiatry 2006;40(10):835-844.
7. Baxter J, Kokaua J, Wells JE, McGee MA, Oakley Browne MA. Ethnic comparisons of the 12 month prevalence of mental disorders and treatment contact in Te Rau Hinengaro: The New Zealand Mental Health Survey. Aust N Z J Psychiatry 2006;40(10):905-913.
8. Foliaki SA, Kokaua J, Schaaf D, Tukuitonga C. Twelve-month and lifetime prevalences of mental disorders and treatment contact among Pacific people in Te Rau Hinengaro: The New Zealand Mental Health Survey. Aust N Z J Psychiatry 2006;40(10):924-934.
9. Bathgate M, Pulotu-Endemann FK. Pacific people in New Zealand. In: Ellis PM, Collings SCD, editors. Mental Health in New Zealand from a Public Health Perspective. Wellington: Ministry of Health, 1997. p. 104-135.
10. Ma'ia'i S. Ma'i Samoa: Herbalists and Demons. In: Health of Pacific People: Problems and Solutions into the New Millennium; 1997 October; Auckland: University of Auckland; 1997.

11. Tamasese K, Peteru C, Waldegrave C. O le Taeao Afua - The New Morning: A Qualitative Investigation into Samoan Perspectives on Mental Health and Culturally Appropriate Services. Wellington: The Family Centre & NZ Health Research Council; 1997.
12. Crawley L, Pulotu-Endemann FK, Stanley-Findlay RTU. Strategic Directions for the Mental Health Services for Pacific Islands People. Wellington, New Zealand: Ministry of Health; 1995.
13. Anae M. Fofoa-i-vao-'ese: Identity Journeys of NZ-born Samoans [PhD]. Auckland: University of Auckland; 1998.
14. Foliaki S. Pacific mental health services and workforce: Moving on the Blueprint. Wellington (NZ): Mental Health Commission; 2001.
15. Thaman KH. Re-presenting and Re-Searching Oceania: a suggestion for synthesis. In: Pacific Health Research Fono; 2002; Auckland: Pacific Health Research Council; 2002.
16. Ma-Ua Hodges T. Ako Pai Ki Aitutaki: Transporting or Weaving Cultures. Research Report of Field Experiences to the Cook Islands. Wellington: Wellington College of Education., 2000.
17. Mulgan G. Evidence and strategy: UK lessons. In: Connecting Policy Research and Practice - Social Policy Research and Evaluation Conference; 2003; Wellington; 2003.
18. Williams CW. Personal Reflections on Permanency Planning and Cultural Competency. In: Anderson G, Ryan AS, Leashore BR, editors. The Challenge of Permanency Planning in a Multicultural Society. New York, London: Haworth Press, Inc., 1997. p. pp9-38.
19. Weaver HN. Indigenous people and the social work profession: Defining culturally competent services. Soc Work 1999;44(3):p217-226.
20. Purnell LD, Paulanka BJ. Transcultural Health Care: A Culturally Competent Approach. Philadelphia: Association of Operating Room Nurses, Inc., 1998.
21. Centre for Mental Health Services. Cultural Competence Standards: In Managed Mental Healthcare Services: For Underserved/ Underrepresented Racial/Ethnic Groups. Washington DC: Centre for Mental Health Services; Substance Abuse and Mental Health Services Administration; and US Department of Health and Human Services; 2000.
22. National Institute for Mental Health in England. Inside Out: Improving Mental Health Services for Black and Minority Ethnic Communities in England. London: National Institute for Mental Health in England; 2003
23. Bathgate M, Alexander D, Mitikulena A, Borman B, Roberts A, Grigg M. The Health of Pacific Islanders in New Zealand. Wellington: Ministry of Health; 1994.
24. Health Research Council of New Zealand. Guidelines on Pacific Health Research. In. Auckland: Health Research Council of New Zealand, 2005.
25. Patton M. Qualitative Evaluation and Research Methods. London: Sage Publications, 1990.
26. Glaser BG. Basics of grounded theory analysis. Mill Valley, California: Sociology Press, 1992.
27. Suaalii-Sauni T, Samu K. Exploring cultural competencies: an exploratory study of cultural competencies in Pacific mental health: Auckland: Pacific Mental Health and Addictions Services, Waitemata District Health Board; 2005.
28. Bush A, Collings S, Tamasese K, Waldgrave C. Samoan and Pyschiatrist perspectives on the self: qualitative comparisons. 2005;39:621-626.
29. Lupe K. An Ocean with many shores: indigenous consciousness and the thinking heart. Honolulu: University of Hawaii Press, 2007.
30. Bird ME, Kane WM, Quackenbush M, editors. Eliminating Health Disparities: Conversations with American Indians and Alaska Natives. Santa Cruz, California: ETR Associates, 2002.
31. CMHS. Cultural Competence Standards: In Managed Mental Healthcare Services: For Underserved/Underrepresented Racial/Ethnic Groups. Washington DC: Centre for Mental Health Services; Substance Abuse and Mental Health Services Administration; and US Department of Health and Human Services; 2000.
32. Sharma A, Gautam R, Gharami A. Indigenous Health Care and Ethno-Medicine. New Delhi: Sarup & Sons, 2006.
33. Atua TT. In search of meaning, nuance and metaphor in social policy. 2003;i20 (June):49-63.
34. Kleinman A, Lin T-Y. Normal and Abnormal Behavior in Chinese Culture. Boston: Dordrecht: Springer, 1981.
35. Lopez SR, Guarnaccia PJ. Cultural psychopathology: uncovering the social world of mental illness. Ann Rev Psychol 2000;51:571-598.
36. Mandiberg J. Innovations in Japanese Mental Health Services. San Francisco: Jossey-Bass, 1996.
37. Macpherson C, Macpherson L. Samoan Medical Belief and Practice. Auckland: Auckland University Press, 1990.
38. Pulotu-Endemann F, Suaalii-Sauni T, Lui D, McNicholas T, Milne M, Gibbs T. Seitapu: Pacific mental health and addiction cultural & clinical competencies framework: Auckland: Te Pou O Te Whakaaro Hui, The National Centre of Mental Health Research and Workforce Development; 2007.
39. Callister P, Didham R. Some emerging demographic features of the Pacific population

in New Zealand. In, 2007. p. Expanded keynote address.

40. Lee S, Chan L, Chau A, Kwok K, Kleinman A. The experience of SARS-related stigma at Amoy Gardens. 2005;61(i9)(November):2038-2046

Table 1: Themes that emerged from the qualitative focus group data

Assessment
Physical environment ('bricks and mortar')
Infrastructural design
Communication
Competencies
Documentation
Employment
Ethnic specificity
Family
'Going the extra mile'
Programme interventions and consumer use of time
Language
Matua
Medication
Philosophical foundations and cultural values
Mental health promotion
Relationships
Resources
Spirituality
Standards
Training
Treatment
Youth

Table 2: The eight models of mental health care identified by participants

The Wellness model: This model focuses on 'health as wellness', where care for the consumer is considered in terms of restoring him or her to a state of wellness.

The Illness model: This model focuses on 'health as illness', where care for the consumer is considered in terms of repairing the disease, hurt or pain.

The *Fonofale* model: This model utilises the metaphor of a Samoan meeting house to make the point that in order for the house to stand firm its core structure must exist and hold together – from the foundation to the posts and roof.

The T*e Vaka* model: This model utilises the Pacific canoe metaphor to symbolise the process of journeying through the complexities of health and wellbeing.

The *Faafaletui* model: This model utilises the Samoan concept of dialogue to frame a methodological approach to health and wellbeing.

The Strands or Pandanus Mat model: This model utilises the Pacific metaphor of a pandanus mat (considered a cultural treasure in a number of Pacific cultures) to symbolise the interwoven nature of health and wellbeing.

The Strengths-based model: This model focuses on notions of empowerment and positive development.

The Traditional Healing Treatment model: In this context this model refers to the indigenous traditional healing beliefs and practice frameworks of Pacific peoples.

Table 3: Examples of participant's quotes

"...I believe that our Pacific people understand in our own way what discrimination and stigma is, through their own personal experience, can help see people for who they are, that they aren't just being mental health [consumers], they are actually consumers who have communities, who have value outside of the label that's forced on them."

(Pacific mental health consumer)

"As Pacific Island people we are still very community minded, we are not from the capitalist world. There is a danger of working too much from our heart, with our calculating financial cost and all that. We need to balance it. But I think they [Pacific mental health service providers] are very much...working from the heart in a way that people who were brought up under the capitalist system are not...and I think those are the things that make us, makes our [Pacific] service uniquely Pacific and makes it work well, because you can connect."

(Pacific family member)

"the model that needs to work for us [Pacific peoples] has to make sure that it is robust enough to stand up clinically [and] that it is robust enough to stand up culturally"

(Pacific opinion leader)

"...One most significant and very important [thing] I see, is the culture.[...] It is not only the way we talk but [the] way of bringing people together and talk about our own understanding of the sickness"

(Pacific service provider participant)

"You have a death wish all the time, because your life is not worth living, because you are drugged to the eyeballs"

(Pacific mental health consumer)

Community Rehabilitation Outcomes Across Cultures Following Traumatic Brain Injury

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Abstract
Objective: *This exploratory study investigates Traumatic Brain Injury (TBI) rehabilitation outcomes among culturally diverse outpatients in community-based rehabilitation who have sustained a Mild to Moderate TBI. The major aims of this study are twofold: firstly, to determine whether community-based rehabilitation outcomes following TBI differ across Māori, Pacific and Pakeha cultures; and secondly, to identify any service delivery needs Pacific people in TBI rehabilitation require that may be distinct from Pakeha.*
Method: *A fixed comparative non-experimental design was utilised where participants were selected using direct control based on their self-identified ethnic group resulting in sub-samples of 11 Māori, 11 Pacific and 11 Pakeha (n=33). Each participant completed the Neurobehavioural Cognitive Status Examination (Cognistat) and the Brain Injury Community Rehabilitation Outcome Scales (BICRO-39 Scales).*
Results: *Results indicate that all participants were at a similar level of overall cognitive functioning but Pacific peoples scored significantly lower than both Māori and Pakeha on two Language subtests and significantly lower than Pakeha on the Memory subtest. Individual handicap increased following TBI and decreased following rehabilitation, with no significant difference across cultures and suggesting good efficacy of rehabilitation.*
Conclusion: *There appears to be universalities in TBI experience and global rehabilitation outcomes that transcends individual cultures. However, there are micro-level cultural variations that have valuable implications when assessing and treating Pacific people in neuro-rehabilitation. Neuropsychologists need to take into account formal education levels and language abilities when working with Pacific people.*
Key words: *cross-cultural, neuropsychology, traumatic brain injury, Pacific, Māori.*

Introduction

Closed Traumatic Brain Injury (TBI) is an "injury to the brain resulting from externally inflicted trauma"[1]. Obtaining an accurate picture of the incidence, prevalence, frequency and patterns of distribution of TBI has been impeded by inconsistency in methods of data collection, classification, recording procedures and lack of uniformity in definition. While there is a lack of reliable TBI incidence and prevalence statistics in New Zealand, it is estimated that the total TBI incidence figure, including those people with TBI who do not seek medical attention, is likely to be in the range of 20,000 to 30,000 cases per year[1]. This phenomenon of brain injury represents a significant public health problem for New Zealand and has been coined in the past as a "silent epidemic".

In 2003, 5% of Accident Rehabilitation and Compensation Insurance Corporation (ACC) claimants for concussion related injury were identified as Pacific people.[1] However, Pacific peoples are almost certainly under-represented in TBI-related claims, given that younger people make the most claims and the Pacific people make up 8% of people aged between 15 to 49 years. Furthermore Pacific people are likely to be vulnerable to TBI due to their high over-representation in factors which amass to strong predictors for TBI, such as motor vehicle accidents (many alcohol-related), falls and sports-related injuries.[2]

The neuropathological effects of TBI are produced by sudden acceleration-deceleration and rotation of the brain within the skull and focal contact between the brain and the skull – the frontal lobes, temporal lobes and brain stem are particularly vulnerable. TBI is associated with a multiplicity of neurophysiological, cognitive, behavioural, and psychosocial sequelae that affect every aspect of a person's life to varying degrees. The enormous array of consequences following TBI involving sensory, motor and autonomic functions is vast and complex. Most of these complications, such as impaired movement, vision,

hearing and tactile sensation are apparent in the first days or months (depending on the severity of the TBI) and tend to improve over time.[3,4] For a small group however, some changes are long-term or permanent, with the most common ones being movement disorders, seizures, headaches, ambient visual fields, and sleep disorders[5].

In most cases however, it is the cognitive and behavioural deficits that are the most common residual impairments in the post-acute period of TBI recovery, making the greatest contribution to the consequences of long-term handicap, and also having the greatest impact on psychosocial functioning.[6] The broad spectrum of cognitive consequences are often categorised into impairments in memory, attention, concentration, language dysfunction, arousal, perception and higher executive functioning (such as problem solving, planning, judgement, insight, motivation information processing and organisation). Cognitive consequences may change in severity and presentation over time and although they can occur singly, they usually occur in combination, lead to a myriad of functional and psychosocial problems. Depression and anxiety are the most frequently reported emotional complications following mild, moderate or severe TBI[5].

The emotional, behavioural, cognitive and physical consequences of TBI lead to debilitating social limitations that affect the TBI victims, their families and wider communities. As the TBI victims attempt to resume their usual daily activities, coping with environmental demands often paves the way for additional psychosocial consequences. These social sequelae generally fall into the interconnected domains of valued social roles (such as maintaining employment), relationships (such as conflict with family and/or spouse and social isolation from friends), and reduced participation in leisure and recreational activities.[7, 8]

Cross-cultural neuropsychological studies in New Zealand are sparse and no local research to date has investigated cross-cultural TBI-rehabilitation. Cultural appropriateness is pertinent in neuropsychological assessment with the overarching concern being that misinterpretations and inaccurate conclusions may be drawn with groups other than those on whom tests have been standardized. New Zealand research has demonstrated that Māori perform differently on some tests than Pakeha, and questions the validity and reliability of these tests with Māori.[9,10,11,12] Moreover, neuropsychological assessment impacts on treatment, influencing rehabilitation recommendations, and compromising subsequent rehabilitation outcomes.

TBI is associated with a multiplicity of neurophysiological, cognitive, behavioural, and psychosocial sequelae that affect every aspect of a person's life to varying degrees.

The rehabilitation of individuals with brain injuries is one of the fastest growing areas in all health care over the last two decades. Advances in management of trauma, emergency medical care and technology have seen a significant reduction in mortality rates and an increase in survival following brain injury. As a result there has been a considerable demand for brain injury rehabilitation services, which has subsequently paved the way for the growth and development of community-based post-acute rehabilitation services. In tandem with the worldwide proliferation of specialist services provided to people who have sustained a brain injury, international research efforts have produced an abundance of studies to increase knowledge of the needs for rehabilitation and to continuously develop effective rehabilitation services for these people. Consistent with overseas, there has been an expansion of head injury rehabilitation services in New Zealand, but local research addressing the areas of appropriate needs and effectiveness of these services is sparse. Moreover, while little is known internationally about the needs of people from minority cultures, there is no New Zealand neuro-rehabilitation research existing to date that addresses cultural diversity. The present study is the first that takes into account the inter-cultural make-up of brain injured individuals in neuro-rehabilitation, unique to New Zealand and the South Pacific.

This exploratory study investigates Traumatic Brain Injury (TBI) rehabilitation outcomes among culturally diverse outpatients in community-based rehabilitation who have sustained a Mild to Moderate TBI. The major aims of this study are twofold: firstly, to determine whether community-based rehabilitation outcomes following TBI differ across Māori, Pacific and Pakeha cultures; and secondly, to identify any service delivery needs Pacific people in TBI rehabilitation require that may be distinct from Pakeha.

Method

This study is a fixed comparative non-experimental design where participants were selected using direct control based on their self-identified ethnic group (i.e., Pakeha, Māori or Pacific). Following Ethics approval by the Auckland Ethics Committee, participants were recruited from Burtons Healthcare, a community-based rehabilitation provider with branches in Auckland, Hamilton, Tauranga and Whangarei.

Participants

The population of interest in this study included male and female adults aged 18 to 65 who self-identified as being able to communicate in English,

self-identified as being of Māori, Pakeha or Pacific Islands ethnicity, and had sustained a TBI diagnosed as mild to moderate. Injury severity was measured according to ACC criteria[13] - i.e. the period of Post Traumatic Amnesia, the standardized Glasgow Coma Scale, and loss of consciousness duration. Inclusion criteria also stipulated that potential participants were no longer than 32 months post-injury, had undergone their first rehabilitation session within 12 months following their injury and that at least six months had elapsed since their first session. These time periods are to ensure they have had sufficient time to complete most spontaneous recovery and benefit from rehabilitation.

Overall there were 33 participants with an ethnic breakdown of 11 Pakeha, 11 Māori and 11 Pacific People. Ethnic breakdown of Pacific people consisted of four Tongan, three Samoan, two Fijian, one Niuean and one Cook Island participants.

Consistent with the epidemiological research on TBI, the sample was predominantly male (76%) with a mean age of 37.5 years (range 18-65). Thirty-three percent of TBI's were caused by Motor Vehcial Accidents (MVAs), 30% assault, 27% falls, and 10% other causes. For the level of severity of TBI, 18% were Mild, 15% were Mild-Moderate, 30% were Moderate, and the remaining 36% were Moderate-Severe. The average education level was 11.5 years and the mean time since injury (to date of interview) was 18.7 months.

Measures

The Brain Injury Community Rehabilitation Outcome 39 Scales (BICRO-39)[14] is a multidimensional quantitative assessment of functioning designed specifically to measure community functioning in areas of activity, social participation, and psychological aspects of functioning. The 39-item questionnaire consists of a Pre-injury Form to give retrospective self-ratings of the participants' functioning prior to their TBI, and a Post-injury Form to give self-ratings of the participants' current functioning. There is no ideal score on the BICRO-39, however "individual level of handicap", magnitude, and size of change over time is determined by comparing pre- and post-injury information. The purpose of including Pre-Injury information is to provide an individualised baseline with which to compare post-injury scores.

The Neurobehavioral Cognitive Status Examination (Cognistat)[15] is a brief measure designed to assess cognitive functioning in the areas of: Language, Constructions, Memory, Calculations and Reasoning. A cognitive status profile of performance on subtests is scored rather than a total composite score. The Cognistat was used as a screening measure to filter out any participants who may be too cognitively impaired to give accurate self-reports, and hence skew the data. It was also used to explore any individual and ethnic group differences across cognitive domains.

Analysis

Multi-variate Analyses of Variance (MANOVAs) were performed to determine whether groupings based on ethnicity differed in test scores. Correlational data were generated to determine the strength and directions of relationships between results on measures as well as with demographic data.

Wilks' Lambda and Tukeys multiple comparison test were used as the test statistics for each MANOVA model and results were considered statistically

Table 1. Cognistat Subscale Mean Scores By Ethnicity & Total Pass Rates

Subscale (cut-off score)	Total (n=33)				Pakeha (n=11)		Māori (n=11)		Pacific (n=11)	
	Mean	(SD)	% Pass Cut-Off	Sig.	Mean	(SD)	Mean	(SD)	Mean	(SD)
Orientation (10)	11.7	(0.6)	97		11.6	(0.9)	11.7	(0.5)	11.9	(0.3)
Attention (6)	6.8	(1.7)	73		7.5	(1.3)	6.6	(2.0)	6.5	(1.7)
Language - Comprehen. (5)	5.9	(0.4)	94		6.0	(0.0)	6.0	(0.0)	5.7	(0.6)
Language - Repetition (10)	11.3	(1.5)	91	***	12.0	(0.0)	11.8	(0.6)	10.1	(2.0)
Language - Naming (6)	7.7	(0.7)	97	***	7.9	(0.3)	8.0	(0.0)	7.1	(0.9)
Constructions (4)	4.4	(1.2)	82		4.4	(0.9)	4.6	(1.2)	4.2	(1.5)
Memory (9)	10.4	(2.0)	85	*	11.5	(0.8)	10.3	(2.0)	9.4	(2.5)
Calculations (3)	3.3	(1.0)	76		3.6	(0.9)	3.4	(0.9)	3.0	(1.0)
Similarities (5)	5.9	(0.9)	94		6.2	(0.6)	5.7	(0.6)	5.8	(1.3)
Judgement (4)	4.5	(1.2)	79		4.6	(1.4)	4.5	(1.2)	4.4	(1.1)

*MANOVA compared ethnic groups: ** p≤ .01, *** p≤ .001, difference across ethnicity*

significant if there was corresponding p-value of less than 0.05, or as otherwise stated.[16]

Results

Cognistat

The total sample profile did not fall into the impaired range on any of the subtests on the Cognistat indicating that all participants were at a similar minimum level of cognitive functioning. This increases comparability of results, and improves the reliability and validity of participants' self-reports in other measures.

A MANOVA was performed on the ten subtests of the Cognistat with Ethnicity as the grouping variable results of which are reported in Table 1. Using Wilks' criteria ($F_{20,42} = 1.894$, $p = .041$) variables with significant ethnic group differences were Language - Repetition ($p=.001$), Language – Naming ($p=.001$), and Memory ($p=.045$). Post Hoc multiple comparisons Tukey's tests indicated that for Language – Repetition and Language – Naming, Pacific people scored significantly lower than both Māori and Pakeha, who did not differ significantly from each other. For Memory, Pakeha scored significantly higher than Pacific People but not Māori, and there were no significant differences between Māori and Pacific.

The association of demographic variables has been shown to confound cognitive screening test results. To adjust for demographic differences across ethnicity, the previously identified potentially confounding variables of Education, Time Since Injury and English as a Second Language (ESL) were added as co-variates to the MANOVA. Results indicate that there were still significant differences across ethnicity having adjusted the results for Time Since Injury ($F(20, 40) = 1.807$, $p = .05$), showing that the differences are not dependent on the duration of time since injury. However, there were no significant differences across ethnicity when adjusting for Education ($F(20, 40) = 1.558$, $p = .115$) and ESL ($F(20, 40) = .711$, $p = .792$), showing that these two variables play a part in the differences shown. No significant correlation was identified between ESL and Education (Spearmans $\rho = .27$, $p < .126$) which suggests that both Education and ESL are equally important factors contributing to the aforementioned significant differences across ethnicity.

BICRO-39

Participants and their Close Others completed the BICRO-39 retrospectively for: 1) Pre-Injury, 2) Intake to treatment, and then for 3) Current functioning. Figure 1 depicts scores for these points in time, where a higher score indicates a greater level of handicap. The total BICRO-39 Pre-Injury mean score for the whole sample was 5.1, the total Intake mean score was 11.4, and total Current mean score was 8.1. The amount of individual level of handicap following TBI was larger than the amount of reduction in individual level of handicap following rehabilitation. Hence while there was significant improvement, participants did not return back to pre-morbid level of functioning on average.

Significance across ethnic differences is shown in Table 2. There were no significant differences found across Pakeha, Māori or Pacific ethnicity for the total outcome scores on the BICRO-39. No significant correlations were found between the BICRO-39 results and demographic data.

Analysis of subscales however identified that the subscale of "Socialising" contributed to significant differences across ethnicity for both Pre-injury ($p = .042$) and Intake ($p = .034$) scores. Post Hoc multiple comparisons Tukey's tests indicated that Pakeha scored significantly higher than both Māori and Pacific people on both occasions.

Figure 1 Brain Injury Community Rehabilitation Outcome – 39 Scales Total Pre-Injury, Intake and Current Scores By Ethnicity.

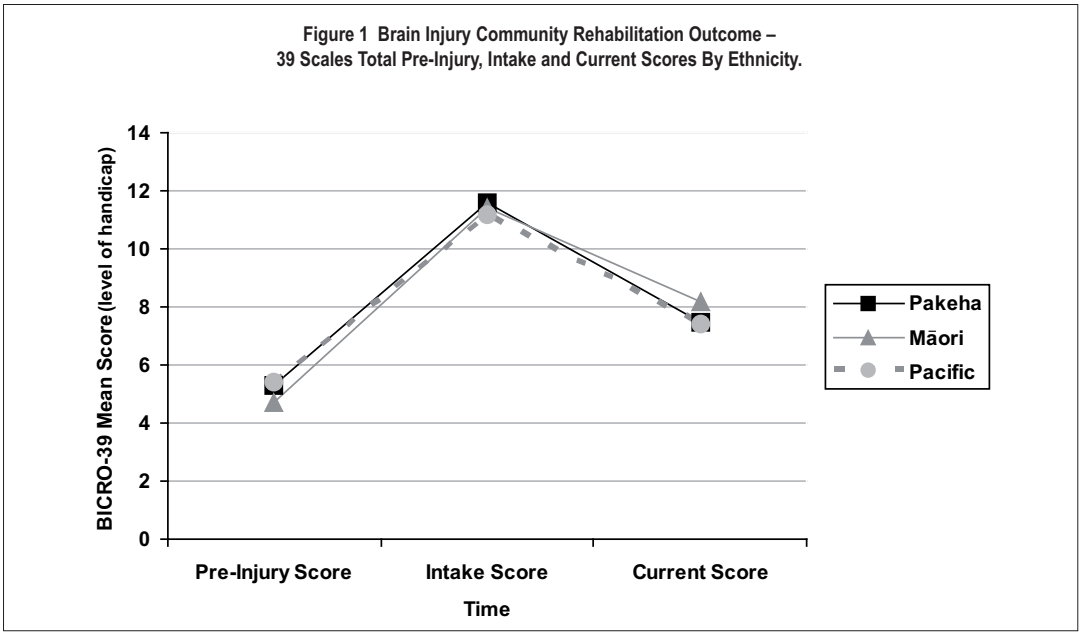

Table 2. Brain Injury Community Rehabilitation Outcome-39 Scales Pre-Injury, Intake and Current Scores By Ethnicity

Scale	Pre-Injury Score								Intake Score								Current Score							
	Total (n=33)		*Pakeha* (n=11)		Māori (n=11)		Pacific (n=11)		Total (n=33)		*Pakeha* (n=11)		Māori (n=11)		Pacific (n=11)		Total (n=33)		*Pakeha* (n=11)		Māori (n=11)		Pacific (n=11)	
	Mean	(SD)	Mean	(SD)	Mean	(SD)	Mean	(SD)	Mean	(SD)	Mean	(SD)	Mean	(SD)	Mean	(SD)	Mean	(SD)	Mean	(SD)	Mean	(SD)	Mean	(SD)
Total	**5.1**	**(1.4)**	**5.3**	**(1.7)**	**4.7**	**(1.0)**	**5.4**	**(1.4)**	**11.4**	**(2.5)**	**11.6**	**(1.8)**	**11.4**	**(3.5)**	**11.2**	**(2.1)**	**8.1**	**(2.0)**	**7.5**	**(1.6)**	**8.2**	**(2.7)**	**8.5**	**(1.7)**
Personal Care	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	2.2	(3.5)	1.1	(2.7)	3.2	(4.7)	2.4	(2.5)	0.2	(0.8)	0	(0.0)	0.6	(1.2)	0.1	(0.3)
Mobility	3.9	(4.5)	1.8 [a]	(2.6)	3.2	(3.7)	6.7	(5.4)	14.7	(9.4)	12.9	(9.4)	13.7	(10.8)	17.6	(7.9)	5.9	(7.0)	3.4	(4)	7.4	(9.7)	6.9	(6.3)
Self-Organisation	2.9	(4.0)	0.8	(1.8)	4.3	(5.4)	3.5	(3.7)	16.3	(7.8)	14.8	(7.7)	18.8	(9.5)	15	(5.7)	9.3	(6.5)	4.8	(3.3)	12.1	(8.1)	11.0	(5)
Contact Partner/Chn	3.9	(3.7)	4.8	(3.3)	4	(4.1)	2.9	(3.7)	3.9	(3.7)	4.7	(2.8)	3.6	(4.4)	3.5	(3.9)	4.6	(3.7)	6.1	(2.8)	3.9	(4.3)	3.9	(3.7)
Contact Parents/Sibs	7.7	(4.6)	7.9	(4.5)	6.6	(4.9)	8.5	(4.6)	7.3	(5.0)	8.2	(6.0)	6.5	(5.0)	7.4	(4.2)	7.2	(4.9)	7.6	(4.9)	5.9	(5.5)	8.3	(4.3)
Socialising	6.7	(4.2)***	10.1	(4.0)	4	(1.9)	6	(4.0)	13.0	(6.6)***	19.2	(6.7)	10	(4.5)	9.7	(3.4)	10.4	(5.2)	12.6	(5.2)	7.8	(4)	10.7	(5.4)
Productive Emplymt	11.7	(3.8)	12.3	(4.4)	11.2	(3.5)	11.6	(3.9)	17.1	(4.2)	17.1	(5.3)	17.2	(3.7)	16.9	(3.6)	14.4	(2.9)	13.8	(3.8)	15.3	(2.4)	14	(2.3)
Psych Well-Being	4.3	(3.0)	4.6	(4.4)	4.3	(2.2)	4.0	(1.6)	16.5	(6.8)	14.6	(5.1)	18.5	(7.4)	16.3	(7.6)	12.3	(5.9)	12.0	(6.7)	12.5	(5.4)	12.5	(6.1)

*MANOVA compared ethnic groups: ** p≤ .01, *** p≤ .001, difference across ethnicity*

Discussion

The BICRO-39 was utilised as the primary outcome measure because it was specifically designed for the multidimensional nature of community-based TBI rehabilitation, measuring functioning in activity, social participation and psychological functioning (i.e., level of handicap). Results showed that average individual level of handicap increased following injury (as might be expected). Following rehabilitation handicap significantly decreased. While participants did not return back to pre-morbid levels of functioning, there was significant improvement, and as demonstrated in previous research, this suggests efficacy of rehabilitation. This evidence, which controls for spontaneous recovery and other potential confounding demographic variables, refutes anecdotal rhetoric which questions the effectiveness of community-based treatment following mild to moderate TBI.

Finding no significant differences across ethnicity for the total rehabilitation outcomes is not aligned with other ethnic minority TBI research. International studies show that ethnic minorities are more likely to have more negative outcomes than the majority race.[17, 18] The results of the present study suggest that Māori and Pacific Peoples can benefit from community-based rehabilitation in New Zealand. This result also contributes to dispelling anecdotal evidence that suggests that Māori and Pacific Peoples have poorer rehabilitation outcomes than Pakeha. Simpson's et al[19] cross-cultural qualitative Australian study reported similar findings and suggested that there is a universal experience of the sequelae of TBI that transcends individual cultures.

On a closer examination of the BICRO-39, Pakeha were significantly more handicapped than both Māori and Pacific Peoples at both Pre-injury and Intake on the Socialising subscale. Because the Socialising subscale focuses on measuring the amount of time spent with extended family and friends, and in traditional Māori and Pacific cultures the individual exists in the context of whanau / aiga potopoto (family / extended family), this result was not unexpected. The change from intake to current social functioning indicates that Pakeha improved significantly more that both Māori and Pacific Peoples. Hence, while Pakeha had increased their amount of time socialising following intake, Māori and Pacific remained constant.

Although they achieved above cut-off levels on the Cognistat, Pacific peoples scored significantly lower than both Māori and Pakeha on two Language subtests and significantly lower than Pakeha on the Memory subtest. Again, confounding demographic variables required statistical scrutinizing and results showed that there was no difference across ethnicity on any of these subtests once years of education and ESL were taken into account. These findings are a first for Pacific people's cognitive performance following TBI.

It has been well documented in the literature that level of education and ESL is associated with neuropsychological performance[3,12,20] and also affects scores on the Cognistat[21]. In their study with a male Māori sample, Ogden and McFarlane-Nathan[12] found that performance on various neuropsychological tests was dependent on Western education. Similarly, Barnfield and Leathem alluded to education and learning to account for their findings of lower neuropsychological performance of Māori subjects. Given that neuropsychological and cognitive tests are based on the Western constructs of intelligence and education it is reasonable to assume that years of formal education and perhaps learning styles contributed to the subscale discrepancies.

However, this does not account for the finding that Māori also had significantly fewer years of education than Pakeha, yet their cognitive profile was comparable to Pakeha. The confounding difference of ESL played a role here with nine of the eleven Pacific people reporting English as their second language and reporting experiencing speech and language difficulties following their injury. Moreover, the Language subtests are obviously heavily reliant on English, and memory tests have been shown as reliant on English as well.[22]

Conclusion

It is evident that Pakeha, Māori and Pacific peoples alike can benefit from community-based rehabilitation following TBI. There appears to be universalities in TBI experience and global rehabilitation outcomes that transcends individual cultures. However, there are micro-level cultural variations that have valuable implications when assessing and treating Pacific people in rehabilitation services for the future.

For Pacific people the impact of language has highlighted the inherent cultural bias in cognitive measures. Of concern to neuropsychological testing as a whole is that the Cognistat reflects standard neuropsychological measures such as the California Verbal Learning Test, Trails A, subtests from the Weschler Memory Scale, and subtests from the Weschler Adult Intelligence Scale. These standard tests are commonly utilized in neuropsychological assessment in New Zealand. Misleading conclusions may occur due to language differences but also because Pacific people have not been included in the population that the instruments are normed on. Consequently, an invalid neuropsychological assessment may give rise to recommendations for a rehabilitation programme that may have minimal effectiveness for a Pacific person. Neuropsychologists

need to take into account the formal education levels and language abilities when dealing with Pacific People, particularly immigrants with English as a second language.

Research is needed to develop and validate the use of neuropsychological and psychometric measures with Pacific people. Measure's would be more effective in New Zealand if they were normed across Māori and Pacific populations. While community-based neuro-rehabilitation has been shown to be effective, future research should also focus on identifying the efficacy of specific interventions within the multi-disciplinary aspects of TBI rehabilitation.

References

1. Accident Compensation Corporation. (2006). Traumatic Brain Injury: diagnosis, acute management and rehabilitation. Wellington: New Zealand Guidelines Group.
2. Lima, I., & Tukuitonga, C. (2000). Injury Among Pacific Peoples in Aotearoa. Auckland: Pacific Health Research Centre, University of Auckland.
3. Lezak, M. D. (1995). Neuropsychological Assessment: third edition. New York: Oxford University.
4. Wrightson, P,. & Gronwall, D. (1999). Mild head injury: a guide to management. New York: Oxford University.
5. National Institute of Health. (1998). Rehabilitation of persons with traumatic brain injury: a consensus statement, 1998 [Data file]. Available from the National Institute of Health Web site http://www.nih.gov/pubs/cbm/tbi.html.
6. Ponsford, J. L. (1995). Mechanisms, recovery and sequelae of traumatic brain injury: a foundation for the REAL approach. In J. L. Ponsford (Ed.), Traumatic brain injury rehabilitation for everyday living, (pp. 1-31). UK: Taylor & Francis.
7. Morton, M. V., & Wehman, P. (1995). Psychosocial and emotional sequelae of individuals with traumatic brain injury: a literature review and recommendations. Brain Injury, 9, 81-92.
8. Teasdale, G., & Christensen, A. (1994). Psychosocial outcome in Denmark. In A. Christensen, & B. Uzzell (Eds.), Brain injury and neuropsychological rehabilitation: international perspectives (pp. 235-244). New Jersey, USA: Lawrence Erlbaum.
9. Barker-Collo, S. L., Clarkson, A., Cribb, A., & Grogan, M. (2002). The impact of American content on California Verbal Learning Test Performance: A New Zealand illustration. The Clinical Neuropsychologist, 16, 290-299.
10. Barnfield, T. V., & Leathem, J. M. (1998). Neuropsychological outcomes of traumatic brain injury and substance abuse in a New Zealand population. Brain Injury, 12, 951-962.
11. Ogden, J.A., Cooper, E., & Dudley, M. (2003). Adapting neuropsychological assessments for minority groups: A study comparing white and Mäori New Zealanders. Brain Impairment, 4, 122-134.
12. Ogden, J. A., & McFarlane-Nathan. (1997). Cultural bias in the neuropsychological assessment of young Mäori men. New Zealand Journal of Psychology, 26, 2-12.
13. Accident Compensation Corporation. (2001). Clinical Guidelines: Acute Management of Traumatic Brain Injury. Wellington: ACC.
14. Powell, J.H., Beckers, K., & Greenwood, R. (1998). The measure of progress and outcomes in community rehabilitation after brain injury: A new assessment measure, the BICRO-39 scales. Archives of Physical Medicine and Rehabilitation, 79, 1213-1225.
15. Kiernan, R. J., Mueller, J., Langston, J. W., & Van Dyke, C. (1987). The Neurobehavioral Cognitive Status Examination: a brief but differentiated approach to cognitive assessment. Annals of International Medicine, 107, 481-485.
16. Tabachnick, B. G., & Fidell, L. S. (1989). Using multivariate statistics: second edition. Northridge, USA: Harper Collins.
17. Kreutzer, J., Marwitz, J., Walker, W., Sander, R., Sherer, M., Bogner, J., Fraser R., & Bushnik, T. (2003). Moderating factors in return to work and job stability after traumatic brain injury. Journal of Head Trauma Rehabilitation, 18, 128-138.
18. Blackmer, J., & Marshall, S. C. (1999). A comparison of traumatic brain injury in the Saskatchewan native North American populations. Brain Injury, 13, 627-635.
19. Simpson, G., Mohr, R., & Redman, A. (2000). Cultural variations in the understanding of traumatic brain injury and brain injury rehabilitation. Brain Injury, 14, 125-140.
20. Spreen, O., & Strauss, E. (1998). A compendium of neuropsychological tests: administration, norms and commentary. New York: Oxford University.
21. Ruchinskas, R., Repetz, N., & Singer, H. (2001). The use of the neurobehavioral cognitive status examination with geriatric rehabilitation patients. Rehabilitation Psychology, 46, 212-228.
22. Harris, J., Tulsky, D., & Schultheis, M. (2003). Assessment of the non-native English speaker: assimilating history and research findings to guide clinical practice. In D. Tulsky,. & D. Saklofske, (Eds.). Clinical interpretation of the WAIS-III and WMS-III (pp. 343-390). USA: Academic.

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Child discipline and nurturing practices among a cohort of Pacific mothers living in New Zealand.

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Abstract
The Pacific Islands Families (PIF) study is a longitudinal investigation of a cohort (N=1376) of Pacific infants born in New Zealand (NZ), and their mothers and fathers.
Objectives: *The PIF study aimed to determine: (1) the prevalence of disciplinary and nurturing parenting practices used with children at 12 months of age, and (2) the demographic, maternal and lifestyle factors associated with parenting practices.*
Methods: *At the 12-month measurement point, mothers (N=1207) were interviewed about their parenting practices using a modified version of the Parent Behaviour Checklist.*
Results: *High nurturance was significantly associated with Samoan ethnicity and post school qualifications, and low nurturance was significantly associated with post-natal depression, alcohol consumption and gambling. At the univariate level, high discipline scores were significantly associated with gambling, postnatal depression and lack of alignment to either Pacific or to European traditions. However the strongest association with discipline was the ethnicity variable with Tongan mothers reporting significantly higher disciplinary behaviours that all other ethnicities.*
Conclusions: *It is clear that there are a number of common underlying lifestyle issues that need to be considered when dealing with parenting problems in families with young children. However, specific to Pacific families, is Tongan ethnicity accounting for a strong cultural effect on parenting style, in particular high discipline scores relative to other Pacific groups. This important finding may be used to guide social policy and prevention programmes that are focused on the wellbeing of Pacific mothers and their children.*
Key words: *Pacific, nurturing, discipline.*

Introduction

Pacific peoples have been migrating to New Zealand (NZ) as early as the late 1800's. The census figures of 2006 show the total NZ population at 4,143,279 people and the total Pacific population living in NZ as 265,974. Health outcomes for Pacific peoples consistently show that Pacific peoples are among the lowest socio-economic groupings in New Zealand and suffer disproportionately from diabetes, obesity, and other diseases. In addition, their children feature disproportionately higher in the mortality statistics compared to all other ethnic groups except Maori.

[1,2,3]Immigration to a new country brings with it a host of challenges for the people who have migrated as well as for the host country. The few studies of Pacific parenting practices clearly illustrate the issues that migrant parents contend with when the culture of the adopted country is at odds with the culture of their homeland. These inter-generational and inter-cultural challenges are well documented internationally[4,5] and in New Zealand.[6,7,8,9]

Closely linked with inter-cultural and inter-generational issues are the parenting styles. The values and beliefs of Pacific parents have been described as having a strong focus on obedience without question, and respect for adults.[9] The concern that often arises for migrant parents is the possibility that their children may become so acculturated into the host country that they lose any semblance of their own ways of doing and knowing.[5] It is suggested that conflict also arises when matters of religious and cultural significance are discarded more easily by their children born and bred in the new country and the parents' inability to either understand or tolerate this change. Duituturaga (1988)[8] describes discipline or violence in Pacific parenting being affected by factors such as motive, context and consequence, if the motive was to cause injury then it can be seen as violent but if the motive was to discipline then it is not seen as violent. The consequences of disciplinary action can also determine whether the action can be described as violent. "Minor bruises can be accepted as a reminder of the lesson to be learned whereas black bruises, cuts, burns, broken bones and serious injuries are often considered as unacceptable consequences" (Duituturaga, 1988, p.111).[8]

Corporal punishment of children to control their behaviour does not produce positive results in the long term and is more likely to produce negative outcomes for both the child and the parents.

Extensive research[4,10,11] has shown that corporal punishment of children to control their behaviour does not produce positive results in the long term and is more likely to produce negative outcomes for both the child and the parents. Within a Pacific context, Anae (2002)[12] found that harsh parenting practices and lack of support and understanding leads to a number of migrant Pacific children in New Zealand, especially first generation, turning to gangs, risky behaviour, and results in poor educational outcomes and mental health problems as these children struggle to 'fit' in with their parents values and beliefs and those of their country of birth or adoption. Macpherson (1997) describes these 'high risk' youth as being disconnected from their families and their church and as most likely to become part of New Zealand's negative Pacific statistics of violent youth crime.

Pacific researchers have shown that Pacific parents often physically discipline their children because they love them, a common scenario being 'I am hitting you because I love you".[7,8,9] In a study of Samoan parenting, Cowley-Malcolm (2005)[7] showed that most of the participants claimed to have been punished because their parents were angry with them, and Fairbairn-Dunlop (2002)[9] found Samoan parents hit their children mostly because of disobedience. Duituturaga (1988)[8] reported that Pacific parents were concerned that if they didn't hit their children they would be seen to be spoilt by other people and would therefore not be loved. They believed, not disciplining or punishing their children would be viewed by God and others as an abdication of their role as 'good' parents. In contrast, a phone survey that included 100 Pacific peoples (Carswell, 2001)[13] found that European/other ethnic groupings (82%) Maori (73%) or Pacific (69%) ethnic groups were more accepting of disciplining their children if they were naughty.

In line with other researchers (Abel et al., 2001),[14] Cowley-Malcolm (2005)[7] found differences between parenting practices by Samoan parents born and bred in New Zealand and those born in Samoa. New Zealand born parents used less discipline and had 'other' ways of disciplining their children, like time out and withdrawal of privileges whereas Samoan born parents used swift, harsh punishment. An earlier small qualitative study (McCallin et al, 2001)[15] demonstrated that Pacific parents were struggling to raise their children in a different way than their parents had raised them with a number of participants wanting to discard the harsh physical discipline of their upbringing in favour of a more nurturing approach. The pattern of punishment that was described by the NZ generation of Pacific peoples was very different from their description of how they were punished when they were children, depicting an emerging pattern of inter-generational differences.[4,5]

In terms of the prevalence of physical punishment of young children, Straus & Stewart (1999)[11] reported that 94% of American children had been spanked before they were 3-4 years of age. Wissow (2001)[16] found that African American parents reported a significantly higher prevalence of ever spanking (67%) compared with whites (57%), Hispanics (47%) and Asians (41%). Within the New Zealand context, Fergusson (1997)[17] reported that 7.8% of the New Zealand 18-year olds in the cohort study stated they were regularly punished physically by their parents. Different methodologies, age groups and environments yield a great deal of variability in the findings in terms of physical discipline.

It is in the light of the national and international concern

for the wellbeing of children, the PIF study aimed to determine the (1) prevalence of disciplinary and nurturing parenting practices used with the child at 12 month of age, and (2) demographic, maternal and lifestyle factors associated with parenting practices

Method

Participants

The PIF study is following a cohort of Pacific infants born at Middlemore Hospital in Auckland between 15 March and 17 December 2000. All potential participants were selected from births where at least one parent was identified as being of Pacific Islands ethnicity and was a New Zealand permanent resident. Participants were identified through the Birthing Unit, in conjunction with the Pacific Islands Cultural Resource Unit, and initial information about the study was provided and consent was sought to make a home visit. At 12 months postpartum maternal interviews were carried out. Female interviewers of Pacific ethnicity who were fluent in English and a Pacific Islands language visited mothers in their homes. Once informed consent was obtained, mothers participated in one-hour interviews concerning family functioning and the health and development of the child. This interview was conducted in the preferred language of the mother. Within the context of a wider interview at the 12 month data point, parenting practices were measured. Detailed information about the PIF cohort and procedures is described elsewhere.[18]

At the time of the birth 1708 mothers were identified, 1657 were invited to participate, 1590 (96%) consented to a home visit; and, of these, 1,477 (93%) were eligible for the PIF study. Of those eligible, 1,376 (93%) participated at the 6-weeks and 1224 (83%) at the 12-month measurement point. No important differential attrition was observed.

Measures

Parenting practices: A modified version of the Parent Behaviour Checklist (PBC)[19] was used to measure parenting practices. The PBC is an empirically derived instrument developed for the parents of children one through four years of age. Modified versions of two subscales (nurturing and discipline) were used. Discipline items measure parental responses to problem behaviour, and nurturing items measure behaviour that promotes a child's psychological growth. Items are answered on a 4 point frequency scale and scores are summed. The two scale scores were categorised into four levels using quartiles. Higher scores in each subscale were indicative of greater nurturance and greater use of discipline behaviours.

Cultural Orientation: The General Ethnicity Questionnaire[20] is based on the widely used concept of *acculturation,* the process of change that groups and individuals undergo when they come into contact with another culture. Berry (1980)[21] identified four different varieties of acculturation: "assimilation", "integration", "separation", and "marginalization". In assimilation, cultural identity is relinquished and the individual moves into the larger society. In the present analyses, mothers were categorized based on their acculturation scores for identification with New Zealand mainstream culture or with the Pacific Islands. Hence "assimilated" mothers had high New Zealand identification and low Pacific identification. Integration involves maintenance of cultural integrity but also the movement towards becoming an integral part of the larger society (high New Zealand/high Pacific Island). Separation refers to self-imposed withdrawal from the larger society (high Pacific/low New Zealand), and marginalization refers to losing the essential features of one's culture, but not replacing them by entering the larger society (low Pacific/low New Zealand).

Post Natal Depression: The Edinburgh Post Natal Depression Scale (EPDS) was administered at the 6-week assessment. It is a self report instrument that focuses on cognitive and affective aspects of depression rather than somatic symptoms. The scale does not provide a clinical diagnosis of depression, but a score above 12 is widely used to indicate the presence of probable depressive disorder. Reliability and validity has been established in a variety of populations[22] including New Zealand.[23] However the use of the EDPS with Pacific mothers is limited.[24]

Analysis

The two subscales of the parenting scale were explored as continuous variables and then were dichotomised into two groups in terms of whether or not mothers fall in the top quartile (25%) of scores for each of the two subscales. Reliability analysis (Cronbach's alpha) was used to test the relationships between individual items in the subscales of nurturing and discipline. Univariable logistic regression procedure was employed to examine association between socio-demographic factors such as age, ethnicity, education, religion, household income, cultural orientation; lifestyle factors such as smoking, alcohol consumption and gambling; and maternal health measured by postnatal depression and being of the top quartile groups of nurturing or discipline. A stepwise multivariable logistic regression procedure was undertaken to assess the independent effects of these variables after adjusting of confounding factors. Nagelkerke's R^2 was used to estimate the variability in the dependent variable explained by the model. All analyses were performed using SPSS version 13.0 statistical software package and a significance level of α=0.05 was used to determine statistical significance for all calculations.

Table 1: Percent responses to Modified PBC items for mothers in the cohort (N=1207)[1].

Modified PBC Subscale and Item	Never/ almost never	Monthly	Fortnightly	Weekly	Daily / almost daily
Nurturance					
Take child to the park or playground	12.5	17.7	11.4	47.8	10.6
Child and I play together	0.3	0.3	0.5	6.3	92.5
Child spends time with partner /relatives	6.2	1.1	2.7	20.5	69.5
Get books for child	36.2	34.5	9.5	14.5	5.2
Involve child in quite activities	4.1	2.3	7.1	15.7	70.7
Praise child for learning new things	0.3	0.6	1.1	6.9	91.1
Plan surprises for child	34.5	44.2	5.4	9.4	6.5
Read to child	14.3	3.2	2.8	33.6	46.1
Take walks with child	6.3	2.2	4.6	39.3	47.5
Arrange activities for child...	8.3	2.7	8.0	28.7	52.3
Discipline					
Smack child	79.4	9.0	3.6	5.5	2.5
Yell at child	78.2	6.1	3.2	7.0	5.5
Threaten to punish child	86.4	5.1	2.4	3.4	2.7
Tell child that he/she is bad	79.0	5.9	3.0	5.8	6.4
Hit child with an object	99.8	0.1	0.0	0.2	0.0

[1]*Numbers responding to several items were slightly fewer*

Results

Twelve hundred and seven mothers responded to the questions about discipline and nurturing behaviours. Most of the mothers were in the 20-29 (612, 50.7%) year old age group and the Samoan ethnic group made up the majority of the respondents (583, 48.3%). A large majority of the mothers (90%) praised their children daily or almost daily, (52.3%) arranged activities for their children daily, and 46.1% read to their children daily or almost daily. A large percentage of the Pacific mothers in this cohort did not smack their child (79.4%), nor yell at their child (78.2%), nor threaten to punish (86.4%), nor tell their child they are bad (79%) nor hit their child with an object (99.8%). Table 1 presents the responses to the modified PBC items for mothers in the cohort.

Nurturance

Univariable analysis revealed significant associations between nurturance scores and ethnicity, partnered mothers, religion, cultural alignment, smoking, alcohol consumption, gambling and post natal depression. Samoan mothers were more likely to fall in the higher quartile of nurturance scores (23.8%) than other groups with Tongans (10%) and Niueans (8.8%). Nurturance scores were significantly higher for mothers who were partnered/married and those who reported being more aligned to 'both' Pacific and European traditions. In relation to lifestyle factors those mothers who drank, smoked, and gambled were significantly less likely to report high nurturing practices. Those mothers who reported suffering from post natal depression were also significantly less likely to report nurturing behaviours. Although mothers with post school qualifications reported higher nurturance scores these did not reach significance, and there were no significant associations found with household income, whether you were New Zealand born or Pacific born or the length of time respondents had lived in New Zealand. Being employed or in a particular family structure (either nuclear or extended) also showed no significant association with nurturance. Table 2 presents the unadjusted odds ratios for the nurturance subscale.

Table 2: Numbers (row percentages) and unadjusted odds ratios for Modified PBC Nurturance subscale scores by selected variables

Variable	Category	Relative score[1]				Unadjusted odds ratio (95% CI)		Overall P value
		Lower		Higher		Odds ratio	95% CI	
		n	%	n	%			
Socio-economic factors								
Age	<20	39	84.8	7	15.2	1		0.747
	20—29	507	82.8	105	17.2	1.15	(0.52, 2.65)	
	30—39	398	81.2	92	18.8	1.29	(0.56, 2.97)	
	40+	49	86.0	8	14.0	0.91	(0.30, 2.73)	
Ethnicity	Samoan	444	76.2	139	23.8	1.00		<0.001
	Cook Island Maori	181	87.4	26	12.6	0.45	(0.29, 0.72) †	
	Niuean	52	91.2	5	8.8	0.31	(0.12, 0.78) *	
	Tongan	215	90.0	24	10.0	0.36	(0.22, 0.57) ‡	
	Other Pacific[2]	30	81.1	7	18.9	0.74	(0.32, 1.73)	
	Non Pacific	72	86.7	11	13.3	0.19	(0.25, 0.95) *	
Education	No formal	376	83	77	17	1		0.054
	Secondary school	344	85.1	60	14.9	0.85	(0.59, 1.23)	
	Post-school	274	78.5	75	21.5	1.34	(0.94, 1.90)	
House income	$0 - $20,000	327	83.8	63	16.2	1		0.579
	$20,001 – $40,000	512	81.1	119	18.9	1.21	(0.86, 1.69)	
	>$40,000	120	82.8	25	17.2	1.08	(0.65, 1.80)	
	Unknown	35	87.5	5	12.5	0.74	(0.28, 1.97)	
Social marital status	Non Partnered	201	87.4	29	12.6	1.00		0.029
	Partnered	793	81.3	183	18.8	1.60	(1.05, 2.44) *	
NZ born	No	670	83.5	132	16.5	1		0.150
	Yes	324	80.2	80	19.8	1.25	(0.92, 1.71)	
Years lived in NZ	0--5	189	84.4	35	15.6	1		0.337
	6--10	113	85.6	19	14.4	0.91	(0.50, 1.66)	
	>10	689	81.3	158	18.7	1.24	(0.83, 1.85)	
Religious affiliation	No	82	90.1	9	9.9	1.00		0.049
	Yes	912	81.3	203	18.2	2.03	(1.00, 4.10) *	
Employment	No	723	82.6	152	17.4	1		0.758
	Yes	271	81.9	60	18.1	1.05	(0.76, 1.47)	
Family structure	Nuclear family	495	81.4	113	18.6	1		0.355
	Extended family	499	83.4	99	16.6	0.87	(0.65, 1.17)	
Acculturation	Assimilationist	320	83.8	62	16.2	1		0.006
	Segregationalist	316	80.0	79	20.0	1.29	(0.89, 1.86)	
	Integrator	160	76.9	48	23.1	1.55	(1.02, 2.36)*	
	Marginal	189	89.2	23	10.8	0.63	(0.38, 1.05)	
Lifestyle factors								
Smoking	No	681	80.8	162	19.2	1		0.028
	Yes	309	86.1	50	13.9	0.68	(0.48, 0.96)*	
Alcohol	No	781	80	195	20	1		0.000
	Yes	212	92.6	17	17.6	0.32	(0.19, 0.54) ‡	
Gambling	No	646	77.4	189	22.6	1		<0.001
	Yes	348	93.8	23	6.2	0.23	(0.14, 0.36) ‡	
Maternal health								
Post natal depression	No	811	80.7	194	19.3	1.00		0.001
	Yes	172	91.0	17	9.0	0.41	(0.25, 0.70) †	

**P<0.05; † P<0.01; ‡ P<0.001, [1] Lower and higher relative scores fell within the lower three-quarters and upper quarter of the distribution respectively. [2] Includes mothers identifying equally with two or more Pacific Island groups, equally with Pacific Island and non Pacific Island groups, or with Pacific Island groups other than Tongan, Samoan, Cook Island Maori or Niuean*

After adjusting of confounding factors the significant factors associated with low nurturance were ethnicity (Cook Island and Tongan), alcohol, gambling and post natal depression, and with high nurturance was ethnicity (Samoan) and post school qualifications. The variables attaining significance from multivariable logistic regression are presented in Table 3.

Table 3: Adjusted odds ratios and 95% CI for higher nurturance scores[1]

Variable	Category	Adjusted odds ratio (95% CI)		
		Odds ratio	95% CI	Overall P value
Socio-economic factors				
Ethnicity	Samoan	1.00		0.007
	Cook Island Maori	0.59	(0.36, 0.95) *	
	Niuean	0.41	(0.15, 1.08)	
	Tongan	0.44	(0.27, 0.71) †	
	Other Pacific[2]	0.98	(0.40, 2.41)	
	Non Pacific	0.87	(0.42, 1.81)	
Education	No formal	1		0.009
	Secondary school	0.91	(0.62, 1.34)	
	Post-school	1.62	(1.11, 2.37) *	
Lifestyle factors				
Alcohol	No	1		0.002
	Yes	0.40	(0.22, 0.71) ‡	
Gambling	No	1		<0.001
	Yes	0.27	(0.17, 0.44) ‡	
Maternal health				
Post natal depression	No	1		0.02
	Yes	0.52	(0.30, 0.90)*	

Nagelkerke R2=14%
**P<0.05; † P<0.01; ‡ P<0.001*
[1]Lower and higher relative scores fell within the lower three-quarters and upper quarter of the distribution respectively.
[2]Includes mothers identifying equally with two or more Pacific Island groups, equally with Pacific Island and non Pacific Island groups, or with Pacific Island groups other than Tongan, Samoan, Cook Island Maori or Niuean

Discipline

Univariate analysis revealed no significant association between age and discipline, although those aged below 20 scored substantially less on the discipline scale. The findings in relation to ethnicity showed that Samoan mothers scored significantly lower in the discipline scale that all other ethnicities, with Tongan mothers scoring the highest on the discipline scale. Discipline was not significantly associated with education, household income, marital status, where respondents were born, the number of years lived in New Zealand, religious affiliation, employment and family structure. However, cultural alignment was significantly associated with discipline with those participants who reported being more aligned with Pacific traditions and participants who reported being aligned to both Pacific and European traditions having lower discipline scores. The univariate findings also revealed that participants who gambled and who had experienced post natal depression scored higher on the discipline scale. In relation to other lifestyle factors no significant relationship was found between discipline scores and smoking and alcohol. Drugs were not included in the analysis as the numbers of respondents who took drugs were very small. Table 4 presents the unadjusted odds ratios for the discipline subscale.

Only ethnicity was retained in the multivariable regression model in association with higher discipline score. Comparing with Samoans, the odds ratios of having higher discipline scores were 7.88 (95%CI: 4.93, 12.61) in Cook Island, 5.99 (95%CI: 2.96, 12.51) in Niuean, 27.80 (95%CI: 17.75, 43.55) in Tongan, 8.77 (95%CI: 4.02, 19.18) in other Pacific and 8.77 (95%CI: 4.88, 15.78) in non Pacific mothers, respectively. Table 5 presents adjusted odds ratios for higher discipline scores among the different pacific ethnic groups.

Table 4: Numbers (row percentages) and unadjusted odds ratios for Modified PBC Discipline subscale scores by selected variables

Variable	Category	Relative score[1]				Unadjusted odds ratio (95% CI)		
		Lower		Higher		Odds ratio	95% CI	Overall P value
		n	%	n	%			
Socio-economic factors								
Age	<20	37	80.4	9	19.6	1		0.682
	20—29	453	74	159	26	1.44	(0.68, 3.06)	
	30—39	373	76.3	116	23.7	1.28	(0.60, 2.73)	
	40+	42	73.7	15	26.3	1.47	(0.58, 3.75)	
Ethnicity	Samoan	552	94.7	31	5.3	1.00		<0.001
	Cook Island Maori	141	68.1	66	31.9	8.33	(5.24, 13.27) ‡	
	Niuean	42	73.7	15	26.3	6.36	(3.18, 12.70) ‡	
	Tongan	91	38.2	147	61.8	28.76	(18.41, 44.95) ‡	
	Other Pacific[2]	25	67.6	12	32.4	8.55	(3.93, 18.60) ‡	
	Non Pacific	55	66.3	28	33.7	9.07	(5.07, 16.21) ‡	
Education	No formal	344	76.1	108	23.9	1		0.549
	Secondary school	296	73.3	108	26.7	1.16	(0.85, 1.58)	
	Post-school	266	76.2	83	23.8	0.99	(0.72, 1.38)	
House income	$0 - $20,000	307	78.7	83	21.3	1		0.216
	$20,001 – $40,000	467	74.1	163	25.9	1.29	(0.96, 1.74)	
	>$40,000	103	71	42	29	1.51	(0.98, 2.33)	
	Unknown	29	72.5	11	27.5	1.40	(0.67, 2.93)	
Social marital status	Non Partnered	182	79.1	48	20.9	1	0.125	
	Partnered	724	74.3	251	25.7	1.32	(0.93, 1.86)	
NZ born	No	597	74.5	204	25.5	1		0.459
	Yes	309	76.5	95	23.5	0.9	(0.68, 1.19)	
Years lived in NZ	0--5	169	75.8	54	24.2	1		0.873
	6--10	97	73.5	35	26.5	1.13	(0.69, 1.85)	
	>10	639	75.4	208	24.6	1.02	(0.72, 1.44)	
Religious affiliation	No	63	69.2	28	30.8	1		0.173
	Yes	843	75.7	271	24.3	0.72	(0.45, 1.15)	
Employment	No	650	74.4	224	25.6	1		0.287
	Yes	256	77.3	75	22.7	0.85	(0.63, 1.15)	
Family structure	Nuclear family	457	75.3	150	24.7	1		0.934
	Extended family	449	75.1	149	24.9	1.01	(0.78, 1.31)	
Acculturation	Assimilationist	276	72.3	106	27.7	1		0.001
	Segregationalist	315	79.9	79	20.1	0.65	(0.47, 0.91)*	
	Integrator	166	79.8	42	20.2	0.66	(0.44, 0.99)*	
	Marginal	142	67	70	33	1.28	(0.89, 1.85)	
Lifestyle factors								
Smoking	No	634	75.2	209	24.8	1		0.980
	Yes	269	75.1	89	24.9	1.0	(0.75, 1.34)	
Alcohol	No	742	76.1	233	23.9	1		0.121
	Yes	163	71.2	66	28.8	1.29	(0.94, 1.78)	
Gambling	No	650	77.9	184	22.1	1		0.001
	Yes	256	69	115	31	1.59	(1.31, 2.09) †	
Maternal health								
Post natal depression	No	790	78.7	214	21.3	1.00		<0.001
	Yes	111	58.7	78	41.3	2.59	(1.87, 3.60) ‡	

**P<0.05; † P<0.01; ‡ P<0.001*

[1]Lower and higher relative scores fell within the lower three-quarters and upper quarter of the distribution respectively.

[2]Includes mothers identifying equally with two or more Pacific Island groups, equally with Pacific Island and non Pacific Island groups, or with Pacific Island groups other than Tongan, Samoan, Cook Island Maori or Niuean

Table 5: Adjusted odds ratios and 95% CI for higher discipline scores[1]

Variable	Category	Adjusted odds ratio (95% CI)		
		Odds ratio	95% CI	Overall P value
Socio-economic factors				
Ethnicity	Samoan	1.00		<0.001
	Cook Island Maori	7.88	(4.93, 12.61) ‡	
	Niuean	5.99	(2.96, 12.15) ‡	
	Tongan	27.80	(17.75, 43.55) ‡	
	Other Pacific[2]	8.77	(4.02, 19.18) ‡	
	Non Pacific	8.77	(4.88, 15.78) ‡	

Nagelkerke R2=34%
**P<0.05; † P<0.01; ‡ P<0.001*
[1]Lower and higher relative scores fell within the lower three-quarters and upper quarter of the distribution respectively.
[2]Includes mothers identifying equally with two or more Pacific Island groups, equally with Pacific Island and non Pacific Island groups, or with Pacific Island groups other than Tongan, Samoan, Cook Island Maori or Niuean.

Discussion

These findings show that the majority of Pacific mothers nurtured their child and did not yell, hit or tell their twelve-month-old child they are bad. The strongest finding was the association between parenting behaviours and Pacific ethnicity. Tongan mothers scored significantly higher on the discipline scale and lower on the nurturing scale and Samoan mothers were significantly lower on the discipline scale and higher on the nurturing scale. These findings may partly be explained by immigration patterns. On average the Samoan population have been in New Zealand longer than New Zealand's Tongan population.[25] This may mean that the effects of acculturation are distinct and could contribute to the reported differences in parenting practices. It is also important to consider that politically, socially and culturally the two countries have their own unique history. Disparate maternal and paternal roles may also explain these differences, as Tongan mothers (rather than fathers) may be the chief disciplinarian whilst for Samoans fathers may be more likely to take up this responsibility. Further research into parenting practices of our Pacific fathers is needed to more fully understand these findings. Although one can only speculate as to the reasons why the results showed this considerable difference it would be remiss of researchers not to consider the uniqueness of ethnic specific groupings; each with their own languages, culture and traditions.

It is interesting to note that at univariate level, cultural orientation of the mothers was significant, those who were defined as integrators were less likely to discipline and more likely to nurture. Integration involves maintenance of cultural integrity but also the movement towards becoming an integral part of the larger society (high New Zealand/high Pacific Island). In terms of prevention and intervention it is clear that what may work for one ethnicity may not necessarily work for another, and if we are to make a difference we must address the issues within the specific communities.

Postnatal depression has been shown to have adverse effects on the wellbeing of children,[26] with significant negative effects on early mother-infant interaction.[27,28] In line with these findings we found that maternal depression was significantly associated with low nurturance and high discipline scores. Previous PIF findings at the 6-weeks time point revealed a large prevalence difference occurred between Tongan mothers and other Pacific Island groups with post natal depression prevalence estimates ranging from 7.7% for Samoans to 30.9% for Tongans.[29] It is possible that Tongans residing in New Zealand experience higher rates of depression generally, not just postpartum which may in part, explain the high discipline and low nurturance scores reported by Tongan mothers at 12 months. It is clear that many different factors are implicated in family wellbeing and in the way parents raise their children and we cannot assume that all Pacific groups face the same pressures in their daily lives.

In terms of lifestyle, low nurturance scores were significantly associated with alcohol consumption and gambling. Research has shown that children of problem gamblers report feeling abandoned, rejected, neglected emotionally deprived and isolated [30,31] and typically experience inconsistency in their relationships with parents, at times being ignored and at other times being nurtured.[32] Darbyshire et al. (2001)[33] described children's experience of living with a parent who had a problem gambling as one

of pervasive loss which included the loss of security and trust and engendered feelings that they were not loved or valued. The wide range of negative effects of alcohol consumption on the parent-child relationship is also well documented. The association between parental substance abuse, child neglect and developmental progress with respect to psychological functioning during infancy and early childhood[34,35] is particularly pertinent. An important task in infancy is socio-emotional development in infancy, influenced to a significant extent, by the quality of parenting, is the formation of a secure infant-caregiver attachment. Consequent to neglectful parenting and emotional unavailability is insecure attachment, observed in 80-100% in maltreated samples.[36] Given that these correlates of low maternal nurturance have emerged in previous studies, it is clear that there are a number of common underlying lifestyle issues that need to be considered when dealing with parenting problems in families with young children.

Caution is required when interpreting these findings due to the data being based on maternal report rather than an objective measure of parenting styles. However data is collected by a team of interviewers who are from the main Pacific ethnicities thus mothers are usually interviewed by women of their own specific ethnicity. The cultural sensitivity of our methods and procedures and the size of the cohort demonstrate the robustness of the PIF Study findings. It is important to note that the PIF Study is breaking new ground in different areas of investigation with the Pacific population and in many cases these are the first set of findings in a specific area. There is a scarcity of Pacific research in the area of parenting and thus there is no comparative data to contribute to a clearer picture of this important aspect of family life. It is vital that further research is undertaken, both quantitatively and qualitatively, to investigate ethnic differences in more depth and thus provide some insight into the reasons behind such findings. However, these findings are a starting point for the evidenced based design of policy and prevention programmes that are focused on the wellbeing of Pacific mothers and their children.

Acknowledgements

The Pacific Islands Families Study is funded by grants awarded from the Foundation for Research Science and Technology, The Health Research Council of New Zealand and the Maurice and Phyllis Paykel Trust. The authors gratefully acknowledge the families who participate in the study as well as other members of the research team. In addition we wish to express our thanks to the PIF Advisory Board for their guidance and support.

References

1. Ministry of Pacific Island Affairs and Statistics New Zealand. (2002). Pacific progress: a report on the economic status of Pacific peoples in New Zealand. Wellington: Statistics New Zealand.
2. Paterson, J., Carter, S., Tukuitonga, C., & Williams, M. (2006). Health Problems among six week old Pacific infants living in New Zealand. Medical Science Monitor, 12(2), CR51-54.
3. Tukuitonga, C. F., Bell, S., & Robinson, E. (2000). Hospital admissions among Pacific children in Auckland. New Zealand Medical Journal, 113, 358-361.
4. Fontes, L.A. (2005) Child Abuse and Culture: Working with diverse families: New York: Guildford Press.
5. Tyska, V. (2003). Immigrant adjustment and parenting of teens: A study of newcomer Groups in Toronto, Canada. Paper originally presented at the 4th International Youth conference in Karelia, Finland, June 7th, Department of Sociology Ryerson University, Toronto.
6. Anae, M. (2001). The New Viking of the Sunrise: New Zealand borns in the Information Age. In C. Macpherson & P. Spoonley (Eds.), Tangata o te Moana Nui: The Evolving Identities of Pacific Peoples in Aotearoa/New Zealand. Palmerston North: Dunmore Press.
7. Cowley-Malcolm, E. T.(2006) Unpublished Masters Thesis 'Some Samoans' perceptions, values and beliefs on the role of parents and children within the context of aiga/family and the influence of fa'asamoa and the church on Samoan Parenting. School of Social Sciences, AUT University, Auckland.
8. Duituturaga, E. (1988). Pacific Island Study. In Attitudes to Family Violence: a study across cultures. Synergy Applied Research. Wellington: FVPCC.
9. Fairbairn-Dunlop, P. (2002). Tetee atu le sasa ma le upu malosi: Hold back your hands and your harsh words. Pacific Health Dialog, 8(1) 220-221.
10. McCord, J. 1996. Unintended consequences of punishment. Pediatrics, 98(4), 832-834.
11. Straus, M. A., & Stewart, J. H. (1999). Corporal punishment by American parents: National data on prevalence, chronicity, severity, and duration, in relation to child and family characteristics. Clinical Child and Family Psychology Review, 2, 55–70.
12. Anae, M. (2002). Papalagi redefined: Toward a New Zealand-born Samoan identity. In P. Spickard, J. L. Rondilla, & D. H. Wright (Eds.), Pacific diaspora: Island peoples in the United States and across the Pacific (pp. 150-168). Honolulu: University of Hawaii Press.

13. Carswell, S. 2001. Survey on public attitudes towards the physical discipline of children. Available from: http://www.courts.govt.nz/pubs/reports/2001/children/children-2.pdf Children's Issues Centre, University of Otago, and Office of The Children's Commissioner. (June, 2004) The Discipline and Guidance of Children: A summary of research.
14. Abel, S., Park, J., Tipene-Leach, D., Finau, S., Lennan, M. (2001). Infant care practices in New Zealand: a cross-cultural qualitative study. Social Science & Medicine, 53(9), 1135.
15. McCallin, A., Paterson, J., Butler, S., & Cowley, E. (2001). Striving for the Best of Both Worlds. Pacific Health Dialog, 8, 6-14.
16. Wissow, L. (2001). Ethnicity income and parenting contexts of physical punishment in a national sample of families with young children. Child Maltreatment, 6(2), 118-129.
17. Fergusson, D. M., & Linsky, M. T. (1997). Physical punishment/maltreatment during childhood and adjustment in young adulthood. Child Abuse and Neglect, 21, 617-630.
18. Paterson, J., Tukuitonga, C., Abbott, M., Feehan, M., Silva, P., Percival, T., Butler, S., Cowley-Malcolm. E., Borrows, J., Williams, M., & Schluter, P. (2006b). Longitudinal study of Pacific children born at Middlemore Hospital: Study design and methodology. New Zealand Medical Journal, 119, 1228, ISSN11758716.
19. Fox, R. A. Parent Behaviour Checklist. (1994). Brandon, Vermont: Clinical Psychology Publishing Co.
20. Tsai, J., Ying, Y., & Lee, P. (2000). The meaning of being Chinese and being American: variation among Chinese and American young adults. Journal of Cross-Cultural Psychology, 31, 302-32
21. Berry, J. W. (2003). Conceptual approaches to acculturation. In K.M. Chun, P.B. Organista & G. Marin (Eds.) Acculturation: Advances in Theory, Measurement & Applied Research (pp.17-38). Washington, DC: American Psychological Association.
22. Harris, B., Huckle, P., Thomas, R., Johns, S., & Fung, H. (1989). The use of rating scales to identify post-natal depression. British Journal of Psychiatry, 154, 813-817.
23. Boyce, P., Stubbs, J., & Todd, A. (1993). The Edinburgh Postnatal Depression Scale: validation for an Australian sample. Australia and New Zealand Journal of Psychiatry, 27, 472-476.
24. Lealaiauloto, R., & Bridgman, G. (1997). Pacific Island postnatal distress. Auckland: Mental Health Foundation of Aotearoa/New Zealand.
25. Sundborn, G., Metcalf, PA., Schaaf, D., Dyall, Gentles, D., Jackson, R. (2006) Differences in health-related socioeconomic characteristics among Pacific populations living in Auckland, New Zealand. New Zealand Medical Journal, Vol 119 No 1228.
26. National Health and Medical Research Council. (2000). Postnatal depression—a systematic review of published scientific literature to 1999. NHMRC: AusInfo, Canberra.
27. Beck, C. (1996). A meta-analysis of the relationship between postpartum depression and infant temperament. Nursing Research, 45, 225-230.
28. Beck, C. (1998). The effects of postpartum depression on child development: a meta-analysis. Archives of Psychiatric Nursing, 12, 12-20.
29. Abbott, M., & Williams, M. (2006). Postnatal depressive symptoms among Pacific mothers in Auckland: prevalence and risk factors. Australian & New Zealand Journal of Psychiatry, 40, 230-238.
30. Abbott, D., Cramer, S. L., & Sherrets, S. D. (1995). Pathological Gambling and the Family: Practice Implications. Families in Society: The Journal of Contemporary Human Services, 76(4), 213-219.
31. Lesieur, H. 1992. Compulsive Gambling. Society, May/June, 43-50.
32. Lesieur, H. R., & Rothschild, J. (1989). Children of Gambling Anonymous Members. Journal of Gambling Behavior, 54, 269-281.
33. Darbyshire, P., Oster, C., & Carrig, H. (2001). The experience of pervasive loss: Children and young people living in a family where parental gambling is a problem. Journal of Gambling Studies, 17, 23–45.
34. Chasnoff, I. J., & Lowder, L.A. (1999). Parental alcohol and drug use and risk for child maltreatment: a timely approach to intervention. In H. Dubowitz (Ed.), Neglected children, research practice and policy (pp. 132-155).
35. Kaplan, S. J., Pelcovitz, D., & Labruna, V. (1999). Child and adolescent abuse and neglect research: a review of the past 10 years. Part 1: physical and emotional abuse and neglect. Journal of the American Academy of Child and Adolescent Psychiatry, 38(10), 1214-1222.
36. Cicchetti, D., Toth, S., & Bush, M. (1988). Developmental psychopathology and incompetence in childhood: suggestions for intervention. In B.B. Lahey & A.E. Kazdin (Eds.), Advances in clinical child psychology, vol 11 (pp.1-77). New York: Plenum.

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'From Kava to Lager' - alcohol consumption and drinking patterns for older adults of Pacific ethnic groups, and Europeans in the Diabetes Heart and Health Study (DHAHS) 2002-2003, Auckland New Zealand

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Abstract

Aim *This paper describes and compares alcohol consumption and drinking patterns for Pacific ethnic groups (Samoan, Tongan, Niue, Cook Islands) and European New Zealanders by gender participating in the 2002-03 Diabetes Heart and Health Study (DHAHS).*

Methods *The DHAHS was a cross-sectional population based study of people age 35-74 years carried out in Auckland between 2002-03. A total of 1011 Pacific people comprising of 484 Samoan, 252 Tongan, 109 Niuean, 116 Cook Islanders and 47 'Other Pacific' (mainly Fijian) and 1745 European participants took part in the survey. Participants answered a self-administered questionnaire to assess whether they consumed alcohol, their drinking patterns and consumption levels and reasons for stopping drinking.*

Results *Approximately half (51.3%) of all Pacific people did not currently drink compared to 6.2% of the European population. Of 'non-drinkers' - 'never Drinking' was significantly more common in Pacific (40%) compared to Europeans (13%) $p<0.0001$. Ex-drinkers comprised 6.3% of the 'ever-drank' population for European compared to 27.6% for Pacific. The majority of Pacific men and women drinkers (>60%) consumed alcohol 'weekly' or 'less than weekly'. In contrast the majority of European men and women drinkers (>60%) consumed alcohol '2-3 days per week' or 'daily'. European men were significantly more likely to drink wine and spirits, and European women were significantly more likely to drink wine than their Pacific counterparts. Pacific drinkers consumed an average of 6.9 drinks on a typical occasion and 82 mls of pure alcohol per week, compared to 3.6 drinks and 126 mls per week for Europeans.*

Conclusion *Middle-aged and older Pacific adults are less likely to consume alcohol than Europeans however those who drink consume more on a typical occasion but drink less regularly resulting in lower weekly consumption of pure alcohol. Drinking patterns in these Pacific adults tend to show substantial diversity by age (older are less likely to drink), sex (women less likely to drink), and financial deprivation (middle groups consume more than least and most financially deprived). For Europeans a more homogenous drinking style prevailed by age, sex, and deprivation. Pacific drinkers were also approximately five times more likely to stop drinking compared to Europeans, citing family and social reasons as their main motivation for stopping drinking.*

Introduction

Pacific people in New Zealand are less likely to consume alcohol than the general New Zealand population.[1] However those Pacific people who consume alcohol are more likely to drink more on any typical occasion and experience negative consequences of such a drinking style.[2,3] In the 1992-1993 Household survey[4] found 53% of Pacific people were estimated to be *'non-drinkers'*. Similarly, in a phone survey carried out in 2002/03, 43% of Pacific people surveyed were *'non-drinkers'* compared to 15% of the general New Zealand (NZ) population.[3] Pacific drinkers would drink an average of eight drinks on a typical drinking occasion compared to four for the national population, and had consumption patterns referred to as *'too much or nothing at all'.*[3] In this same study Pacific people were not found to drink more frequently than their non-Pacific counterparts but were more likely to have experienced negative consequences from drinking compared to national levels, this finding is supported elsewhere.[5]

Research has suggested that the concept of a *'social drinker'* was not well recognised in Pacific communities and that for most, drinking meant drinking enough to get drunk or until one could not drink anymore.[6] This view of drinking would indeed support a *'too much or nothing at all'* culture and was thought to have been influenced in part by traditional kava drinking practices. When drinking kava an entire cup is consumed in one go, and the kava drunk until finished rather than when one feels that they have had enough.[6] For other Pacific nations that have a longer migration histories in New Zealand (Cook Islands and Niue) and where kava drinking is less common,[7,8] an adoption of a typical New Zealand drinking culture is most likely. From 1918 – 1967 New Zealand pubs had to be closed by 6pm. This gave rise to what is known as the 'six o'clock swill'. Six o'clock closing has been seen by many commentators as teaching two generations of Kiwi men to drink as fast as possible, contributing to a binge-drinking culture.[9] The most recent New Zealand Health Survey found that for *'drinkers'* - the proportion engaged in 'hazardous drinking' in Pacific adults (39.2%) was almost double that of European/ Other New Zealanders (20.1%).[5]

The aim of this study is to describe the characteristics of *'drinkers'* & *'non-drinkers'* of the pan-Pacific `and main Pacific groups (Samoan, Cook Islands, Tongan, Niuean) who participated in the Diabetes Heart and Health Study (DHAHS).

Pacific drinkers would drink an average of eight drinks on a typical drinking occasion compared to four for the national population, and had consumption patterns referred to as 'too much or nothing at all'.

Method

The aim of the DHAHS was to investigate the prevalence of cardiovascular and diabetes risk factors in a representative sample of Aucklanders aged 35-74 years, between January 2002 and December 2003.

Participants were recruited using two sampling frames: one was a cluster sample where random starting point Auckland area addresses were obtained from Statistics New Zealand and the probability of selection was proportional to the number of people living in that mesh block (response rate 61.3%); and the other was a random sample taken from the November 2000 Auckland electoral rolls stratified into 5 year age bands and included all people living in the Auckland area, with the exception of the Franklin and Rodney electorates (response rate 65%). Participants were interviewed in places close to where they lived. All completed a self-administered questionnaire and a series of health measurements were made.

Classification of ethnicity gave priority to Pacific over European ethnicity. This is similar to the method used by Statistics New Zealand.[10] Participants who indicated belonging to more than one Pacific ethnic group were assigned to one ethnic group only. Those who were of Pacific and non-Pacific or non-Maori were assigned into their respective Pacific ethnic group. Those who belonged to more than one Pacific ethnic group were assigned to the smaller Pacific group as done by census 2001.[10] This gave priority firstly to Niuean, followed by Cook Island, Tongan, and lastly Samoan ethnicity. Small numbers of Fijian (n=27) and 'Other Pacific' (n=27) participants meant that analysis of their results could not generate reliable findings. Analyses were performed for the entire Pacific cohort (n=1011) which included 'Fijian' and 'Other Pacific' participants, as well as ethnic specific analyses for the main Pacific ethnic groups (Samoan, Cook Island, Tongan and Niuean). Ethical approval was obtained from the Health and Disability Ethics Committees.

Four components of alcohol consumption and drinking patterns will be described in this paper. These include the proportion of 'drinkers' & 'non-drinkers' in these populations, the frequency of drinking (i.e. days per week/month), the number of drinks consumed on a typical drinking occasion, and the type of alcohol consumed. From these measures an overall estimate of total pure alcohol consumed weekly was determined. Characteristics of 'non-drinkers' will also be described highlighting reasons why ex-drinkers stopped drinking. Both 'drinkers' and 'non-drinkers'

were analysed separately. The 'non-drinkers' group consisted of i) 'never-drinkers', ii) 'ex-drinkers', and iii) 'occasional drinkers, not monthly'.

All participants received information in the mail with instructions of where and when to attend the survey centres. Participants completed questionnaires covering socioeconomic status (SES), demographic information and alcohol consumption. In addition a number of CVD and diabetes risk factors were measured (but not discussed in this paper).

An NZDep2001 score was determined for each participant based on their area of domicile and was classified in quintiles. Quintile 1 represents areas with the least deprivation and quintile 5 areas with the most deprivation.[5] The New Zealand Index of social deprivation (NZDep20001) was created from Census 2001 data; it describes the deprivation by small geographic areas and is used as a proxy for individual deprivation.

Statistical analysis was undertaken using SAS version 9.1. Participant data were weighted according to the sampling frame that they were obtained from and means, standard errors and prevalence's calculated using dual frame sampling methodology.[11-13] SAS survey procedures (SURVEYMEANS, SURVEYREG, SURVEYFREQ AND SURVEYLOGISTIC) were used to calculate weighted means, adjusted means, percentages and odds ratios, respectively.[14] The Rao-Scott modified Pearson Chi squared test was used where appropriate. Analyses have compared all Pacific ethnic groups to their European counterparts.

Results

Non-drinkers

Non-drinking was significantly more common in Pacific peoples (p<0.0001) compared to European. Approximately half (51.3%) of all Pacific people reported that they did not drink compared 6.2% of the European population. All Pacific ethnic groups followed this pattern (Samoan 50.6%, Cook Islands 49.2%, Tongan 58.9%) with the exception of Niueans among whom one third (32.9%) did not drink. Non-drinking was more common amongst women for all groups. Samoan women (92%) were most likely to report that they did not drink, followed by Tongan (78%), Cook Islands (75%), Niue (65%) and Europeans (27%). For men, non-drinking was most common in Tongans (70%), followed by Cook Islands (54%), Samoans (41%) Niueans (26%) and Europeans (14%).

Table 1 Proportion of non-drinkers by age group, adjusted for sex

	European (%)	Pacific (%)
<45	7.4	46.8‡
45-54	2.7	43.5‡
55-64	9.2	62.4‡
65+	4.8	70.3‡

‡ = p<0.001

Table 1 shows the proportion of *'non-drinkers'* by age group. Non-drinking was more common in older Pacific age groups, whereas for Europeans *'non-drinkers'* generally became less common in the older age groups.
For both Pacific and European people, ex-drinkers comprised approximately half of the non-drinking group (Pacific 53%, European 51%). 'Never Drinking' was significantly more common in Pacific compared to Europeans (Pacific 40%, European 13%; p<0.0001). Pacific were also significantly less likely to be occasional drinkers (Pacific 7%, European 36%; p<0.0001).

Ex-drinkers comprised 6.3% of the 'ever-drank' population (excluding 'Never Drinking') for European compared to 27.6% for Pacific. This shows that not only are Pacific people less likely to drink alcohol; those that start are approximately 5 times more likely to stop compared to Europeans.

Reasons for stopping drinking

'Social/Family' reasons were the main reasons reported for stopping drinking among both the pan-Pacific population (52%) and Europeans (37%). The leading reason for stopping drinking for Samoans and Niueans was 'Other health reasons'. Significantly more Pacific people (29%) named 'Other health reasons' as their leading reason for stopping drinking compared to Europeans (14%), (p<0.05). Concerns regarding heart disease was not a significant reason for stopping drinking for both Pacific (6%) and Europeans (3%).

Table 2 Types of Alcohol consumed by gender, age adjusted

	Men (%)		Women (%)	
	European (n = 738)	Pacific (n= 215)	European (n = 632)	Pacific (n = 84)
Beer	60.0	82.1*	7.3	27.9*
Spirits/Liqueurs	11.0	5.7*	21.4	34.3
Table wine or similar	28.0	10.5*	68.6	27.2*
Fortified wine	1.1	1.1	1.6	1.4

** p<0.05, reference = European*

Type of alcohol consumed

The types of alcohol consumed by ethnicity and gender are presented in Table 2. Beer was the leading drink consumed by more than 80% of Pacific male drinkers and Spirits/Liqueurs were the leading type of alcohol consumed by Pacific women.

Frequency of drinking

Table 3 presents drinking frequencies of Pacific and European men and women. The majority of Pacific men and women drinkers (>60%) consumed alcohol *'weekly'* or *'less than weekly'*. In contrast the majority of European men and women drinkers (>60%) consumed alcohol *'2-3 days per week'* or *'daily'*. Pacific men were most likely to drink *'weekly'* and Pacific women *'less than weekly'*.

Table 3 Frequency of Drinking in Pacific and European by gender

	Men (%)		Women (%)	
	European (n = 738)	Pacific (n= 215)	European (n = 632)	Pacific (n = 84)
Daily	36.2	11.6‡	22.3	16.7
2-3 days a week	41.0	20.3‡	38.3	9.9‡
Weekly	12.3	35.1‡	18.6	18.5
< Weekly	10.6	33.0‡	20.8	55.0‡

‡ = p<0.001

Table 4 presents age adjusted ethnic specific drinking frequencies. For all Pacific groups more than 55% of drinkers consumed alcohol *'weekly'* or less compared to 22.8% of European men and 38.6% of European women. 'Weekly' consumption was the leading drinking frequency for Samoans, Cook Islands and Niuean men, whilst '< weekly' was the leading dinking frequency for Samoan, Tongan and Niuean women.

Consumption levels

Table 5 presents ethnic specific information on consumption with regard to i) the average number of drinks consumed per 'sitting' and also ii) the average amount (in mls) of pure alcohol consumed weekly. Caution is advised when interpreting sex-specific statistics due to small sample sizes (as indicated by the large standard error). Samoan, Cook Islands, and Niuean men consumed significantly more drinks in an average sitting compared to their European counterparts. Samoan and Cook Island men consumed significantly lower amounts of pure alcohol per week compared to their European counterparts. In all groups fewer drinks were consumed in the older age category. This pattern was also reflected in total weekly alcohol consumption with exception of European women, who consumed more total alcohol than their younger counterparts.

Table 4 Frequency of Drinking in Pacific groups and European

MEN	European (%) (n=738)	Samoan (%) (n=118)	Cook Island (%) (n=22)	Tongan (%) (n=34)	Niuean (%) (n=32)
Daily	36.1	7.6‡	6.9‡	28.1	12.9‡
2-3 days a week 41.0		23.5*	16.0*	16.3†	19.5*
Weekly	12.2	36.8†	42.0*	20.2	37.3†
< Weekly	10.6	32.1†	35.2*	35.4	30.2*
WOMEN	**European (%) (n=632)**	**Samoan (%) (n=27)**	**Cook Island (%) (n=16)**	**Tongan (%) (n=17)**	**Niuean (%) (n=14)**
Daily	22.3	14.4	7.0‡	5.2‡	9.1‡
2-3 days a week 38.3		8.9†	7.9†	6.8‡	16.3
Weekly	18.6	23.9	65.8*	6.0	7.2
< Weekly	20.9	52.8†	22.4	82.1‡	67.5†

*adjusted for age, * = p<0.05, † = p<0.01, ‡ = p<0.001 compared to European*

Table 5 Consumption characteristics of European and Pacific ethnic groups

MEN	European (se) n=738	Pacific (se) n=215	Samoan (se) n=118	Cook Island (se) n= 22	Tongan (se) n= 34	Niue (se) n= 32
Drinks on an average sitting	4.3 (0.13)	7.8 (0.54)‡	7.8 (0.63)*	8.0 (1.38)*	7.1 (7.07)	8.7 (1.71)*
Average consumption per week (mls)	158 (10.07)	107 (13.36) †	87 (11.39)*	74 (16.82)*	169 (54.73)	150 (53.22)
WOMEN	**n=632**	**n= 84**	**n= 27**	**n= 16**	**n= 17**	**n= 14**
Drinks on an average sitting	2.9 (0.09)	5.4 (1.69)	4.0 (0.82)	12.9 (4.80)*	4.2 (1.63)	2.7 (0.62)
Average consumption per week (mls)	95 (8.48)	63 (18.99)	126 (74.40)	89 (17.37)	30 (15.55)*	41 (13.68)*

MEN Drinks on an average sitting	European (se)	Pacific (se)	Samoan (se)	Cooks (se)	Tongan (se)	Niue (se)
35-54	4.9 (0.19)	8.7‡ (0.66)	8.7‡ (0.75)	8.9* (1.70)	8.4 (2.53)	9.3* (2.16)
55-74	3.2 (0.11)	6.2‡ (0.74)	6.5† (0.85)	8.3‡ (1.23)	3.8 (0.75)	9.0† (1.83)
Average consumption per week (mls)						
35-54	161 (14.54)	110† (12.97)	93† (11.24)	82† (18.17)	201 (62.10)	114 (45.92)
55-74	153 (11.12)	96 (35.82)	61‡ (19.72)	45‡ (12.02)	82 (79.00)	284 (175.37)

WOMEN Drinks on an average sitting	European (se)	Pacific (se)
35-54	3.1 (0.13)	5.8 (0.13) (n=72)
55-74	2.5 (0.08)	2.9 (1.01) (n=12)
Average consumption per week (mls)		
35-54	86 (11.90)	57 (18.94)
55-74	109 (10.60)	51 (30.57)

Low numbers of women drinkers rendered age categorised analysis by Pacific ethnic group very prone to random error.

*adjusted for age, sex, where appropriate, * = p<0.05, † = p<0.01, ‡ = p<0.001 compared to European*

Figure 1 Number of drinks had on average occasion of European and Pacific by NZ Deprivation 2001 (age and sex adjusted)

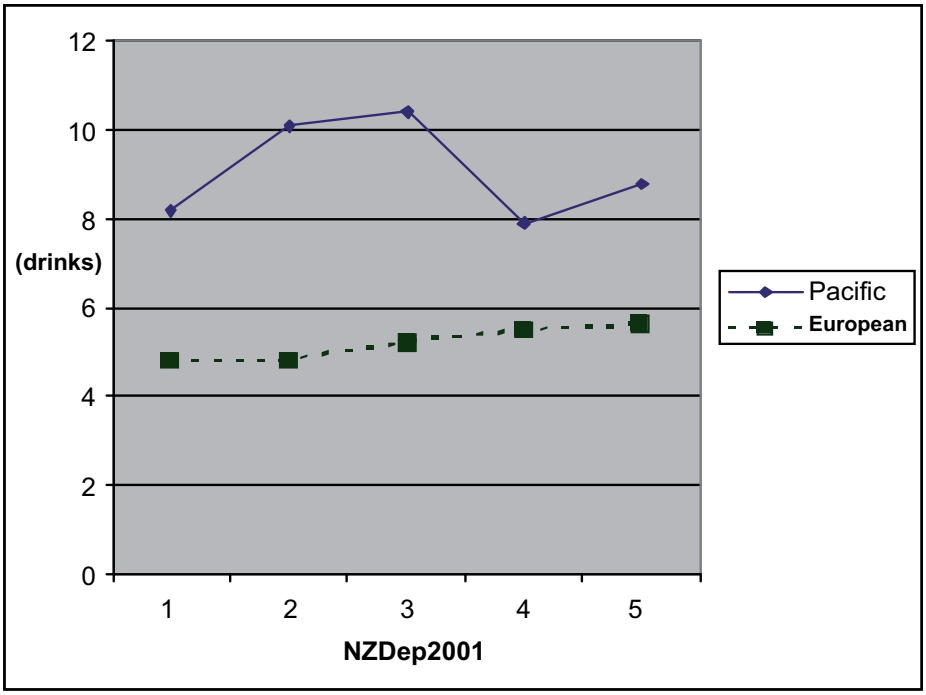

Figure 1 shows that Pacific drinkers consume 2-5 more drinks than Europeans who experience similar levels of economic deprivation. For Europeans there is little difference in the number of drinks consumed on an average drinking occasion between the different NZDep2001 groups. However, this was not found for Pacific people. Pacific drinkers in the middle classes appeared to have a more hazardous drinking style (consuming more drinks) compared to those Pacific groups experiencing the most and least amount of financially deprivation as measured by the NZDep2001 tool.

Discussion

Uniqueness & important findings

There is a dearth of research on alcohol consumption and drinking patterns of Pacific people.[15] The Pacific Drugs and Alcohol Consumption Survey (PDACS) 2003,[3] was the first major study developed to address this need. In the PDACS, 1103 Pacific participants aged 13-65 years provided a wealth of information on Pacific alcohol consumption and drinking patterns. In this study only 472 (42%) were older adults (35+). Our study in contrast only surveyed older Pacific adults and although not primarily focussed on alcohol consumption, has provided an extensive amount of information on the use of alcohol of 1011 older Pacific adults. Arguably these findings could be regarded as the most reliable/extensive source of information on alcohol use of older Pacific adults in New Zealand.

Total alcohol consumption

In contrast to findings from the PDACS, a key finding of our study is that total alcohol consumption of Pacific adults is considerably lower than Europeans. The 2003 PDACS found that Pacific drinkers drank on average 21 litres of pure alcohol per year (men 28 litres, women 14 litres) compared to 11 litres per year (men 16 litres, women 7 litres) in European/Others.[3] In contrast the DHAHS found that the Pacific drinkers drank on average 4.3 litres per year (men 5.6 litres, women 3.3 litres) compared to 6.6 litres per year for Europeans (men 8.2 litres, women 4.9 litres).

This point of difference may be explained in part by the differing age range of the two studies. The DHAHS surveyed people from ages 35-74 years; whilst the PDACS surveyed from 13-65 years, suggesting higher consumption in Pacific youth than their non-Pacific counterparts. Some support for this suggestion is shown in Tables 1 & 5 where younger age groups were more likely to be drinkers, consumed more drinks on an average sitting resulting in greater quantities of pure alcohol consumed.

Number of drinks

In our study Pacific drinkers reported drinking 6.9 drinks on an average occasion. This was similar to the average of 8 drinks per occasion reported by the PDACS. The comparative average for European/Others was 4 drinks reported by PDACS and 5 drinks in the DHAHS for Europeans. Binge or risky alcohol use has been defined as consuming seven or more

drinks on any one occasion.[16] This underscores the fact that most Pacific drinkers tend to be high-risk drinkers.

Drinking frequency

The lower total level of alcohol consumption in Pacific people is due to their lower frequency of consumption. The majority (over 2/3rds) of Pacific drinkers drank *'≤ weekly*', whereas the majority of Europeans (approximately 2/3rds) drank ≥ *2-3 days per week*. This contrasts with results of the PDACS that found Pacific and European/Other drinking frequencies to be comparable. In the PDACS, Pacific people reported consuming alcohol 2-3 days per week compared to the national average of 3 days per week.

Non-drinkers

Non-drinking was much more common in the middle aged and older Pacific people. This may be due in part to alcohol playing less of a role in older Pacific people's lives. It may also be that consumption of alcohol is socially frowned upon by Pacific communities and that older people are more likely to adhere to such social norms and expectations.

Reasons for stopping drinking

Social and family reasons were reported as the main cause for stopping drinking. It is possible that this may be a result of the importance placed on adhering to cultural/religious norms and familial expectations and a negative stigma that may surround alcohol consumption from within Pacific communities. The majority of Pacific people (83%) are religious,[17] which may contribute to social reasons cited for stopping drinking and abstaining from drinking altogether. Pacific drinkers were twice as likely as Europeans to experience hazardous drinking,[5] more likely to report violence and injury from other peoples drinking and problems from violence and serious arguments as a result of their own drinking.[3] Our results confirm the binging nature of Pacific drinkers alcohol consumption patterns (Table 5) as reported elsewhere. Negative consequences of this binge drinking may act as a deterrent from drinking and explain why Pacific drinkers were approximately five times more likely to stop compared to Europeans.

Limitations

While the DHAHS has many strengths (being one of the largest population based surveys of Pacific people allowing for intra-Pacific ethnic comparisons, gathering physical measurements of risk factor status) it also has limitations. An important limitation of this study and indeed nearly all studies on alcohol consumption, is the reliance on self-reported information concerning alcohol consumption and drinking patterns, which may be subject to recall and social desirability bias. Respondents may forget or report drinking behaviours that are more aligned to socially acceptable/appropriate norms rather than reality.

In addition, the low prevalence of drinking in this Pacific population has meant that the drinker sample is relatively small (n=299) compared to the whole Pacific sample (n=1011) making some analyses problematic. For this reason, findings need to be interpreted with caution especially when assessing the smaller Pacific ethnic groups and even more so when these groups are age or gender stratified.

Further research in this field could investigate in more detail the reasons why ex-drinkers stopped, and why many Pacific people abstained from alcohol consumption altogether. Research that aims to determine what environment can best facilitate the transformation of Pacific drinking patterns from the binging/hazardous style reported here and elsewhere to a more moderate/responsible style would also be useful.

Conclusion

Middle aged and older Pacific adults are less likely to consume alcohol than Europeans however those who do, consume more on an average occasion but drink less regularly so overall consume significantly lower amounts of pure alcohol. Drinking patterns in Pacific adults tend to show substantial diversity by age (older are less likely to drink), sex (women less likely to drink), and financial deprivation (middle groups consume more than least and most financially deprived). For Europeans these differences are not so large and a more homogenous drinking style was observed. Pacific drinkers were approximately five times more likely have stopped drinking compared to Europeans, citing family and social reasons as their main motivation for stopping drinking.

Acknowledgments

This research was funded by the Health Research Council of New Zealand and was carried out in the Section of Epidemiology and Biostatistics/Section of Pacific Health, School of Population Health, University of Auckland.

We also thank the participants who took part in this survey.

References

1. New Zealand Health Information Service. New Zealand Drug Statistics Wellington: Ministry of Health; 2001 2001.
2. Casswell S. Drinking by New Zealanders. Wellington: Alcoholic Liquor Advisory Council and the Alcohol Research Unit; 1980.
3. Huakau J, Asiasiga L, Ford M, et al. New Zealand Pacific peoples' drinking style: too much or nothing at all? New Zealand Medical Journal. 2005;118.
4. Statistics New Zealand and Ministry of Health. A Picture of Health.

   Wellington: Statistics New Zealand and Ministry of Health; 1993.
5. Ministry of Health. A Portrait of Health: key results of the 2006/07 New Zealand Health Survey. Wellington: Ministry of Health; 2008 June 2008.
6. Ministry of Health. The place of alcohol in the lives of people from Tokelau, Fiji, Niue, Tonga, Cook Islands and Samoa living in New Zealand: an overview. Wellington: Alcohol Advisory Council of New Zealand; 1997.
7. Ministry of Health. Vai mamali: The place of alcohol in the lives of Niuean people living in Aoteroa New Zealand. Wellington: Alcohol Advisory Council of New Zealand; 1997.
8. Ministry of Health. Kaikava me kare Inuinu: The place of alcohol in the lives of Cook Islands people living in Aoteroa New Zealand Wellington: Alcohol Advisory Council of New Zealand; 1997.
9. New Zealand History Online. 1967 The end of the 'six o'clock swill'. 2005. Available online: http://www.nzhistory.net.nz, Accessed at 15th September, 2008.
10. Allan J. Review of measurement of Ethnicity: Classification and Issues. Wellington: Statistics New Zealand; 2001 September.
11. Lohr S, Rao J. Inference from dual frame surveys. JASA. 2000;2000:271-80.
12. Metcalf P, Scott A, Hutchinson R. Dual frame estimation for a survey with a complex design. In: In: 55th Session of the international Statistical Institute; 2005 2005; Syndey, Australia; 2005.
13. Skinner C, Rao J. Estimation in dual frame surveys with complex designs. JASA. 1996;1996:349-56.
14. SAS II. SAS/STAT User's Guide. Version 9.1.; 2004.
15. Lower T, Nauan B, Abel M, et al. Curbing the tide - Non-communicable disease in the Pacific. Pacific Health Dialogue. 2005;12:61-4.
16. Alcohol Advisory Council of New Zealand. The Way We Drink - 2005 Executive Summary. Wellington: Alcohol Advisory Council of New Zealand; 2005.
17. Statistics New Zealand. QuickStats About Pacific Peoples: 2006 Census. 2007. Available online: http://www.stats.govt.nz, Accessed at 9th September, 2008.

Two years on: Gambling amongst Pacific mothers living in New Zealand

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Abstract

Research investigating the prevalence and correlates of Pacific peoples gambling within a New Zealand context is limited. This paper provides data about gambling activity from the two-year data collection point for a cohort of mothers within the longitudinal Pacific Islands Families study. The results indicate a number of consistencies and discrepancies between data collected at this time point and two years previously (six-week baseline data collection point). For example, at baseline, Samoans were the least likely to gamble and spent less money on gambling activities. Two years later, Samoans remained the least likely to gamble, but those who did gamble, were more likely to spend more money than other ethnicities. This article highlights the importance of this type of prospective study in examining the development of the risk and protective factors in relation to the development of problem gambling.

Introduction

Pacific peoples make up 6.9% of the total New Zealand population. Samoan people constitute half of this ethnic group (131,103), followed by Cook Islanders (58,008), Tongans (50,481), Niueans (22,476), Fijians (9,864) and Tokelauans (6,819). Pacific peoples have also been identified as a youthful population with the highest proportion of children (aged 0 to 14 years) of all of the major ethnic groups, at 38%.[1] They are one of the fastest growing ethnicities in this country and it is estimated that by 2051 Pacific peoples will represent 12% of the New Zealand population.[1] Following mass-migration to New Zealand during the 1960s and 70s the social and economic situation of Pacific peoples has progressed. However, compared with the total New Zealand population, this ethnic group remains over-represented in low levels of formal education, high rates of unemployment, low skilled manual jobs, low annual income* and poor health status. In addition, Pacific peoples are also highly susceptible to conditions conducive to the development of addictive behaviours such as smoking and alcohol consumption.[1]

The Pacific population has been identified as being the most at-risk ethnic group for developing problem and pathological gambling behaviour.[2,3] The 2002/03 New Zealand Health Survey identified significantly high prevalence for problem gambling amongst Pacific peoples with 13.3% of the adult (18 years or older) Pacific population identified as problem gamblers and with Pacific peoples being 4.5 times more likely to be problem gamblers than Europeans/Others†. These findings are consistent with the 1999 national prevalence survey results where 13.6% of the adult Pacific population were identified as problem gamblers with a risk ratio of 6.17 times more likely to develop problem gambling than European/Other ethnicities.‡[2] When put into context with the Pacific population as a proportion of the total population, it can be seen that Pacific peoples are disproportionately affected

* Median annual income NZ$20,500 compared with NZ$24,400 for the national population (Statistics New Zealand, 2006)

† The measure of problem gambling was based on participation rates over the previous 12 months. However, it should be noted that a non-standard problem gambling screen was used, developed specifically for this survey.

‡ The measure of problem gambling was based on participation rates over the previous six months using the revised South Oaks Gambling Screen (SOGS-R).

by problem gambling.

Another consistency across gambling research in New Zealand is that the high prevalence of problem gambling amongst Pacific peoples is disproportionate to the small percentage of Pacific peoples who take part in gambling activities. For example, the 1999 national prevalence survey identified that the majority of the Pacific population did not gamble regularly; however, those who did gamble reported relatively high gambling expenditure in comparison with other population groups.[2] Abbott and Volberg describe this as a bimodal gambling distribution and suggest that this is one reason why Pacific peoples are more likely than others to develop gambling problems. Similarly, the New Zealand Health Survey found that only 54% of Pacific peoples had gambled in the previous 12 months compared with 72% of the European/Other group; expenditure on gambling was not reported.[3] Further New Zealand research has indicated similar low levels of gambling activity amongst mothers within a child development cohort study in South Auckland, New Zealand whereby only 30% had gambled in the previous 12 months.[4] Bellringer et al[4] report this from the data collection phase of the Pacific Islands Families study when the cohort children were six weeks old. This paper presents findings relating to the same mothers at the two year measurement point.

Since 1999, increasing numbers of Pacific peoples have presented to gambling treatment services. During 2007, Pacific peoples represented 7.2% of the 1,816 new face-to-face counselling clients (compared to 5% in 1999) and 13.6% of new gambler callers to the national telephone helpline (compared to 4.6% in 1999).[5] Despite these increases, Pacific peoples' access to treatment services remains low in light of the high prevalence for this population.

Pacific peoples are disproportionately affected by problem gambling.

In 2007, Pacific males and females presenting to face-to-face problem gambling treatment services reported electronic gaming machines (EGMs) outside casinos as their main mode of gambling (65.1% and 83.0% respectively). This rose to 75.9% and 93.6% respectively when casino machines were included. These findings are consistent with the majority of new face-to-face counselling clients that also report gaming machines as their primary mode of problem gambling (76.5%).[5] Abbott and Volberg[2] suggest that continuous forms of gambling such as EGMs are significantly associated with problem gambling.

This paper presents gambling-related demographic data and associated factors for mothers in the Pacific Islands Families (PIF) study when the cohort children were two years of age. This longitudinal investigation of a birth cohort of Pacific infants in New Zealand is designed to provide information on Pacific people's health as well as the cultural, economic, environmental and psychosocial factors that are associated with child health and developmental outcomes, and family functioning. At two years, two gambling-related questions were added to those already asked at the first measurement point (six weeks postpartum;[4]
The analyses presented in this paper, relating to gambling, were selected by the authors as those considered most relevant to the cultural, social and economic situation of many Pacific peoples in New Zealand. To that end, analyses were performed on variables including cultural orientation and religious affiliation. In addition, a variable identifying the number of years lived in New Zealand was included to identify any distinctions between mothers born in New Zealand and those migrant to this country. On this premise, the discussion focuses on variables that the authors considered were important to understanding Pacific-specific cultural factors relevant to contemporary Pacific gambling.

The purpose of gambling-related questions at the six week base-line and subsequent data collection phases of the PIF longitudinal study are to track and record any trends or changes over time in regard to gambling activity. These findings will develop the currently limited knowledge base on Pacific peoples gambling and provide information to identify problem gambling risk and protective factors for Pacific mothers and children.

Methods

Data were collected as part of the PIF study which follows a cohort of Pacific Island infants born at Middlemore Hospital in South Auckland between 15 March and 17 December 2000. All potential participants were selected from births where at least one parent self-identified as being of Pacific ethnicity and who was also a New Zealand permanent resident. At the Birthing and Pacific Islands Cultural Resource Units participants were identified, information about the study was provided and consent was gained for an interviewer to conduct a home visit.

Postpartum maternal interviews were carried out at six-weeks, one and two years. Pacific interviewers fluent in English and a Pacific language visited mothers in their homes. Subsequent to obtaining informed consent, mothers participated in one-hour long interviews concerning family functioning and the health and development of the child. Detailed information about the PIF cohort and procedures is described elsewhere.[6] Over the three measurement points, these interviews included three short questions related to gambling. At the one and two year data

collection points, two additional gambling questions were included.

The interviewers read out the following examples of gambling: Lotto, poker/slot machines in casinos or pubs, raffles, card games, Housie (bingo), Instant Kiwi (a scratchcard game), horse betting and lottery tickets, then asked whether the mothers had gambled within the previous 12 months. This was intended to be a generic question only, solely ascertaining whether any form of gambling had taken place during the previous year. At the one and two year data collection points, upon affirmation of gambling participation in the previous 12 months, the mothers were then asked their preferred form of gambling and how often they partook in this activity. Consistent with the questions at the six week time point, they were then asked how much they usually spent per week on gambling activities.

This paper presents results from the two year measurement point in relation to the gambling questions on participation and expenditure, and to any associations between the questions as well as a total of seven selected other variables assessed at two years. In addition, results from the additional questions asked at one and two years regarding preferred gambling forms and frequency of participation are presented. Data are also presented and discussed in relation to the findings at the six-week measurement point, which have been provided in more detail elsewhere.[4]

Statistical analysis

The statistical software package used for analyses was SPSS for MS Windows (11.0) with a significance level of 0.05. Univariate and multivariate logistic regression procedures were performed to examine associations between the gambling questions and certain maternal, demographic and cultural variables assessed at the two-year measurement point.

Logistic regression is used when the independent variables include both numeric and nominal measures and the outcome is dichotomous. A major advantage of the procedure is that it requires no assumptions about the distributions of the independent variables. Additionally, the results provide odds ratios that lend interpretability to the data by indicating how much more likely (or unlikely) it is for the outcome to be present given certain conditions.

Binary outcomes for the gambling questions were: (1) whether respondents had gambled at all during the previous 12 months, and (2) whether those that had gambled fell within the upper quartile for usual weekly expenditure (≥NZ$20).

Predictor variables (n=7) examined in the univariate logistic regression analyses were age, ethnicity, social marital status, years lived in New Zealand, cultural orientation, religious affiliation, and gambling status at the six-week baseline. Numerical predictor variables such as age were categorised prior to the analyses.

With regard to the multiple logistic regression analyses, four demographic variables (age, ethnicity, marital status and gambling status at six-weeks) were initially forced into each of the two gambling outcome models as control variables and then all remaining predictor variables were submitted to a forward stepwise entry procedure (p to enter = 0.15 and p to remove = 0.20).

Results

Tests for differential attrition associated with the gambling variables assessed at the six-week baseline (i.e. whether gambled in the past 12 months, and usual weekly expenditure) were conducted at the one- and two-year data collection points[§]. No important differential attrition was observed for any of the socio-demographic variables investigated at either time point. Eighty-two percent (N=1,132) of the mothers who agreed at six-weeks to participate in the study (N=1,376) completed the gambling questions at the two-year time point.

All 1,132 mothers responded to the first question. Most (71%) reported that they had not gambled in the last 12 months compared with 29% who replied in the affirmative. Of those who gambled (n=315) the usual weekly expenditure on gambling activities ranged from NZ$1 to NZ$100, with a median of NZ$10 and a mean of NZ$14.

Preferred Form of Gambling and Expenditure

Table 1 shows that at the one- and two-year data collection points, Lotto was identified by the majority of mothers (78% and 76% respectively) as their most preferred form of gambling. Over half of mothers at both time points (55% and 56%) gambled weekly on Lotto with a weekly median expenditure of NZ$10. Other preferred forms of regular (weekly) gambling included Housie (bingo) and EGMs. At the one-year data collection, almost three quarters (71%) of mothers gambled weekly on Housie with a median weekly expenditure of NZ$40; by the two-year data collection, popularity of Housie appeared to have

[§] Differential attrition was deemed to have occurred if both one- and two-year distributions of participation and non-participation were significantly different from the baseline six-week distributions using a significance level of α=0.05 to determine statistical significance.

diminished with half of the mothers (50%) gambling weekly on this form with a median expenditure of NZ$23. At the same time, 12% of mothers gambled weekly on EGMs at the one-year time point (expenditure NZ$20); this increased to a third of mothers (33%) a year later with greater median weekly expenditure (NZ$30).

Gambling Participation

Table 1: Preferred form of gambling at 12 and 24 month time points

	12 months (%)	24 months (%)
Lotto	78.3	76.4
EGMs (pokies)	4.6	6.3
Raffles	3.8	0.0
Housie	3.8	13.9
Instant Kiwi	1.6	1.2
Horse Betting	0.5	0.6
Other	7.3	1.5

Tables 2, 3, 4 and 5 in this paper show variables examined for potential associations with gambling phenomena at the 24 month measurement point**. Within each variable, the numbers and percentages of mothers who reported: (1) whether or not they gambled, and (2) how much money they spent on gambling, are shown along with the associated odds ratios.

Statistically significant associations in the univariate analyses were found between whether mothers gambled and all variables examined (see previously) except for education, household income, whether born in New Zealand, English fluency, post natal depression, traditional gift giving, and whether gambled at 6 weeks. All significant associations are presented in Table 2, although it should be noted that with 20 variables assessed, it is highly likely that at least one of these significant results is spurious (a Type I error). All significant associations at the six week time point are presented in Table 2a.

At 24 months, the variables reaching statistical significance with gambling participation were age, ethnicity, marital status (being partnered), years lived in New Zealand (more than ten years), cultural orientation, religious affiliation, cigarettes smoked yesterday (higher cigarette dosage at 6 weeks, more likely to gamble 2 years later) and alcohol.

Including the five demographic variables initially forced in as control variables, the final step of the multivariate logistic regression model included nine variables. Model statistics were: -2 log likelihood = 1377.62; model chi-square = 76.07, d.f. = 5, $p<0.001$; Nagelkerke R2 = 0.248. Variables retaining their significant associations with gambling activity were age, ethnicity, religious orientation, number of cigarettes smoked yesterday, and for drinking six or more drinks on one occasion before pregnancy. Statistical significance was also attained for cultural orientation. Table 3 presents adjusted odds ratios of variables attaining significance in the multiple logistic regression model. Table 3a presents information from the six week time point.

Gambling Expenditure

At the univariate level, variables having statistically significant associations with greater weekly gambling expenditure (≥$20) were ethnicity, English fluency, cigarettes smoked yesterday, and gambling status at six-weeks. As noted for the gambling participation outcome, given that 20 variables were assessed, it is likely that at least one of the significant associations constitutes a Type I error. Data are presented in Table 4. Table 4a presents comparable data from the six week time point.

Relative to Samoan mothers, Tongan and Non Pacific mothers were less likely to spend high weekly amounts (i.e. spending >=$20) on gambling. Also, those fluent in English were more likely to spend ≥$20 than those not fluent. In addition, mothers who smoked at six-weeks and those with a usual spend of ≥$20 at this time-point were also more likely to spend ≥$20 per week at 24 months.

The final model of the multivariate logistic regression included ten variables, five of which were the demographic variables initially forced in as control variables. Model statistics were: -2 log likelihood = 427.97; model chi-square = 39.85, d.f. = 9, $p<0.001$; Nagelkerke R2 = 0.227. Variables retaining their significant associations with a higher amount of money spent weekly on gambling activities (≥ $20) were ethnicity, number of cigarettes smoked yesterday, and whether participants drank alcohol during pregnancy. Table 5 presents adjusted odds ratios of variables attaining significance in the multiple logistic regression model. Data from the six week time point is presented in Table 5a.

** For comparative purposes, Tables 2a, 3a, 4a and 5a show variables examined for potential associations with gambling phenomena at the 6 week measurement point (Bellringer, Perese, Abbott, & Williams, 2006).

Table 2: 24 month time point - Numbers (row percentages) and univariate odds ratios of mothers gambling during the past 12 months at two years' postpartum by variables assessed six weeks postpartum attaining statistical significance (N=1131[1])

Variable	Category	Spent money on gambling				Univariate odds ratio	
		Yes	(%)	No	(%)	(95% CI)	
Age (years)[2]	<20	22	(27.5)	58	(72.5)	1.00	
	20-29	145	(24.9)	438	(75.1)	0.87	(0.52, 1.48)
	30-39	152	(35.3)	278	(64.7)	1.44	(0.85, 2.45)
	40+	13	(35.1)	24	(64.9)	1.43	(0.62, 3.29)
Ethnicity	Samoan	77	(14.2)	464	(85.3)	1.00	
	Cook Island	75	(40.3)	111	(59.7)	4.07	(2.79, 5.95)***
	Tongan	108	(45.0)	132	(55.0)	5.38	(3.47, 7.00)***
	Other Pacific[3]	35	(42.2)	48	(57.8)	2.93	(2.67, 7.23)***
	Non Pacific	37	(45.7)	44	(54.3)	3.72	(3.08, 8.35)***
Social marital status	Partnered, legally married	190	(28.4)	480	(71.6)	1.18	(0.83, 1.68)
	Partnered, de facto	89	(35.6)	161	(64.4)	1.65	(1.10, 2.47)*
	Non-partnered	53	(25.1)	158	(74.9)	1.00	
Years lived in NZ	0-2	13	(17.6)	61	(82.4)	1.00	
	3-5	39	(27.9)	101	(72.1)	1.81	(0.90, 3.66)
	6-10	26	(20.6)	100	(79.4)	1.89	(0.58, 2.55)
	>10	252	(31.9)	537	(68.1)	1.33	(1.19, 4.08)*
Cultural Orientation	High Pacific, low NZ	81	(22.2)	284	(77.8)	1.00	
	High Pacific, High NZ	55	(28.5)	138	(71.5)	1.40	(0.94, 2.08)
	Low Pacific, High NZ	115	(31.1)	255	(68.9)	1.58	(1.14, 2.20)**
	Low Pacific, Low NZ	78	(40.6)	114	(59.4)	2.40	(1.64, 3.51)***
Religious Orientation	No Religion	36	(44.4)	45	(55.6)	1.00	
	Catholic	58	(28.3)	147	(71.7)	0.50	(0.30, 0.84)
	Mormon	28	(18.9)	120	(81.1)	0.30	(0.16, 0.53)
	Congregational church	24	(20.2)	95	(79.8)	0.32	(0.17, 0.60)
	Methodist	46	(36.2)	81	(63.8)	0.71	(0.40, 1.25)
	Presbyterian	53	(46.9)	60	(53.1)	1.10	(0.62, 2.00)
	Assembly of God	12	(14.3)	72	(85.7)	0.21	(0.10, 0.44)
	7th Day Adventist	9	(20.5)	35	(79.5)	0.32	(0.14, 0.80)
	Other	66	(31.4)	144	(68.6)	0.60	(0.34, 1.00)
Cigarettes smoked yesterday	None	220	(25.6)	640	(74.4)	1.00	
	1-9	83	(39.2)	129	(60.8)	1.87	(1.37, 2.57)***
	10 or more	28	(50.0)	28	(50.0)	2.91	1.69, 5.02)***
Frequency of alcohol usage Before pregnancy	Never	256	(26.6)	707	(73.4)	1.00	
	Monthly or less	32	(42.7)	43	(57.3)	2.06	(1.27, 3.32)**
	Two or more times/month	41	(46.6)	47	(53.4)	2.89	(10.55, 3.75)***
Six or more alcoholic drinks on one occasion Before pregnancy	No	271	(27.1)	730	(72.9)	1.00	
	Yes	58	(46.8)	66	(53.2)	2.37	(1.62, 3.46)***
Ever unable to stop drinking in past year	No	310	(28.5)	779	(71.5)	1.00	
	Yes	17	(51.5)	16	(48.5)	2.67	(1.33, 5.35)**
Gambled during past year	No	163	(21.2)	607	(78.8)	1.00	
	Yes	169	(46.8)	192	(53.2)	3.28	(2.50, 4.29)

** P < 0.05, ** P < 0.01, *** P < 0.001*

[1] Numbers will vary due to missing data for some variables

[2] Although none of the contrasts shown reach significance, compared to 20-29 year old mothers the odds of those aged 30-39 years gambling were 1.65 (95% CI: 1.26, 2.17) times greater (p < 0.001).

[3] Includes mothers identifying equally with two or more Pacific groups, equally with Pacific and non-Pacific groups or with Pacific groups other than Tongan, Samoan or Cook Island

Table 2a: Six week time point - Numbers (row percentages) and univariate odds ratios of mothers gambling during the past 12 months by selected variables (N=1376[1])

Variable	Category	Spent money on gambling				Univariate odds ratio	
		Yes	(%)	No	(%)	(95% CI)	
Age (years)	<20	20	(18.0)	91	(82.0)	1.00	
	20-29	207	(28.8)	513	(71.3)	1.84	(1.10, 3.06)*
	30-39	171	(34.2)	329	(65.8)	2.37	(1.41, 3.97)**
	40+	16	(36.4)	28	(63.6)	2.60	(1.19, 5.68)*
Ethnicity	Samoan	115	(17.7)	535	(82.3)	1.00	
	Cook Island	59	(25.4)	173	(74.6)	1.59	(1.11, 2.27)*
	Tongan	155	(53.6)	134	(46.4)	5.38	(3.96, 7.31)***
	Other Pacific[2]	41	(38.7)	65	(61.3)	2.93	(1.89, 4.56)***
	Non Pacific	44	(44.4)	55	(55.6)	3.72	(2.39, 5.81)***
Social marital status	Partnered, legally married	249	(32.0)	530	(68.0)	1.75	(1.26, 2.43)**
	Partnered, de facto	108	(32.9)	220	(67.1)	1.83	(1.26, 2.65)**
	Non-partnered	57	(21.2)	212	(78.8)	1.00	
Education	Post-school qualification	144	(38.2)	233	(61.8)	2.18	(1.30, 2.82)***
	Secondary school qual.	152	(32.8)	312	(67.2)	1.72	(1.63, 2.92)***
	No formal qualifications	118	(22.1)	417	(77.9)	1.00	
Household income	<$20,000	117	(25.6)	340	(74.4)	1.00	
	$20,001-$40,000	224	(31.5)	486	(68.5)	1.34	(1.03, 1.74)*
	>$40,000	58	(36.0)	103	(64.0)	1.64	(1.11, 2.40)*
	Unknown	15	(31.3)	33	(68.8)	1.32	(0.69, 2.52)
Born in New Zealand	Yes	113	(24.9)	341	(75.1)	1.00	
	No	301	(32.6)	621	(67.4)	1.46	(1.14, 1.89)**
Years lived in NZ	0-2	24	(23.5)	78	(76.5)	1.00	
	6-10	54	(36.7)	93	(63.3)	1.89	(1.07, 3.33)*
	>10	276	(29.0)	677	(71.0)	1.33	(0.82, 2.14)
Post-natal depression	No	318	(28.0)	818	(72.0)	1.00	
	Yes	88	(39.3)	136	(60.7)	1.66	(1.24, 2.24)**
Traditional gifting	No	131	(25.4)	385	(74.6)	1.00	
	Yes	283	(32.9)	577	(67.1)	1.44	(1.13, 1.84)**
Frequency of alcohol usage Before pregnancy	Never	306	(26.4)	854	(73.6)	1.00	
	Monthly or less	50	(49.5)	51	(50.5)	2.74	(1.81, 4.13)***
	Two or more times/month	56	(50.9)	54	(49.1)	2.89	(1.95, 4.30)***
Since birth	Never	375	(29.3)	907	(70.7)	1.00	
	Monthly or less	25	(39.7)	38	(60.3)	1.59	(0.95, 2.67)
	Two or more times/month	13	(48.1)	14	(51.9)	2.25	(1.05, 4.82)*
Six or more alcoholic drinks on one occasion Before pregnancy	No	319	(26.4)	891	(73.6)	1.00	
	Yes	92	(57.9)	67	(42.1)	3.84	(2.73, 5.39)***
Ever unable to stop drinking in past year	No	384	(29.0)	938	(71.0)	1.00	
	Yes	25	(59.5)	17	(40.5)	3.59	(1.92, 6.73)***

** P < 0.05, ** P < 0.01, *** P < 0.001*

[1] Numbers will vary due to missing data for some variables

[2] Includes mothers identifying equally with two or more Pacific groups, equally with Pacific and non-Pacific groups or with Pacific groups other than Tongan, Samoan or Cook Island

Table 3: 24 month time point - Adjusted odds of mothers who had gambled during the past 12 months at two years postpartum for variables attaining significance in a multiple logistic regression (N = 1343)

Variable	Category	Adjusted odds ratio (95% CI)	
Age (years)	40+	1.00	
	<20	0.47	(0.18, 1.21)
	20-29	0.41	(0.19, 0.90)*
	30-39	0.78	(0.36, 1.71)
Ethnicity	Samoan	1.00	
	Cook Island	3.18	(1.94, 5.24)***
	Tongan	5.76	(3.81, 8.71)***
	Other Pacific[1]	3.65	(1.98, 6.70)***
	Non Pacific	5.99	(3.11, 11.51)***
Cultural Orientation	Low Pacific, Low NZ	1.00	
	High Pacific, low NZ	0.66	(0.41, 1.06)
	High Pacific, High NZ	1.04	(0.62, 1.75)
	Low Pacific, High NZ	0.52	(0.33, 0.81)**
Cigarettes smoked	None	1.00	
yesterday	1-9	1.88	1.28, 2.76)**
	10 or more	2.56	(1.36, 4.80)**
Six or more drinks on one occasion before pregnancy	No	1.00	
	Yes	1.68	(1.01, 2.78)*
Religious orientation	No religion	1.00	
	Catholic	0.81	(0.43, 1.54)
	Mormon	0.37	(0.19, 0.75)**
	Congregational church	0.78	(0.36, 1.70)
	Methodist	0.83	(0.41, 1.70)
	Presbyterian	1.52	(0.77, 2.98)
	Assembly of God	0.41	(0.17, 0.99)*
	7th Day Adventist	0.46	(0.17, 1.20)
	Other	0.61	(0.33, 1.14)

** P < 0.05, ** P < 0.01, *** P < 0.001*

[1] Includes mothers identifying equally with two or more Pacific groups, equally with Pacific and non-Pacific groups or with Pacific groups other than Tongan, Samoan or Cook Island

Table 3a: Six week time point - Adjusted odds of mothers who had gambled in the past 12 months for variables attaining significance in a multiple logistic regression (N = 1343)

Variable	Category	Adjusted odds ratio (95% CI)	
Maternal variables			
Age (years)	<20	1.00	
	20-29	1.53	(0.84, 2.76)
	30-39	2.07	(1.11, 3.86)*
	40+	3.17	(1.31, 7.69)*
Education	Post-school qualification	2.03	(1.44, 2.85)***
	Secondary school qual.	1.88	(1.37, 2.59)***
	No formal qualifications	1.00	
Ethnicity	Samoan	1.00	
	Cook Island	1.49	(1.00, 2.24)
	Tongan	5.09	(3.65, 7.10)***
	Other Pacific[1]	2.03	(1.21, 3.42)**
	Non Pacific	3.79	(2.16, 6.65)***
Social marital status	Partnered, legally married	1.58	(1.00, 2.49)*
	Partnered, de facto	2.23	(1.38, 3.61)**
	Non-partnered	1.00	
Born in New Zealand	Yes	1.00	
	No	2.01	(1.40, 2.89)***
Cigarettes smoked yesterday	None	1.00	
	1-9	0.88	(0.60, 1.28)
	10 or more	1.84	(1.06, 3.19)*
Six or more alcoholic drinks on one occasion Before pregnancy	No	1.00	
	Yes	5.95	(3.70, 9.55)***
During pregnancy	No	1.00	
	Yes	0.24	(0.11, 0.54)***

** P < 0.05, ** P < 0.01, *** P < 0.001*

[1] Includes mothers identifying equally with two or more Pacific groups, equally with Pacific and non-Pacific groups or with Pacific groups other than Tongan, Samoan or Cook Island

Table 4: 24 month time point - Numbers (row percentages) and univariate odds ratios of mothers who gambled during the past 12 months at two years postpartum falling in the upper quartile of usual expenditure per week (>=$20) by variables assessed six weeks postpartum attaining statistical significance (N=313[1])

Variable	Category	Expenditure >= $20 per week				Univariate odds ratio (95% CI)	
		Yes	(%)	No	(%)		
Ethnicity	Samoan	35	(46.1)	41	(53.9)	1.00	
	Cook Island	22	(33.8)	43	(66.2)	0.60	0.30, 1.19)
	Tongan	14	(13.1)	93	(86.9)	0.18	(0.09, 0.36)***
	Other Pacific[2]	8	(25.8)	23	(74.2)	0.41	(0.16, 1.03)
	Non Pacific	4	(11.8)	30	(88.2)	0.16	(0.05, 0.49)**
Fluent in English	No	21	(18.6)	92	(81.4)	1.00	
	Yes	62	(31.0)	138	(69.0)	1.97	(1.12, 3.45)*
Cigarettes smoked	None	42	(20.1)	167	(79.9)	1.00	
yesterday	1-9	31	(40.3)	46	(59.7)	2.68	(1.52, 4.73)**
	10 or more	10	(38.5)	16	(61.5)	2.49	(1.05, 5.87)*
Gambled status	Gambled, usual spend < $20	20	(19.2)	84	(80.8)	1.00	
	Gambled, usual spend >=$20	24	(40.0)	36	(40.0)	2.80	(1.38, 5.70)**
	Did not gamble	39	(26.2)	110	(73.8)	1.490	(0.81, 2.74)

** P < 0.05, ** P < 0.01, *** P < 0.001, [1] Numbers will vary due to missing data for some variables, [2] Includes mothers identifying equally with two or more Pacific groups, equally with Pacific and non-Pacific groups or with Pacific groups other than Tongan, Samoan or Cook Island*

Table 4a: Six week time point - Numbers (row percentages) and univariate odds ratios of mothers who gambled in the past year falling in the upper quartile for usual expenditure per week (≥$20) by selected variables (N=414[1])

Variable	Category	Expenditure ≥$20 per week				Univariate odds ratio (95% CI)	
		Yes	(%)	No	(%)		
Ethnicity	Samoan	27	(23.5)	88	(76.5)	1.00	
	Cook Island	20	(33.9)	39	(66.1)	1.67	(0.84, 3.33)
	Tongan	66	(42.6)	89	(57.4)	2.42	(1.41, 4.13)**
	Other Pacific[2]	8	(19.5)	33	(80.5)	0.79	(0.33, 1.91)
	Non Pacific	8	(18.2)	36	(81.8)	0.72	(0.30, 1.75)
Education	Post school qualification	30	(20.8)	114	(79.2)	0.46	(0.27, 0.80)**
	Secondary school qualification	56	(36.8)	96	(63.2)	1.02	(0.62, 1.68)
	No formal qualifications	43	(36.4)	75	(36.4)	1.00	
Traditional gifting	No	28	(21.4)	103	(78.6)	1.00	
	Yes	101	(35.7)	182	(64.3)	2.04	(1.26, 3.31)**
Cigarettes smoked yesterday	None	84	(27.4)	223	(72.6)	1.00	
	1-9	31	(42.5)	42	(57.5)	1.96	(1.16, 3.32)*
	10 or more	14	(42.4)	19	(57.6)	1.96	(0.94, 4.08)
Alcohol usage							
Before pregnancy	Never	100	(32.7)	206	(67.3)	1.00	
	Monthly or less	9	(18.0)	41	(82.0)	0.45	(0.21, 0.97)*
	Two or more times/month	20	(35.7)	36	(64.3)	1.14	(0.63, 2.08)

** P < 0.05, ** P < 0.01, [1] Numbers will vary due to missing data for some variables, [2] Includes mothers identifying equally with two or more Pacific groups, equally with Pacific and non-Pacific groups or with Pacific groups other than Tongan, Samoan or Cook Island*

Table 5: 24 month time point - Adjusted odds of mothers who had gambled during the past 12 months at two years' postpartum falling in the upper quartile of usual expenditure per week (>=$20) for variables attaining significance in a multiple logistic regression.

Variable	Category	Adjusted odds ratio (95% CI)	
Ethnicity	Samoan	1.00	
	Cook Island	0.71	(0.33, 1.54)
	Tongan	0.30	(0.12, 0.60)
	Other Pacific[1]	0.31	(0.10, 0.94)
	Non Pacific	0.11	(0.03, 0.43)
Cigarettes smoked	None	1.00	
yesterday	1-9	3.00	(1.44, 5.60)
	10 or more	3.50	(1.20, 10.20)
Six or more drinks on one occasion before pregnancy	No	0.11	(0.02, 0.65)
	Yes	2.74	(0.77, 9.80)

Table 5a: Six week time point - Adjusted odds of usual expenditure falling in the upper quartile per week (≥$20) for variables attaining significance in a multiple logistic regression (N=400)

Variable	Category	Adjusted odds ratio (95% CI)	
Maternal variables			
Education	Post-school qualification	0.50	(0.26, 0.94)*
	Secondary school qual.	1.07	(0.60, 1.90)
	No formal qualifications	1.00	
Ethnicity	Samoan	1.00	
	Cook Island	1.58	(0.69, 3.66)
	Tongan	2.44	(1.30, 4.59)**
	Other Pacific[1]	0.68	(0.24, 1.88)
	Non Pacific	0.28	(0.09, 0.86)*
Born in New Zealand	Yes	1.00	
	No	0.24	(0.11, 0.53)***
Traditional gifting	No	1.00	
	Yes	2.04	(1.09, 3.81)*
Cigarettes smoked yesterday	None	1.00	
	1-9	3.02	(1.54, 5.92)**
	10 or more	3.60	(1.47, 8.85)**

** P < 0.05, ** P < 0.01, *** P < 0.001*

[1] Includes mothers identifying equally with two or more Pacific groups, equally with Pacific and non-Pacific groups or with Pacific groups other than Tongan, Samoan or Cook Island

Discussion

The knowledge base on contemporary Pacific gambling remains limited despite the high risk of problem gambling within this ethnic group. The PIF study is the only study nationally and internationally to provide an insight into Pacific female gambling activity over time.

Participation & Expenditure (6 weeks & 24 months)

There was no significant change in the numbers of mothers gambling between six weeks and 24 months (30.1% and 29.4% respectively). About 70% of mothers were non gamblers at both measurement points. This finding is consistent with low participation rates found among Pacific peoples in both the 1999 general prevalence survey and the 2002/03 New Zealand Health Survey. In light of the disproportionately high prevalence of problem gambling amongst Pacific peoples, this finding indicates an increased propensity for risk within this gambling population.

There were also no significant differences in the median expenditure for mothers who gambled during the 12 months prior to the six-week ($10) and 24 month ($10) measurement points. However, mothers with a usual weekly expenditure of $20 or more at the six week time point (14.8%) were 3.5 times more likely to do the same at the 24 month time point when compared with those that spent less than $20. Given that the annual median income for the Pacific population is low in comparison to the national median income, this finding suggests that gambling expenditure for a proportion of mothers is high. Also, despite increasing efforts to reduce gambling related harms within Pacific communities, this finding implies that there is a need for further research on effective interventions.

Consistent with the six week measurement point, mothers from all ethnic groups have a significantly increased likelihood of gambling activity in comparison to the Samoan mothers. This remained significant in the multivariate analyses even when gambling status at six weeks was controlled for and suggests that ethnicity has prognostic significance with gambling activity. Although Tongans were identified as being more likely to gamble compared with Samoans at six weeks, and to spend $20 or more per week on gambling (42.6% and 23.5%), at 24 months, despite Samoans remaining the least likely to gamble, those that did were more likely than Tongans to spend $20 or more per week on gambling (46.1% vs 13.1%). This ethnic specific difference provides further evidence of the need for future gambling research to acknowledge the heterogeneity within Pacific populations. Further research is also required to explore whether Samoan ethnicity can be a protective factor for gambling participation and/or a risk factor for gambling expenditure.

Another consistency across measurement points was that older mothers (over 20 years of age) were more likely to gamble than younger mothers. Age remained a significant variable when gambling status was controlled for at the six week measurement point and thus has prognostic significance with participation in gambling activities.

Mothers who were in de-facto or partnered relationships also had a significantly increased likelihood to gamble than single mothers at both measurement points. A small qualitative study on Samoan people in Auckland highlights that the pressure associated with fulfilling household and childrearing responsibilities in addition to the demands of employment can influence gambling participation. Gambling provides opportunities for socialisation, time-out, independence, relaxation, and moments of reprieve from cultural and gender-role responsibilities.[7]

This finding suggests that a reduced sense of cultural identity for Pacific peoples increases the likelihood of gambling participation.

Migrant mothers who had lived in New Zealand for increased lengths of time were more likely to gamble than more recent migrants at both the six week and 24 month measurement points. At six weeks, mothers who had lived in this country for between six to ten years, and at 24 months, those who had been here for more than ten years had a significantly increased likelihood of participation. Although there was no overall statistical significance reached between the number of years lived in New Zealand and the amount spent on gambling, it is noted that those who have lived in New Zealand for more than 10 years were likely to spend $20 or more compared with those who have lived in this country 5 years or less.

Mothers in the categories of *Low Pacific, High New Zealand* (low following of Pacific culture but high following of New Zealand culture, i.e. more Westernised) and *Low Pacific, Low New Zealand* (poorly adapted with loss of Pacific culture and little adaptation to New Zealand culture) orientations had significantly greater odds of gambling at 24 months than those in the *High Pacific, Low New Zealand* (retains high Pacific culture with low signs of New Zealand culture incorporated, i.e. may not fit well into New Zealand society) category. This finding suggests that a reduced sense of cultural identity for Pacific peoples increases the likelihood of gambling participation. This could also suggest that a strong sense of personal and cultural identity can

reduce the likelihood of gambling participation and act as a protective factor. As no studies have been conducted that specifically investigate the migration and adaptation processes of Pacific peoples in New Zealand in relation to gambling activity, further research in this area is required.

At 24 months, mothers who were affiliated with a religious denomination were less likely to participate in gambling activities than those not affiliated. This remained significant in the multivariate analyses which also identified that mothers belonging to the Mormon and Assembly of God faiths remained significantly less likely to have bet money on gambling activities.

Preferred gambling form and frequency of participation (12 & 24 months)

Within the 12 month measurement point, although less people identified Housie as their overall preferred form of gambling (3.8%), a high proportion of mothers (71.4%) participated in it weekly and more money was spent on this activity than any other gambling form. In other words, despite few mothers identifying housie as their preferred form of gambling, the majority of those that did also reported high weekly participation and expenditure on this activity. This study contends that, in light of the church being an important aspect of Pacific culture, and Housie a common form of fundraising within particular churches, that the increased frequency of participation in this activity could be a function of church membership. Also, since children in the PIF study are relatively young at this measurement point, Housie within the church could provide an accessible and acceptable environment to gamble. There have been no studies conducted that specifically investigate the role of housie within Pacific churches, further research in this area is required.

At the 24 month measurement point, a high proportion of mothers identified Housie as their preferred form of gambling. However fewer mothers participated weekly when compared with 12 months. At this measurement point more mothers reported a weekly preference for EGMs and a higher expenditure on this activity. It is plausible that mothers are more mobile to engage in other forms of gambling, as well as fulfil their roles and responsibilities within the church. Given that EGMs are significantly associated with problem gambling, it will be important to monitor the participation of mothers in this study over time and the impacts that this may have on Pacific individuals, children, families and communities.

This paper is a Pacific specific investigation into the consistencies and inconsistencies that have occurred with gambling activity over time. It highlights areas associated with contemporary Pacific gambling that require further exploration within Pacific cultures, understandings and knowledge.

The authors recognise that there are several limitations to this study. In particular, the gambling questions are brief and thus provide limited information.

Also, the associations examined in relation to gambling have been selected by the authors from a large range of variables investigated as part of the longitudinal PIF study and other potentially more important variables may have been overlooked. It is hoped that these issues can be at least partially addressed at future measurement points within the longitudinal study.

Additionally, the associations that have been discussed were those selected and considered by the authors to be of most relevance to developing the limited knowledge base and understandings of Pacific specific cultural factors and contemporary Pacific gambling.

Conclusion

This paper provides data about gambling activity from the two-year data collection point for a cohort of mothers within the longitudinal PIF study. The results indicate a number of consistencies and discrepancies between data collected at this time point and the six-week baseline data collection point.

The proportions of mothers gambling as well as median expenditure 12 months prior to a data measurement point remain consistent between six-weeks and two years. Another significant consistency is that mothers from all ethnic groups are more likely than Samoan mothers to participate in gambling activity. However, it is important to recognise that whilst Samoan mothers remain the least likely to gamble at two years, those that did were more likely to spend more money on gambling activities. Other consistencies between the six-week and 24 month measurement points are that older mothers (over 20 years of age), mothers in de-facto or partnered relationships and migrant mothers who had lived in New Zealand for increased lengths of time were more likely to gamble.

An additional finding at the two year measurement point suggests that low cultural orientation or sense of cultural identity increases the likelihood of gambling. Conversely a strong sense of cultural identity may serve act as a protection factor. Further research is required in this area as well as on the role of housie within Pacific churches. This paper identifies the need to continue to monitor Pacific mothers gambling preferences over time and highlights aspects of contemporary Pacific gambling that require further exploration within Pacific understandings and contexts.

References

1. Statistics New Zealand. (2002). *Pacific Progress: A report on the economic status of Pacific Peoples in New Zealand*. Wellington: Statistics New Zealand.
2. Abbott, M. W., & Volberg, R. A. (2000). *Taking The Pulse on Gambling and Problem Gambling in New Zealand: A Report on Phase One of the 1999 National Prevalence Survey. Report Number Three of the New Zealand Gaming Survey.* Wellington: Department of Internal Affairs.
3. Ministry of Health. (2006). *Problem Gambling in New Zealand: Analysis of the 2002/03 New Zealand Health Survey*. Wellington: Ministry of Health.
4. Bellringer, M., Perese, L., Abbott, M., & Williams, M. (2006). Gambling Among Pacific Mothers Living in New Zealand. *International Gambling Studies, 6*(2), 217-235.
5. Ministry of Health. (2008). *Problem gambling intervention services in New Zealand: 2007 Service-user statistics*. Wellington: Ministry of Health.
6. Paterson, J., Tukuitonga, C., Abbott, M., Feehan, M., Silva, P., Percival, T., et al. (2006). Pacific Islands Families: First Two Years of Life Study - design and methodology. *The New Zealand Medical Journal*.
7. Perese, L., & Faleafa, M. (2000). *The Impact of Gambling on Some Samoan People's Lives in Auckland*. Auckland: The Problem Gambling Foundation of New Zealand.

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Mental health well-being amongst fathers within the Pacific Island Families Study

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Abstract

This article investigates the prevalence of potential psychological disorder amongst a cohort of primarily Pacific fathers in New Zealand over their child's first 6-years of life. The analysis is based on data collected at 12-months, 2-years and 6-years postpartum during the Pacific Islands Families Study, and uses the 12-item General Health Questionnaire (GHQ12) to assess the prevalence of psychological distress amongst participant fathers at each measurement wave. Various sociodemographic and potentially confounding variables were also investigated to determine their effect on the risk of developing potential mental health disorder. The majority of fathers within the study reported good overall health and well-being and their prevalence of 'symptomatic' disorder was initially low at 12-months (3.9%) but increased significantly at 2-years (6.6%) and at 6-years (9.8%) in crude and adjusted analyses (both P-values<0.001). In the adjusted analysis, the odds of symptomatic cases at 2-years was 1.7 (95% confidence interval: 1.1, 2.8) times that observed at 12-months postpartum and at 6-years the odds was 3.2 (95% confidence interval: 1.9, 5.2) times that observed at 12-months. Moreover, in the adjusted analysis, smoking status, marital status, employment status, and ethnicity, were all significantly associated with the risk of developing symptomatic mental health disorder.

Introduction

International perspective

Modern day fathers are experiencing increasing demands from both work and family life. The associated financial, psychological and physical strain placed upon fathers trying to balance work and family can also have an adverse impact on family life. However, unlike women, there is a surprising lack of research into male health issues, and particularly data concerning the health and well-being of fathers. What research that does exist highlights the potential effects of fathering roles and practices in influencing their child's behaviour and cognitive development.[1, 2] It also underlines the large potential for positive fathering to promote resiliency and improved mental health outcomes amongst young children.[3,4]

The importance of research on fathers and fathering behaviours has been recognized as key priority areas by international bodies, including the World Health Organisation (WHO).[5] There is a clear need to develop a deeper understanding of health issues surrounding male health, fathering roles, and family support structures in promoting resiliency amongst children and young people. In response to this need, several international organizations and countries are now endeavouring to provide information to fill this knowledge gap on fathers. One example is the nationwide longitudinal study on Men's health in Australia, which has a key purpose of investigating some of the key issues which affect the health of males, and their potential impact on fathering roles and practices.[6] Likewise, a research study conducted through the University of East Anglia in the United Kingdom (UK), is exploring whether modern day fathers suffer from similar tensions to mothers when trying to balance their work and family life. These

findings may in turn allow consideration of whether these factors may impact on the well-being of the children.[7]

The mental health well-being of fathers is of particular importance to the function and well-being of the family. First time fathers can be particularly prone to depression after childbirth[8] with mild to moderate depression most likely.[9] Such depression is likely to place strains on the father's relationship to his partner and new child, arguably at a time when his involvement is most needed. Moreover, depressed new mothers receive more support from their partner than from any other individual, including medical staff.[10] Such support is likely to be compromised if the father himself has poor mental-health.

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New Zealand perspective

Within the New Zealand context, recognition of the fundamental roles of men and fathering in family function and health has received increased nationwide attention through the New Zealand Ministry of Health,[11,12] the New Zealand Families Commission,[13] and the Health Research Council of New Zealand. Once again there is a general lack of information on male health, fathering, and associated mental health issues. Nevertheless, one research report concerning fathers in West Auckland highlighted the increasing recognition of fatherhood as an important factor in successful health outcomes for their children.[14] The report also indicated that fathers have their own unique role in providing parenting support and assistance which is quite distinct from the mother. Therefore positive fathering behaviours must be nurtured and encouraged in order to enhance positive health outcomes for their children.[14]

New Zealand-based Pacific Perspective

Alongside the international and national significance of men's health and well-being, the lack of information or data concerning Pacific males and specifically Pacific fathers is another important motivation for undertaking research into this area. Currently there is a scarcity of research on parenting practices and styles amongst different cultural groups in New Zealand,[15] and research findings on Pacific Island parents in New Zealand are very limited and inconsistent. A greater understanding of fathers mental health and how fathering roles may promote cohesion and connectedness of children to schools or preschools, would be highly beneficial in helping to formulate better strategies and policies to improve the health of Pacific children and youth.[11] Quantifying the extent of mental illness amongst Pacific peoples in New Zealand has historically been a very difficult task, with most information about the frequency of mental disorders being generated using institutional statistics that tend to underestimate the true prevalence of mental disorder.[16] Furthermore, what figures are available have usually been grouped under a Pacific ethnic label which fails to capture any sub-ethnic differences and variations. Nevertheless, recent information and evidence from Te Rau Hinengaro[17] has contributed to a better understanding of mental health amongst Pacific peoples. Specific key findings from this study indicate that Pacific peoples experience higher rates of mental illness than New Zealanders overall. Furthermore, the 12-month prevalence of Pacific peoples experiencing a mental disorder was 25%, compared with 20.7% of the total New Zealand population.[18] However, one of the fundamental findings within the study was recognition of the need for further research in mental health and particularly amongst specific groups within the Pacific population such as Pacific youth and Pacific males. It is important to emphasise that this perspective is only reflective of the situation amongst New Zealand-based Pacific people, and may not represent the situation amongst Pacific people living in the Pacific Islands.

Pacific Islands Families (PIF) study

The Pacific Island Families (PIF) study is an ongoing longitudinal study of Pacific children. In addition to information collected on the children, data was also collected from mothers and fathers. Using a standardized measure of mental health well-being, this study aims to report the prevalence of potential psychological mental health disorders amongst a cohort of primarily Pacific fathers within the PIF Study over the first 6-years of the child's life. Additionally, important covariates for the potential mental health disorders are investigated.

Methods

Participants

The PIF study follows a cohort of Pacific Island infants born at Middlemore Hospital between 15 March and 17 December 2000. All potential participants were selected from births where at least one parent was identified as being of Pacific Island ethnicity and a New Zealand permanent resident. Participants were identified through the Birthing Unit, in conjunction with the Pacific Islands Cultural Resource Unit. Information about the study was provided and consent was sought to make a home visit.

Approximately 6-weeks postpartum, potential participants were allocated to a team of female Pacific interviewers fluent in both English and a Pacific language. In most cases the interviewers were ethnically matched to the potential participant. The interviewers visited the potential participant in their own homes, fully described the study with

the parent(s) and obtained the mother's informed consent. Once consent was obtained, the interview was carried out in the mother's preferred language. When the children reached their first, second, fourth and sixth birthdays all maternal participants were re-contacted and revisited by a female Pacific interviewer. Again, consent was obtained before the interview was conducted in the mother's preferred language. At the time of the first, second and sixth year interviews, mothers were asked to give permission for a male Pacific interviewer to contact and interview the father of the child. If permission and paternal contact details were obtained then a Pacific male interviewer contacted the father to discuss participation in the study. Once informed consent was obtained, fathers participated in one-hour interviews concerning family functioning and the health and development of the child. This interview was conducted in the preferred language of the father. Within the context of a wider interview, issues of paternal health were measured using various screening tools, including the 12-item General Health Questionnaire. Detailed information about the PIF cohort and procedures is described elsewhere.[19]

Ethical clearance

Careful consideration is always applied to the ethical aspects of this longitudinal study with Pacific peoples. Ethical approval for the PIF study was obtained from the Auckland Branch of the National Ethics Committee, the Royal New Zealand Plunket Society, and the South Auckland Health Clinical Board.

Measures

Psychological disorder at 1-year, 2-years, and 6-years:

At 1-year, 2-years, and 6-years measurement waves, paternal mental health was assessed using the 12-item General Health Questionnaire (GHQ12),[20] a self-report screening tool widely used to identify minor psychiatric disorder. Using the binary method, the GHQ12 was scored to give a total of 12 and a cut-point value of 2 was used to indicate potential psychological disorder.[20] Fathers who scored ≥2 were defined as symptomatic for potential mental disorder, and fathers who scored <2 were defined as non-symptomatic.

Socio-demographic and potential confounding variables: Socio-demographic characteristics and variables known association with potential psychological disorder were investigated, including age, ethnicity, being New Zealand born, and household income at baseline, highest educational qualification at baseline, current smoking status, current alcohol drinking status, current employment status, marital status and acculturation.

Development of acculturation measure:

This measure was adapted from the General Ethnicity Questionnaire (GEQ),[21] and two scales were developed: the New Zealand (NZACCULT) and Pacific (PIACCULT) version. Modifications were made to the GEQ to make it appropriate and relevant to Pacific peoples and New Zealand society as a whole. Specifically included were questions relating to language, social affiliation, activities, exposure in daily living and food, and also included questions relating to contact with Pacific family and relatives and attendance at church, both of which were considered important in a Pacific context in New Zealand society.[22] Similarly, inclusion of sport as a particular recreation was included because of the perceived importance of Pacific youth involvement in New Zealand sport and its importance in the context of the wider New Zealand society.[23]

Assessment of acculturation:

Using the model of Berry,[24-26] the acculturation variable describes four distinct categories for respondents depending on whether the acculturation strategy is freely adopted by the individual, or imposed by the dominant culture. Each of the respondents was individually scored on both the NZACCULT and PIACCULT scales and allocated to one of the categorical classes dependent on whether their individual score fell above or below the median of the full group, namely: Separationalist (Low New Zealand – High Pacific); Integrator (High New Zealand – High Pacific); Assimilationalist (High New Zealand – Low Pacific); Marginal (Low New Zealand –Low Pacific).

Statistical analysis

Categorical variable comparisons between groups were made using Fisher's exact test. Due to the longitudinal non-normal data, binomial generalized estimating equation (GEE) models were employed to investigate relationships between fathers mental health status over time in crude analyses and when adjusted for potential confounding variables.[27] Binomial GEE models were also used to model whether there were systematic patterns in attrition with sample sub-groups. An unstructured correlation matrix was employed and robust Huber-White sandwich variance estimators used for all GEE analyses. Statistical analyses were performed using SAS version 9.1 (SAS Institute Inc., Cary, NC, USA) and Stata version 10.0 (StataCorp, College Station, TX, USA) software and $\alpha=0.05$ was used to define statistical significance.

Results

Nine hundred and ninety-nine of the mothers interviewed at 12-months had partners who met eligibility criteria, of whom 825 (83%) were interviewed. Most, 820 (99%), were the biological fathers of the children with five adoptive or stepfathers. For ease

Table 1. Frequencies (percentage) of different socio-demographic variables at baseline over measurement waves (1-year n=825, 2-years n=757, and 6-years n=591).

Variable	Measurement Waves			
	12 months n (%)	2 years n (%)	6 years n (%)	P-value
Age at baseline (years)				
<20	7 (0.9)	4 (0.7)	4 (0.9)	<0.001
20-29	314 (38.2)	215 (36.0)	145 (33.1)	
30-40	390 (47.4)	286 (47.8)	219 (50.0)	
≥40	112 (13.6)	93 (15.6)	70 (16.0)	
Ethnicity				
Samoan	440 (53.3)	350 (58.3)	213 (48.5)	0.12
Cook Islands Maori	73 (8.9)	50 (8.3)	32 (7.3)	
Niuean	26 (3.2)	19 (3.2)	13 (3.0)	
Tongan	199 (24.1)	121 (20.2)	142 (32.4)	
Other Pacific	28 (3.4)	20 (3.3)	15 (3.4)	
Non-Pacific	59 (7.2)	40 (6.7)	24 (5.5)	
New Zealand Born				
Yes	203 (24.6)	149 (24.8)	95 (21.6)	0.17
No	621 (75.4)	451 (75.2)	344 (78.4)	
Highest educational qualification at baseline				
No formal qualification	481 (58.4)	345 (57.7)	270 (61.8)	0.12
Secondary	220 (26.7)	163 (27.3)	96 (22.0)	
Post-secondary	122 (14.8)	90 (15.1)	71 (16.3)	
Acculturation				
Assimilationist	305 (37.0)	216 (36.0)	140 (31.9)	0.01
Separationalist	302 (36.6)	208 (34.7)	188 (42.8)	
Integrator	75 (9.1)	53 (8.8)	38 (8.7)	
Marginal	143 (17.3)	123 (21.0)	73 (16.6)	
Household Income at baseline				
$0-$20,000	216 (26.2)	185 (24.4)	152 (25.7)	0.005
$20,001-$40,000	486 (58.9)	455 (60.1)	334 (57.0)	
>$40,000	103 (12.5)	102 (13.5)	84 (14.2)	
Unknown	20 (2.4)	15 (2.0)	21 (3.6)	

Note: n=164 fathers included at 2 years did not participate at 12 months; and n=158 fathers included at 6 years did not participate at 12 months

of exposition, we shall refer to this group collectively as 'fathers' hereafter. Most, 786 (95%), fathers were living with the biological mother in a married (77%) or de facto (18%) relationship. Their mean age was 32.1 years (range: 17-65 years). At the 2-year interview, 938 mothers consented to the child's father to act as a collateral respondent of whom 757 (81%) consented and completed the interview, while at the 6-year interview 848 mothers consented and 591 (70%) fathers completed the interview. The numbers of fathers participating has significantly decreased over time (P<0.001). As father recruitment for each measurement wave was conditional on mother's consent, 164 fathers interviewed at the 2 year measurement phase did not participate in the 12 month phase, and 158 fathers interviewed at the 6 year measurement phase did not participate in the 12 month phase. Overall 1053 fathers are included in this study with 271 (26%) fathers completing one measurement wave, 444 (42%) fathers completing two and 338 (32%) fathers completing all three measurement waves.

Summaries of the frequencies and percentages of socio-demographic variables at baseline for the participants in the study over the three measurement waves are presented in Table 1. After accounting for the attrition over time, there were no significant differences in attrition across different ethnic groups, place of birth groups and highest educational qualification groups over the measurement waves. However, younger fathers, assimilationists and those fathers with lower household incomes were significantly more likely to attrite from the studies than their older, non-assimilationist and higher income counterparts. Despite the distributions of age, acculturation and household income changing over measurement waves, the overall percentage differences remained relatively small (Table 1).

Table 2 shows the frequencies and percentages for potential confounding variables amongst the participant fathers over the three different measurement waves. The findings indicate that the majority of participants in the study are married or in defacto relationships, are non-drinkers and non-smokers, and are in full-time employment.

Table 2. Frequencies (percentage) of different confounder variables over measurement waves (1-year, 2-years, and 6-years).

Variable	Measurement Wave		
	12 months n=825 n (%)	2 years n=757 n (%)	6 years n=591 n (%)
Marital Status			
Married/De Facto	789 (95.6)	724 (95.8)	568 (97.1)
Separated/Single	36 (4.4)	32 (4.2)	17 (2.9)
Current smoking status (cigs/day)			
Non-Smoking (0)	490 (59.5)	414 (54.8)	363 (62.1)
Regular Smoker (1-9)	123 (15.0)	175 (23.2)	90 (15.4)
Moderate Smoker (10-19)	169 (20.5)	123 (16.3)	87 (14.9)
Heavy Smoker (>20)	41 (5.0)	44 (5.9)	45 (7.7)
Current alcohol drinking status			
Non-Drinking	578 (70.2)	536 (71.0)	425 (72.0)
Monthly or less	209 (25.4)	185 (24.4)	117 (19.8)
2-4 times month	34 (4.1)	28 (3.7)	36 (6.1)
2-3 times week	3 (0.4)	8 (1.1)	12 (2.0)
Current employment status			
Unemployed	109 (13.2)	96 (12.7)	57 (9.6)
Full-time employment	666 (80.7)	605 (80.0)	485 (82.1)
Part-time employment	28 (3.4)	24 (3.2)	27 (4.6)
Full time parent	5 (0.6)	6 (0.8)	5 (0.9)
Student/other	17 (2.1)	25 (3.3)	17 (2.9)

The frequencies of symptomatic mental health indications over each measurement wave, estimated odds ratios (ORs) and associated 95% confidence intervals (95% CI) are presented in Table 3. In crude analysis, the results show that participants are 1.75 times more likely to be symptomatic at 2 years and 2.67 times more likely to be symptomatic at 6 years, than at the 12 month measurement phase; a significant time effect (P-value<0.001). The adjusted analysis results were similar to those of the crude analysis, indicating that this association did not appear to be confounded by the socio-demographics and covariates considered here (Table 3).

Table 3. Numbers, and frequency of symptomatic mental health indications from the GHQ12 over measurement waves since child's birth, together with crude and adjusted OR estimates and associated 95% confidence intervals (95% CI) derived from binomial generalised estimating equation (GEE) models.

Measurement		Symptomatic		Crude			Adjusted†		
Wave	Total	n	(%)	OR	(95% CI)	P-value	OR	(95% CI)	P-value
12-months	825	32	(3.9)	1.0	Reference	<0.001	1.0	Reference	<0.001
2-years	757	50	(6.6)	1.8	(1.1, 2.7)		1.7	(1.1, 2.8)	
6-years	591	58	(9.8)	2.7	(1.7, 4.2)		3.2	(1.9, 5.2)	

†*Adjusted for all variables listed in Tables 1 and 2.*

Table 4 presents the ORs and 95%CI for the socio-demographic and covariates used in the adjusted analysis. Ethnicity, current smoking status, employment status and marital status were all significantly associated with symptomatic mental health indications from the GHQ12. When studying these variables further, Cook Islands or Tongan ethnicity, being a regular smoker, being unemployed, and having marital status of separated or single all had increased odds for symptomatic mental health indications.

Table 4: Adjusted OR estimates and associated 95% confidence intervals (95% CI) derived from binomial generalised estimating equation (GEE) models for all variables.

Variable	OR	(95% CI)	P-value
Age (years)			
<20	1.0	Reference	0.42
20-29	2.0	(0.3, 16.3)	
30-40	2.6	(0.3, 20.5)	
≥40	3.3	(0.4, 27.4)	
Ethnicity			
Samoan	1.0	Reference	<0.001
Cook Islands Maori	2.9	(1.5, 5.6)	
Tongan	2.3	(1.2, 4.1)	
Other Pacific	0.8	(0.3, 2.2)	
Non-Pacific	2.3	(0.9, 5.5)	
New Zealand born			
Yes	1.0	Reference	0.06
No	1.8	(1.0, 3.2)	
Highest educational qualification at baseline			
No formal qualification	1.0	Reference	0.69
Secondary	1.0	(0.5, 1.9)	
Post-secondary	1.3	(0.7, 2.5)	
Acculturation			
Assimilationist	1.0	Reference	0.28
Separationalist	1.1	(0.5, 2.3)	
Integrator	1.4	(0.6, 3.1)	
Marginalist	1.8	(0.9, 3.5)	
Household Income at baseline			
$0-$20,000	1.0	Reference	0.42
$20,001-$40,000	1.0	(0.6, 1.7)	
>$40,000	0.7	(0.4, 1.4)	
Unknown	0.3	(0.1, 2.3)	
Marital Status			
Married/De Facto	1.0	Reference	0.004
Separated/Single	3.2	(1.5, 7.1)	
Current smoking status (cigs/day)			
Non-Smoking (0)	1.0	Reference	0.04
Light Smoker (1-9)	1.9	(1.1, 3.2)	
Moderate Smoker (10-19)	1.7	(1.0, 2.9)	
Heavy Smoker (>20)	2.1	(1.0, 4.4)	
Current alcohol drinking status			
Non-Drinking	1.0	Reference	0.35
Monthly or less	0.8	(0.5, 1.4)	
2-4 times month	1.7	(0.8, 3.5)	
2-3 times week	2.2	(0.4, 13.1)	
Current employment status			
Unemployed	1.0	Reference	<0.001
Full-time employment	0.3	(0.2, 0.6)	
Part-time employment	0.5	(0.2, 1.4)	
Full-time Parent	0.6	(0.1, 7.0)	
Student/other	0.6	(0.2, 2.2)	

Discussion

Prevalence of mental disorder

Our analysis identified 3.9% of fathers with potential psychological disorder in the 1st year after the birth of their child, increasing to 6.7% and 9.8% in the 2-year and 6-year postpartum phases. By comparison, findings from the Te Rau Hinengaro study indicate that currently amongst Pacific people 25% or 1 in 4 are mentally unwell.[17] Although the Te Rau Hinengaro study findings are based on a personal interview survey of a nationally representative sample of people aged 16 years and over living throughout New Zealand, making direct comparisons difficult. While low initially, the increasing potential mental health disorder within our male cohort is of concern for the function and well-being of the fathers themselves and the family unit. However, Pacific viewpoints of mental illness differ distinctly from Western medical approaches. Pacific cultures tend to view the cause of mental illness as being either spiritual or inherited, and treatment is delivered in the traditional way by traditional or 'spiritual' healers.[28] A holistic approach to mental health is often utilized by Pacific peoples, thus requiring that all aspects of a person's life – spiritual, physical, emotional and family – to be in harmony.[28] The application of this holistic framework to potential mental disorder amongst Pacific fathers, emphasizes the need to discern and understand potential risk factors which significantly increase the likelihood of developing mental disorder.

These findings highlight the necessity for further research to understand what particular issues and concerns make these ethnicities more susceptible to potential mental illness.

Significant risk factors

In addition to time postpartum, a number of other variables were found to be significantly associated with potential psychological disorder; being a regular smoker was one such variable. According to the Mental Health Foundation of New Zealand, there is little research available regarding the effects of smoking on mental health in New Zealand.[29] However, internationally it has been reported that smoking prevalence is significantly higher among people with mental health problems than among the general population.[30] Additionally, smoking prevalence was the highest among those people diagnosed with a psychiatric disorder, and daily cigarette consumption is considerably higher among smokers with mental health problem.[31] One of the major explanations put forward to explain smoking prevalence among mental illness sufferers is that it is a coping mechanism for dealing with feelings of isolation and mental illness. [31] Furthermore, previous research suggests that the nicotine in cigarettes may help to alleviate some of the side effects of medication for mental illness sufferers, thereby encouraging them to keep smoking.[32] Consequently, our research compliments previous international findings that indicate there is a significant association between smoking and mental health. It is, however, unclear whether smoking is a causal factor, or whether it is a proxy variable for other risk factors associated with potential mental disorder.

The relationship between full-time employment and mental illness was also significant with those who work full-time less likely to develop potential mental disorder compared to those who were unemployed. This finding is consistent with findings from a Mental Health Commission of New Zealand report[33] which found that employment and mental health were definitely linked and that employment helps mental illness sufferers in their recovery and decreases their dependence on services. Despite a lack of systematic research in New Zealand on discrimination experienced by people with mental illness in the labour force, people with mental illness and mental health service providers cite discrimination as a key barrier to employment more than any other factor, potentially affecting the chances for recovery and also increasing the likelihood of potential psychiatric disorder developing.[33]

Marital status was also significantly related to mental illness, with those who were separated or single being significantly more likely to develop potential mental disorder than those who were married or in de facto relationships. These findings concur with previous results which have revealed that married spouses serve as sources of beliefs and validators of identity, leading to positive self-image and a source of resilience when dealing with everyday stresses.[34] Likewise, marital disruption may create vulnerability to stresses, with divorced people reporting worse mental health due to stresses and strains associated with role transitions.[35]

Finally, the relationship between Cook Islands or Tongan ethnicity and mental illness was also found to significantly affect the likelihood of developing potential mental disorder. Apart from the Te Rau Hinengaro Mental Health Survey, little work has been done on the prevalence of mental illness amongst Pacific people, and particularly ethnic specific information on prevalence of mental illness. Our findings may support the proposal that Pacific approaches and understandings of mental illness differ markedly from western perspectives, and some Pacific ethnic groups describe mental illness in ways that are unique to their own particular culture.[28] For instance, Samoan perceptions of mental illness are frequently described in terms of spiritual relationships or the breaking of forbidden traditions.[36] Therefore, these findings highlight the necessity for further

research to understand what particular issues and concerns make these ethnicities more susceptible to potential mental illness.

Strengths of the research

The PIF study provides information from the first, large, and culturally diverse sample of Pacific fathers within New Zealand. The sample composition is approximately representative,[19,37] and although it suffers from significant attrition, remains reasonably representative over time (Table 1) suggesting that any findings are likely to be generaliseable. Other key features of this research are the strong study design and the sophisticated generalized estimating equation (GEE) model analytic techniques employed to examine data from the PIF cohort over time. Moreover, the PIF study design is multi-disciplined, broad-based and inclusive—capturing information from mothers, fathers and their children. In general the PIF study aims to identify and characterize both positive and negative health outcomes amongst participants, understand the mechanisms and processes leading to those outcomes, and make empirically based strategic and tactical recommendations to improve the wellbeing of Pacific children and families and thereby benefit New Zealand society as a whole.[37]

The GHQ12 is a standardized measure of general health, including mental health, used internationally – with good specificity and sensitivity.[38] The GHQ12 was developed as a screening instrument to provide information on the mental well-being of respondents. This is achieved by assessing normal healthy functioning, and the appearance of new distressing symptoms, rather than giving a specific psychiatric diagnosis.[20] A key strength of the GHQ12 instrument is its accuracy and ease of administration as a screening tool for the identification of symptomatic (those with potential psychiatric disorder) and non-symptomatic (those with no significant risk of potential psychiatric disorder), symptomatic being identified by specified cut-off scores.[38] Subsequent research has confirmed that despite its shortened form, the GHQ12 is as accurate in screening and case detection as longer versions of the GHQ.[38]

Limitations

A potential limitation to this research is the attrition seen amongst the cohort. Attrition, particularly differential attrition, is problematic as it can cause systematic bias within study findings. It has also been suggested that non-responders in longitudinal studies can often be those that are most likely to be the worst off or, in this instance, are more likely to be symptomatic of mental health disorder.[39] However, at baseline, the prevalence of potential mental health disorders was at its lowest. So while the subsequent measurement waves may underestimate the underlying rate of mental health disorders, the figures at baseline are likely to be robust.

While having strengths, the GHQ12 may also suffer from weakness. Despite its success as an accurate screening measure for psychological disorder, there are varying methods in which symptomatic or non-symptomatic cases are defined. For example, the traditional method of scoring the questions is a binary method but the GHQ can also be scored as a Likert scale or by assigning different weights to questions associated with illness or health.[40] The threshold or cut-scores for the GHQ not only vary with the scoring method and length of questionnaire but also across populations. As a result, there can be vastly different rates of case detection depending on which scoring method is employed for the analysis.[41] However, this is alleviated in our longitudinal study by explicitly articulating our threshold and then consistently employing this threshold over all measurement waves. This given internal validity to our study, and external validity for those studies adopting the same threshold level.

Another important limitation of the findings is the fact that family size, composition and child number and order was not measured from fathers or accounted for in the analysis. The composition of the household and number of children in the family unit could potentially affect the amount of stress present in the home and thereby increase the likelihood of potential psychiatric disorder.

Policy Implications

There is an obvious lack of robust information on the mental well-being of Pacific fathers, and although the prevalence rate of potential mental disorder is lower in our sample compared to the general Pacific population, there is an increasing trend over time. Therefore health of fathers should be targeted as a priority research objective, especially given their important role in influencing the health and well-being of children. Likewise, further investigation must be undertaken to examine some of the variables which significantly increase the likelihood of developing potential mental health disorder. Although some of the issues such as smoking are already key factors which have been identified as affecting health, more comprehensive research should be initiated to gain a more detailed understanding of the associations with potential mental disorder. This may help to establish potential strategies to mitigate or prevent the increase of potential mental disorder among fathers.

Conclusion

Within our cohort of participant fathers in the PIF study rates of mental health symptomatic indications were low but there is a significant trend of increase over time. Fathers who were regular smoking, being unemployed, being separated or single, and being of Cook Islands and Tongan ethnicity had significantly increased likelihood of being symptomatic for

potential psychological disorder. However, further investigation should be conducted to determine what specific element of variables is responsible for this relationship. Moreover, future measurements over time are needed to establish whether this increasing mental health symptomatic indication prevalence continues, plateaus or declines with advancing child age.

Acknowledgements

The Pacific Islands Families: First Two Years of Life (PIF) Study and the Transition to Schools Study are supported by grants awarded from the Foundation for Science, Research and Technology; the Health Research Council of New Zealand; and the Maurice and Phyllis Paykel Trust. The authors also gratefully acknowledge the families who participated in the study; the Pacific Peoples Advisory Board; and the other members of the PIF research team.

References

1. Sarkadi A, Kristiansson R, Oberklaid F, Bremberg S. Fathers' involvement and children's developmental outcomes: a systematic review of longitudinal studies. Acta Paediatrica. 2008 Feb;97(2):153-8.
2. Flouri E. Fathering and adolescents' psychological adjustment: the role of fathers' involvement, residence and biology status. Child Care Health Dev. 2008 Mar;34(2):152-61.
3. Boyce WT, Essex MJ, Alkon A, Goldsmith HH, Kraemer HC, Kupfer DJ. Early father involvement moderates biobehavioral susceptibility to mental health problems in middle childhood. Journal of American Academy Child Adolescent Psychiatry. 2006 Dec;45(12):1510-20.
4. Flouri E, Buchanan A. The role of father involvement in children's later mental health. Journal of Adolescence. 2003 Feb;26(1):63-78.
5. WHO Europe. Fatherhood and Health Outcomes in Europe: A Summary Report. Copenhagen: Denmark.
6. Australian Centre of Excellence in Men's Reproductive Health. Andrology Australia. 2008 [cited 2008 September 14]; Available from: http://www.andrologyaustralia.org.
7. University of East Anglia. Fathers, Work-Family Research. Norwich 2008 [cited 2008 September 14]; Available from: http://www.fathersworkfamilyresearch.co.uk.
8. Cowan CP, Cowan PA, Heming G, Miller N. Becoming a family: marriage, parenting and child development. Hillsdale, NJ: Lawrence Erlbaum; 1991.
9. Soliday E, McCluskey, Fawcett K, O'Brien M. Postpartum affect and depressive symptoms in mothers and fathers. American Journal of Orthopsychiatry. 1999;69(1):30-8.
10. Holopainen D. The experience of seeking help for postnatal depression. Australian Journal of Advanced Nursing. 2002;19(3):39-44.
11. Ministry of Health. Child Health Strategy. Wellington: Ministry of Health; 1998 June.
12. Ministry of Health. Pacific Child Health: A paper for the Pacific Health and Disability Action Plan Review. Wellington: Ministry of Health; 2008.
13. Families Commission. Families Commission Website. Wellington; 2008 [cited 2008 14 September]; Available from: http://www.nzfamilies.org.nz.
14. Pudney W. Fathering our City: A scoping report on fathering our children in Waitakere City 2005. Waitakere; 2006.
15. Marshall, K. Cultural Issues. Wellington: Office of the Children's Commissioner; 2005.
16. Ministry of Health. Making a Pacific Difference: Strategic initiatives for the health of Pacific peoples in New Zealand. Wellington: Ministry of Health; 1997.
17. Oakley Browne M, Wells J, Scott K. Te Rau Hinengaro: The New Zealand Mental Health Survey. Wellington: Ministry of Health; 2006.
18. Ministry of Health. Pacific Peoples and Mental Health: A paper for the Pacific Health and Disability Action Plan Review. Wellington: Ministry of Health; 2008.
19. Paterson J, Tukuitonga C, Abbott M, Feehan M, Silva P, Percival T. Pacific Islands Families: First Two Years of Life Study-design and methodology. New Zealand Medical Journal. 2006;119(1228): U1814.
20. Goldberg D, Williams P. A User's Guide to the General Health Questionnaire. Windsor, U.K:1988.
21. Tsai JL, Ying Y, Lee PA. The meaning of "being Chinese" and "being American": Variation among Chinese American young adults. Journal of Cross-Cultural Psychology. 2000;31(3):302-22.
22. Statistics New Zealand. New Zealand Census 2006: Pacific Profiles. Wellington: Statistics New Zealand; 2008 [cited June 27 2008]; Available from: http://www.stats.govt.nz/analytical-reports/pacific-profiles-2006/default.
23. Abraído-Lanza A, Armbrister A, Flórez K, Aguirre A. Toward a Theory-Driven Model of Acculturation in Public Health Research. American Journal of Public Health. 2006:1342-6.
24. Berry JW. Acculturation as varieties of Adaptation In A.M. Padilla (Ed). *Acculturation, theory, models and some new findings* (pp9-25). American Association for the Advancement of Science: Boulder: Westview Press; 1980.

25. Berry JW. Conceptual approaches to acculturation In K. M. Chun, P. B. Organista, G. Marín (Eds.). *Acculturation: Advances in theory, measurement, and applied research* (pp.17-38). Washington D.C: American Psychological Association; 2003.
26. Berry JW. Contexts of Acculturation In D. Sam J. Berry (Eds.). *The Cambridge Handbook of Acculturation Psychology* (pp. 27-42). Cambridge University Press; 2006.
27. Lee JH, Herzog TA, Meade CD, Webb MS, Brandon TH. The use of GEE for analyzing longitudinal binomial data: a primer using data from a tobacco intervention. Addictive Behaviors. 2007;32(1):187-93.
28. Ministry of Health. Te Orau Ora: Pacific Mental Health Profile. Wellington: Ministry of Health; 2005.
29. Mental Health Foundation of New Zealand. Mental Health Foundation of New Zealand. Auckland; 2008 [cited 23 September 2008]; Available from: http://www.mentalhealth.org.nz/.
30. Meltzer H, Gill B, Petticrew M, et al. Economic activity and social functioning of adults with psychiatric disorders. OPCS Surveys of Psychiatric Morbidity in Great Britain Report 3. London: Department of Health, Scottish Home and Health Department and the Welsh Office; 1995.
31. Brown C. Tobacco and Mental Health: A literature review. Edinburgh: ASH, Scotland; 2004.
32. Patkar AA, Gopalakrishnan R, Lundy A, Leone FT, Certa KM, Weinstein SP. Relationship between tobacco smoking and positive and negative symptoms in schizophrenia. Journal of Nervous and Mental Disease. 2002;190:604-10.
33. Mental Health Commission. Employment and Mental Health: Issues and Opportunities. Wellington, Mental Health Commission; 1999.
34. Umberson D. Family status and health behaviors: Social control as a dimension of social integration. Journal of Health and Social Behaviour. 1987;28:306-19.
35. Aseltine RH, Kessler RC. Marital status and depression in a community sample. Journal of Health and Social Behavior. 1993;34:237-51.
36. Tamasese K, Peteru C, Waldegrave C, Bush A. Ole Taeao Afua, the new morning: A qualitative investigation into Samoan perspectives on mental health and culturally appropriate services. Australian and New Zealand Journal of Psychiatry. 2005 Apr;39(4):300-9.
37. Paterson J, Percival T, Schluter P, Sundborn G, Abbott M, Carter S, et al. Cohort profile: the Pacific Islands Families (PIF) Study. International Journal of Epidemiology. 2007;37(2):273-9.
38. Goldberg D, Gater R, Satorius N, Ustun TB, Piccinelli M, Gureje O. The validity of two versions of the GHQ in the WHO study of mental illness in general health care. Psychological Medicine. 1997;27:191-7.
39. Boys A, Marsdena J, Stillwell G, Hatchings K, Griffiths P, Farrella M. Minimizing respondent attrition in longitudinal research: Practical implications from a cohort study of adolescent drinking. Journal of Adolescence. 2003;26:363-73.
40. Goodchild ME, Duncan JP. Chronicity and the General health Questionnaire. Psychological Medicine. 1985;1979(9):139-45.
41. Martin CR, Jomeen J. Is the 12-item General Health Questionnaire (GHQ-12) confounded by scoring method during pregnancy and following birth? Journal of Reproductive Infant Psychology. 2003;21:267-78.

Twelve-Month Prevalences Of Mental Disorders And Treatment Contact Among Cook Islanders Resident In New Zealand

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Abstract

Objective: *To show the 12 month prevalences of mental disorders, 12-month treatment contact and use of mental health services among Cook Islanders resident in New Zealand.*

Data: *A) The New Zealand Mental Health Survey (NZMHS) is a nationally representative face-to-face household survey, carried out in 2003-2004. It surveyed 12,992 New Zealand adults aged 16 or more including 2374 Pacific peoples (500 Cook Islands Maori) and 2457 New Zealand Maori. B) An extract from the Mental Health Information National Collection (MHINC). This is a national dataset that is reported to by mental health services around New Zealand.*

Method: *Multiple logistic regression models are used to produce estimates from both sets of data. In the case of A) the NZMHS the results are weighted to account for different probabilities of selection and analysis takes account of the complex survey design.*

Results: *A previous paper[1] and this one confirm that Cook Islanders experience high prevalence of mental disorder. However, the difference is more attributable to their population age and gender structure or being New Zealand-born than from ethnicity. The prevalence was higher among New Zealand-born Cook Islanders than those born in the Cook Islands. Those born in the Islands with a disorder were less likely to have used a health service for their mental health compared with others and much less likely to have visited a specialist mental health service.*

From MHINC, twelve month data on use of mental health services shows: high use of acute inpatient and Forensic mental health services by Cook Island clients but similar levels of community mental health services. Cook Islands clients were more commonly diagnosed with bipolar, psychotic or schizophrenic disorders. They were also more likely to be diagnosed with a substance disorder.

Conclusion: *In spite of high levels of disorder Cook Islanders have low use of specialist mental health services. The exception to this is an over-representation in inpatient and forensic services. This experience of mental health services at the extreme end implies delayed or avoided treatment that has resulted in more serious levels of disorder among those Cook Islanders who are eventually seen by mental health services.*

Key words: *cross-sectional studies, epidemiology, mental disorders, Pacific, Cook Islands.*

Introduction

The Cook Islands are a group of 15 islands in the South Pacific well known as a relaxed holiday destination with a colourful, appealing and varied culture. The peoples from these islands have a varied mix of cultural practices and languages. The past century has seen much interaction between the people of the Cook Islands and New Zealand since the Islands were annexed in 1900. People of the Cook Islands have both Cook Islands and New Zealand citizenship.

Increased demand for workers in New Zealand manufacturing and service industries during the 1950's and 60's led to greater numbers of people from the Cook Islands as well as from other non Cook Islands (NCI) Pacific nations emigrating to urban centres.[2,3] International migration has become a feature of Cook Islands society to the extent that it is estimated that 85% of Cook Islands descendants live outside of the Cook Islands themselves.[4] In 2006,

while 11,800 residents lived in the Cook Islands there were 52,600 Cook Islanders who lived in New Zealand at the same time.[5] As a result there are many vibrant Cook Islands communities throughout New Zealand. Although largely in Auckland, there are strongly identified Cook Islands communities around the rest of New Zealand. Wellington, Hamilton, Hastings, Tokoroa, Christchurch and even as far south as Dunedin and Invercargill each have small but distinct Cook Islands communities. People of the Cook Islands who have settled in New Zealand and their descendants have quietly become a part of that society. Cook Islanders can be found at all levels of New Zealand society.

An economic downturn began in the 1970's and characterised New Zealand's economy through the 1980's and early 90's that led to many Pacific peoples in the manufacturing industries to be laid off. This created adverse consequences in general living conditions for many Pacific migrants and their families. It has been speculated that resulting adverse socio-economic, living conditions, acculturation and adjustment pressures have had a negative impact on the mental health of all Pacific peoples living in New Zealand. Recent years have seen some improvement in the social and economic environment for Pacific communities as a whole.

Foliaki et al reported that Cook Islanders had a 12 month prevalence rate of mental disorder 50% higher than that of New Zealand as a whole.

Like those who descended from non Cook Islands (NCI) Pacific nations, issues exist for Cook Islanders born or raised in New Zealand from an early age that differ from Island born.[6] Issues of identity for young pacific peoples are significant, in a bicultural and multicultural environment. Transition from Island culture to an urban, largely papa'a dominated culture of New Zealand is difficult. Some evidence would point to a greater burden of this transition has been felt among the New Zealand born descendants of those who migrated rather than the migrants themselves.[7]

In the past there have been only a few publications about Cook Islands history, culture, health and traditional healing practices.[8-10] Even fewer documents have dealt with mental illness among Cook Islanders in New Zealand. An observation of traditional healing practices was that physical manifestations possibly attributed to mental illness would be interpreted and treated as "maki tupapaku" or spiritual illness. Waitemata District Health Board (DHB) produced a workbook for a workshop on Cook Islands cultural competency for mental health services in New Zealand.[11] In it the authors proposed a Cook Islands model for mental health care as well as an in depth glossary of Cook Islanders translations for many concepts related to mental illness.

Very little has been reported on the prevalence of mental disorder among Cook Islanders or even the use of mental health services by Cook Islanders in New Zealand. Foliaki et al[1] reported that Cook Islanders had a 12 month prevalence rate of mental disorder 50% higher than that of New Zealand as a whole. This paper seeks to expand on the analysis of Te Rau Hinengaro: the New Zealand Mental Health Survey (NZMHS)[1] and combine this with patterns of use of mental health services in New Zealand from the Mental Health Information National Collection (MHINC), New Zealand's national database of mental health services.

Method

New Zealand Mental Health Survey

The NZMHS was a nationally representative household survey of 12 992 adults aged 16 years and over, with a stratified multistage clustered sample design. Face-to-face interviews were carried out between October 2003 and December 2004 by specially trained interviewers, in English. The response rate achieved was 73.3%. To enable analysis of Maori and Pacific peoples estimates with increased precision both groups were oversampled.[12]

Demography: Correlates included age at interview and sex, age at migration and place of birth.

Ethnicity: This was determined by self-identification, according to the ethnicity question in the 2001 Census of Population and Dwellings, which enables a breakdown to individual Island group for people of Pacific ethnicity. This paper uses an ethnicity breakdown of; 500 "Cook Islanders", 1874 people from other non Cook Islands Pacific ethnic groups ("NCI Pacific"), 2319 non Pacific New Zealand Maori ("NZ Maori"), and 7299 people from other, non Pacific-non Maori, ethnicities ("Others").

Diagnosis: Mental disorders have been identified using the Composite International Diagnostic Interview (CIDI) version 3.0. which covered anxiety disorders, mood, eating and substance disorders. There was a psychosis screener but this did not yield diagnoses for rare disorders like schizophrenia. People with a 12 month disorder were those who had previously met the criteria for that disorder and had displayed symptoms in the past 12 months.

'Serious' mental disorder was assigned if in the past 12 months there was either: an episode of bipolar I disorder; substance dependence with serious role impairment; a suicide attempt and any mental disorder; at least two areas of severe role impairment due to a mental disorder in the Sheehan Disability Scale domains; or overall functional impairment with

a Global Assessment of Functioning[15] score of 50 or less in conjunction with a mental disorder.[26]

Table footnotes refer to a "Long" and "Short" form version of the questionnaire. In order to reduce the overall length of interview only a selection of respondents were asked about less common disorders (Long version) while everyone was asked about common disorders (Short form).[12]

Analysis: Data was weighted to account for the clustered sample design, different probabilities of selection and differential non-response. All prevalence estimates reported are the population-weighted estimates. Multivariable models were analysed by multiple logistic regression using SUDAAN and SAS (version 9.1.2). If the number in the denominator was 30 or less, confidence intervals were calculated according to a method by Korn and Graubard.[13,14]

The first "unadjusted" model regresses the logit of the (prevalence or service) variable of interest on ethnicity and migration (NZ born, not NZ born). The second, "adjusted" model is the same as the "unadjusted" model but also includes age at interview (16-24, 25-44, 45-64, 65+ years) and sex alongside ethnicity and migration.

New Zealand Mental Health Information National Collection

The Mental Health Information National Collection (MHINC) is "a national database of information collected by the Ministry of Health to support policy, monitoring and research".[15] In New Zealand there are 21 agencies, owned by District Health Boards (DHBs), that provide services to 99% of clients seen by mental health services reporting to the database. In practice not all non-government owned services (NGOs) report to the MHINC.[15] In most years the number of NGOs reporting to the MHINC was in excess of 30. This represented less than 10% of NGOs contracted to provide Mental Health services in New Zealand. The database used in this analysis contains data on individuals (clients) who had used a mental health service between July 2000 and June 2006.

Demography: A selection of demographic correlates include date of birth (age), gender, in addition to a geographic identifier. The latter enables a link to an indicator of local area deprivation (NZDEP2001).

Ethnicity: This is collected using the question in the 2001 census. Each client can report as many ethnic groups as they like but only three at most are recorded in the MHINC. The level of coding enables a breakdown to individual Island group for people of Pacific ethnicity. Ethnicity, in the MHINC is reported in two separate tables in MHINC and coding may change over time. "Pacific" and "Cook Island Maori" are counted if they identified themselves as such in any year or in either of the two places reported in the MHINC. This method of capturing ethnicity is similar to the method described in an analysis of breast cancer among Maori in 2005.[16]

Diagnosis: DSM IV and ICD10 diagnoses are both reported although to remain consistent with the NZMHS output only DSM IV diagnosis is reported. Rare conditions such as schizophrenia and other psychotic disorders are captured in the MHINC.

Services: A variety of attributes associated with mental health service care have been captured and are listed fully in the data dictionary.[15] This report focuses mainly on high level service use of community, inpatient or forensic services as a whole.

Analysis: This was carried out using logistic regressions in SAS version 9.2. In addition, missing data, mainly ethnicity and diagnosis, was addressed using multiple imputation.[17-19] This was done using the additional SAS Procedures; MI and MIANALYSE.

Results from NZMHS

Prevalence of disorder

The twelve month prevalence rates for mental disorder and treatment sought for a mental health problem in the past year have been estimated using the NZMHS. These extend analyses of the prevalence of disorder among New Zealand residents originally or descended from the Cook Islands (Cook Islanders). These were introduced in two earlier publications in published 2006.[20,1]

There is a typical pattern that emerges from looking at prevalence of mental disorder across the different ethnic groups: Cook Islanders are about the same as NZ Maori and higher than NCI (non Cook Islands) Pacific peoples who in turn are higher than the composite Other of non Maori and non Pacific ethnic groups. Many of these differences are reduced after adjusting the rates for population, age and sex.

As shown in Table 1, the 12 month prevalence of any mental disorder is 30.9% among Cook Islanders, 29.5% of NZ Maori, 24.2% of NCI Pacific and 10.3% of people of Others. All are significantly higher than Others. After adjustment for different age and sex structure of each population the 12 month prevalence of any mental disorder is 26.9% among Cook Islanders, 26.4% among NZ Maori, 21.6% among NCI Pacific peoples and 19.7% among people of Other ethnicities. Compared to Others, Cook Islanders still have higher prevalence after adjustment (p=.03) but the difference for NCI Pacific peoples are explained by age and sex (p=.3)

The 12 month prevalence of substance disorders in Cook Islands and NZ Maori is at least twice that for NCI Pacific peoples and over three times that of

Table 1 12 month prevalence of mental disorder† by ethnicity in NZMHS

Comparison	Adjusted	Cook Islands	NCI Pacific	NZ Maori++	Other
Any mental disorder#	unadjusted	30.9 (23.3, 38.5)	24.2 (20.3, 28.1)	29.5 (26.5, 32.4)	19.3 (18.0, 20.6)
	Adjusted for Age and Sex	26.9 (20.0, 33.7)	21.6 (18.0, 25.2)	26.4 (23.7, 29.0)	19.7 (18.4, 21.1)
Any mental disorder (excl substance) #	unadjusted	27.1 (19.9, 34.3)	22.1 (18.5, 25.7)	25.3 (22.8, 27.9)	17.9 (16.7, 19.1)
	Adjusted for Age and Sex	23.7 (17.2, 30.2)	20.0 (16.6, 23.4)	22.8 (20.4, 25.1)	18.3 (17.1, 19.5)
Any Substance disorder	unadjusted	9.5 (5.3, 13.7)	4.6 (3.2, 6.0)	9.0 (7.5, 10.5)	2.7 (2.3, 3.2)
	Adjusted for Age and Sex	7.0 (4.0, 10.1)	3.4 (2.4, 4.5)	7.2 (6.0, 8.4)	2.9 (2.4, 3.4)
Serious disorder#‡	unadjusted	7.7 (4.3, 11.1)	5.7 (4.2, 7.2)	8.9 (7.5, 10.2)	4.1 (3.6, 4.6)
	Adjusted for Age and Sex	6.5 (3.5, 9.4)	5.0 (3.6, 6.3)	7.8 (6.6, 9.0)	4.2 (3.7, 4.7)

†DSM-IV CIDI 3.0 disorders with hierarchy.[24: section 13.4.1] ++Excluding Maori who were also Pacific; #Assessed in the subsample who did the long form interview.[24: section 13.4.2] ‡For severity.[24: section 13.12.3, 25: section 2.3]

Table 2 Odds ratios of ethnicity and NZ born from logistic regression on 12 month prevalence of mental disorder† among Pacific in NZMHS.

Disorder	Model	Description	Cook Islands vs NCI Pacific (OR=1)	NZ Born vs not (OR=1)
Any Disorder#	i) Ethnicity alone	OR (95%CI)	1.41 (0.93,2.14)	
		p-value	0.1	
	ii) Adjusted NZ Born	OR (95%CI)	1.27 (0.84,1.92)	1.81 (1.28,2.56)
		p-value	0.3	0.0009
	iii) Adjusted as for ii) plus age and sex	OR (95%CI)	1.25 (0.82,1.9)	1.62 (1.1,2.39)
		p-value	0.3	0.01
Any Disorder excl substance#	i) Ethnicity alone	OR (95%CI)	1.32 (0.87,1.99)	
		p-value	0.2	
	ii) Adjusted NZ Born	OR (95%CI)	1.20 (0.80,1.80)	1.70 (1.20,2.42)
		p-value	0.4	0.003
	iii) Adjusted as for ii) plus age and sex	OR (95%CI)	1.15 (0.76,1.74)	1.57 (1.05,2.34)
		p-value	0.5	0.03
Substance	i) Ethnicity alone	OR (95%CI)	2.33 (1.27,4.27)	
		p-value	0.006	
	ii) Adjusted NZ Born	OR (95%CI)	1.95 (1.04,3.64)	2.35 (1.37,4.01)
		p-value	0.04	0.002
	iii) Adjusted as for ii) plus age and sex	OR (95%CI)	2.15 (1.15,4.01)	1.52 (0.84,2.73)
		p-value	0.02	0.2
Severe#‡	i) Ethnicity alone	OR (95%CI)	1.44 (0.81,2.56)	
		p-value	0.2	
	ii) Adjusted NZ Born	OR (95%CI)	1.36 (0.77,2.41)	1.37 (0.85,2.20)
		p-value	0.3	0.2
	iii) Adjusted as for ii) plus age and sex	OR (95%CI)	1.38 (0.76,2.51)	1.13 (0.67,1.88)
		p-value	0.3	0.6

†DSM-IV CIDI 3.0 disorders with hierarchy.[24: section 13.4.1] #Assessed in the subsample who did the long form interview.[24: section 13.4.2] ‡For severity.[24: section 13.12.3, 25: section 2.3]

Others. After adjustment for different age and sex structure of each population the pattern remains similar. However, prior to adjustment NCI Pacific were significantly higher than Others but the difference became no longer significant after adjusting for age and sex (p=.4).

Thus many of the differences between Pacific, particularly NCI Pacific, and Others for most disorders are explained by differences in age and sex.
Within Pacific, looking at Cook Islands and Non-Cook Islands ethnic groups, the first model includes only ethnicity (Cook Islands vs not) and then a second model adjusts for whether an individual is born in New Zealand (NZ born) or not and a further model also adjusts for age and sex. The results of the regressions are shown in Table 2.

In the case of diagnosed mental disorders, the odds ratio for ethnicity with no other factors is usually higher, indicating Cook Islanders are more likely to have a disorder than NCI Pacific peoples, but the odds ratios are not significant. However, with the introduction of place of birth, New Zealand born vs not born in New Zealand (NZborn), as a factor, the odds ratios for place of birth is significant. Although the difference is reduced, NZborn still are significantly more likely to have a disorder after adjusting for age and sex. The exception to this is for severe disorders where neither the odds ratios for ethnicity nor place of birth are significant.

In the case of substance disorder, not accounting for any the affects of other factors, Cook Islanders are more likely to have a disorder as NCI Pacific peoples. Even after adjusting for place of birth and age and sex, the odds ratios for both NZ born and ethnicity are still significantly greater than 1. This means that the differences between Cook Islanders and NCI Pacific ethnic groups, in substance disorder, are not fully explained by either place of birth or age and sex.

Age is a significant factor underpinning higher prevalence of substance disorder as well as serious disorder among Cook Islanders compared with NCI Pacific. People aged 16 to 24 years are most likely of all age groups to have substance disorder. They are also significantly more likely to have a severe disorder than older people.

Females have higher rates of mood disorders than males, and males have higher rates of substance disorders.

Service use

NCI Pacific peoples and Cook Islanders had the lowest proportions of people with a 12 month disorder to use any health service for their mental health problem compared to both NZ Maori and Others. Even after adjustment for different age and sex structure of each population NCI Pacific people remain significantly less likely to have seen anyone for their mental health problem. Cook Islanders are less, but not significantly, likely than Others to visit a service.

As shown in Table 3, the proportion who had used any mental health specialist service for their mental health problem is 26.4% among NZ Maori, 23.7% of Others, 17.2% of Cook Islanders, and 15.6% of NCI Pacific peoples. Pacific people, both Cook Islanders and NCI Pacific peoples, were significantly less likely to have seen anyone for their mental health problem, with or without adjustment for age and sex.

In summary Cook Islands people are more likely than NCI Pacific peoples to see someone for their mental health problem but both groups are less likely than Others and NZ Maori to visit mental health specialist services.

Table 3 12 month prevalence of service use by those with any disorder by ethnicity in NZMHS

Comparison	Adjusted	Cook Islands	NCI Pacific	NZ Maori†	Other
Mental Health Specialist Visit	unadjusted	17.2	15.6	26.4	23.7
		(12.7, 21.8)	(12.6, 18.6)	(24.2, 28.5)	(22.6, 24.8)
	Adjusted for Age and Sex	16.1	14.7	24.6	24.0
		(11.7, 20.5)	(11.8, 17.5)	(22.6, 26.7)	(22.8, 25.1)
Any Health Service	unadjusted	30.0	24.3	37.5	38.9
		(23.5, 36.5)	(20.9, 27.7)	(35.1, 39.8)	(37.6, 40.2)
	Adjusted for Age and Sex	30.1	24.4	36.9	39.0
		(23.4, 36.8)	(20.9, 27.9)	(34.6, 39.3)	(37.7, 40.3)

†NZ Maori excluding Maori who were also Pacific

Results from the MHINC

Mental health service use

The estimated prevalence of mental health service use (clients per year) is calculated from the MHINC for the years from 2001/02 to 2005/06. The MHINC enables a breakdown of ethnic group to individual Island ethnicity but unlike the NZMHS does not enable an analysis by place of birth or migration status.

Table 4 Average annual prevalence of mental health service use by ethnicity, per 10,000 people † (MHINC)

	Cook Islands	NCI Pacific	NZ Maori‡	Other
Unadjusted	162.2	150.7	336.4	215.6
	(148,177)	(137,164)	(327,346)	(213,218)
Adjusted† I) Age and gender	196.2	173.6	350.1	213.9
	(178,214)	(158,189)	(340,360)	(211,217)

†standardised to the New Zealand total 2006 population. ‡NZ Maori excluding Maori who were also Pacific

All services combined

Table 4 shows the average annual prevalence of mental health service use by ethnicity. NCI Pacific peoples and Cook Islanders had the lowest annual rates of people to use a mental health service compared to both NZ Maori and Others. Even after adjustment for different age and sex structure of each population the differences remain significant.

By service category

Table 5 shows that over 80% of Cook Islands mental health service clients were seen by community services, a similar proportion to the three other comparison ethnic groups. However, 30% of Cook Islands clients are seen by inpatient services compared with 9% of Others clients and 28% of Cook Islands clients are seen by Forensic services compared to 3% of Others.

NCI Pacific and Cook Islanders had lower use of community mental health service than NZ Maori and Other. After adjusting for age sex little difference remained between Cook Islanders, NCI Pacific and people of Other ethnicities. The rate for NZ Maori remained higher after adjusting for age and sex.

Table 5 Average annual mental health service use: service category by ethnicity† (MHINC)

	Cook Islands	NCI Pacific	NZ Maori‡	Other
Community				
Unadjusted	131.5	122.6	245.7	177.1
	(116,147)	(108,137)	(237,255)	(174,180)
Adjusted: Age and gender	162.0	143.3	255.6	176.3
	(143,181)	(128,159)	(246,265)	(173,180)
Inpatient				
Unadjusted	48.1	30.6	48.6	19.8
	(45,52)	(28,33)	(45,52)	(19,21)
Adjusted: Age and gender	39.0	25.0	44.7	19.1
	(35,43)	(23,27)	(43,47)	(18,20)
Forensic				
Unadjusted	45.5	26.4	39.7	7.4
	(40,51)	(24,28)	(37,42)	(7,8)
Adjusted: Age and gender	27.5	16.0	29.0	6.0
	(20,35)	(14,18)	(26,32)	(5,6)

†standardised to the New Zealand total 2006 population. ‡NZ Maori excluding Maori who were also Pacific

The unadjusted rate who had used an inpatient mental health service for Cook Islanders and NZ Maori (48.1 and 48.6 per 10,000) is twice that and NCI Pacific (30.6) 50% higher than the rate for Others (19.8). After adjusting for age sex the rate for Cook Islanders reduced to be similar that of NCI Pacific but remained 50% higher than that for Others.

A similar pattern was evident for those who used Forensic services except the rate for Cook Islanders was six times, for NZ Maori more than five times and NCI Pacific more than four times that of Others. Even after adjustment the differences were between three to 4.5 times that of Others.

Table 6 Average annual mental health service use: diagnosis by ethnicity † (MHINC)

	Cook Island	non CI Pacific	NZ Maori‡	Other
Anxiety				
Unadjusted	19.4	9.8	20.6	23.4
	(15,24)	(8,11)	(16,25)	(20,27)
Adjusted: Age and gender	25.9	12.2	21.0	23.2
	(17,35)	(10,14)	(17,25)	(20,27)
Bipolar				
Unadjusted	38.1	18.8	33.8	17.1
	(34,43)	(17,21)	(28,40)	(15,19)
Adjusted: Age and gender	39.5	18.4	33.7	16.1
	(36,43)	(16,21)	(28,40)	(14,18)
Depression				
Unadjusted	37.4	24.8	39.4	43.9
	(31,44)	(21,29)	(31,47)	(38,49)
Adjusted: Age and gender	39.0	22.6	39.9	42.8
	(31,47)	(20,26)	(33,47)	(37,48)
Schizophrenic disorders				
Unadjusted	94.9	65.5	91.5	24.1
	(81,109)	(56,75)	(77,106)	(21,27)
Adjusted: Age and gender	74.6	50.9	69.3	19.6
	(66,83)	(43,59)	(58,80)	(17,22)
Other Psychotic disorders				
Unadjusted	37.6	25.3	27.0	10.2
	(31,44)	(21,30)	(21,34)	(8,12)
Adjusted: Age and gender	35.5	20.5	20.2	8.6
	(28,43)	(17,24)	(15,26)	(7,11)
Alcohol				
Unadjusted	42.4	19.1	48.5	19.4
	(38,46)	(18,20)	(42,55)	(17,22)
Adjusted: Age and gender	26.8	10.8	34.4	15.7
	(18,35)	(9,12)	(28,41)	(13,18)

†standardised to the New Zealand total 2006 population. ‡NZ Maori excluding Maori who were also Pacific

By diagnosis

Among Cook Islanders the diagnoses of people who were seen by mental health services were from, most prevalent;

Order	Cook Islands	NCI Pacific	NZ Maori	Others
1	Schizophrenia	Schizophrenia	Schizophrenia	Depression
2	Alcohol related	Psychotic	Alcohol related	Schizophrenia
3	Bipolar	Depression	Depression	Anxiety
4	Psychotic	Alcohol related	Bipolar	Alcohol related
5	Depression	Bipolar	Psychotic	Bipolar
6	Anxiety	Anxiety	Anxiety	Psychotic

Individuals can receive more than one diagnosis so they can be counted in more than one diagnostic total. It should also be noted that around one third of people seen had a temporary diagnosis, where a specific diagnosis had not been determined.

For Cook Islanders, NCI Pacific and NZ Maori the most common diagnosis was schizophrenia followed by alcohol related disorder for Cook Islanders and NZ Maori or Psychotic disorders for NCI Pacific. Depression and anxiety, the two least likely diagnoses among Cook Islands clients are two of the three most common among Others.

There has long been a concern that Pacific peoples seem to be over represented in services that deal with extreme levels of mental health care

Table 6 shows that Cook Islanders (94.9 per 100,000) were nearly four times more likely to receive a diagnosis of Schizophrenia compared with Others (24.1). After adjusting for age and sex the rate among Cook Islanders was still 3.5 times that of Others. NZ Maori and NCI Pacific were also over three times the rate for Other ethnicities. A similar pattern was evident among those with psychotic disorders.
The rates of those who had an alcohol related disorder for Cook Islanders (42.4) was more than twice that for Others (19.4). After adjusting for age sex the difference between Cook Islanders, NCI Pacific and Others was no longer significant.

The rates of those who had a bipolar disorder for Cook Islanders (38.1) was also more than twice that for Others (17.1). After adjusting for age sex the difference between Cook Islanders was still more than twice the rate of Others.

Discussion

New Zealand Mental Health Survey

The NZMHS shows the prevalence of mental disorder among Cook Islands residents in New Zealand. This analysis of the NZMHS has extend that of Foliaki et al[1,20] which showed a high prevalence of mental disorder among Cook Islands peoples compared with NCI Pacific peoples or New Zealand as a whole.

Adjusting for age and sex enables us to see that many of the differences in prevalence of disorder are largely due to the age and gender structure of the Cook Islands population living in New Zealand. These results show the prevalence of disorder among "New Zealand-born" Cook Islands people is higher than those who migrated to New Zealand as is also shown in an analysis of ethnicity, migration and disorder.[8] The results suggest that early exposure to the New Zealand society may be associated with higher levels of mental disorder. The affect of place of birth on rates of disorder is greater than ethnicity. Thus, simply being a Cook Islander does not increase the likelihood of having a disorder. Nonetheless, even after adjustment for demographic factors, substance related disorder, predominantly alcohol, is still high.

National mental health service use (MHINC)

Te Rau Hinengaro[1,21] indicated that, in the previous 12 months, 3% of Pacific people had seen mental health specialist services for their mental health compared with 4.9% of the total population. The prevalence reported by MHINC is around half of that estimated by NZMHS. The reason for this lower prevalence is most likely because the NZMHS used a more inclusive definition of mental health specialist services than are able to be captured by the MHINC. It included private consultations with psychiatrists, psychologist, and counsellors and mental health helpline contacts, not just the psychiatric admissions and other services provided by mental health specialty services which are captured in MHINC.

It has been shown[1,20] that Pacific peoples with a serious mental disorder were half as likely to have seen any health service for their mental health problem and Pacific peoples with a 12 month disorder

were least likely to have seen health service for their mental health problem even after adjusting for socio-demographic factors.

The results in this paper also show that while both Cook Islanders and NCI Pacific groups have lower use of health services if they have a disorder Cook Islanders are slightly more likely to have seen someone for their mental health problem. The pattern is similar for use of a mental health specialist service.

There has long been a concern that Pacific peoples seem to be over represented in services that deal with extreme levels of mental health care.[22,23] Generally, there has been an impression that Pacific peoples use of mental health services, while generally lower than people from other ethnicities, generally required a level of treatment that was longer in duration and more costly. These results seem to confirm that pattern for Cook Islands clients.

There is a need for a better understanding of the underlying protective and risk factors for mental health and mental illness among all Pacific populations. While it is true that, age, gender and place of birth account for many of the differences between Cook Islanders and other ethnic groups there still remains a need for further investigation into other factors that contribute to better mental health of Cook Islanders in New Zealand. However, just because we understand a bit better the mechanisms that underpin higher levels of disorder in the Cook Islands population does not negate the fact that there is still a comparatively high burden of mental disorder in existence. It appears to be the price for making the adjustment to New Zealand that appears to be extracted more from the children and grandchildren of those who migrated to New Zealand.

Cook Islanders do have a high prevalence of mental disorder and particularly substance use yet relatively low levels of treatment sought for such problems. Another finding from an analysis of the impact of migration[8] seemed to point to particularly low use of health services by older migrants. This is also likely to be the case with Cook Islanders. So while treatment may be low among Cook Islanders generally the solution is not a one size fits all remedy.

Yet, it should be remembered that even with relatively high prevalence of mental disorder, 70% of Cook Islands people did not have a disorder when surveyed. Of those who have a disorder only a relatively small proportion would require treatment and under ordinary treatment conditions an even smaller number would be severely impaired for a great length of time.

However, there are some concerns raised by the results presented here about mental illness that should not be ignored by the Cook Islands population resident in New Zealand as well as those who plan for and work in services that treat people with problems related to mental disorder. These results point to:

- Relative high levels of need
- Particularly high rates of substance use, and
- Non-access to specialist mental health services for treatment by those who need it.

There are many reasons that lead to avoiding treatment; understanding of mental illness, cultural background, knowledge and availability of services or perceived cost, to name a few. The evidence suggests that for whatever reasons, Cook Islanders appear to only receive treatment when it is extremely severe or under compulsion.

Acknowledgements

Te Rau Hinengaro: The New Zealand Mental Health Survey was funded by the Ministry of Health, Alcohol Advisory Council and Health Research Council of New Zealand. The survey was carried out in conjunction with the World Health Organization World Mental Health (WMH) Survey Initiative. We thank the WMH staff for assistance with instrumentation, fieldwork and data analysis. These activities were supported by the US National Institute of Mental Health (R01MH070884), the John D and Catherine T MacArthur Foundation, the Pfizer Foundation, the US Public Health Service (R13-MH066849, R01-MH069864, and R01 DA016558), the Fogarty International Center (FIRCA R01-TW006481), the Pan American Health Organization, Eli Lilly and Company, Ortho-McNeil Pharmaceutical, Inc., GlaxoSmithKline, and Bristol-Myers Squibb. WMH publications are listed at: http://www.hcp.med.harvard.edu/wmh/

Other members of the Te Rau Hinengaro Research Team are M Oakley-Browne, J Baxter, T K Kingi, R Tapsell, M H Durie, K M Scott and C Gale.

We particularly acknowledge the input by the Pacific Advisory Group: Fuimaono Karl Pulotu-Endemann, Francis Agnew, Vito Malo, Reverend Feiloaiga Taule-ale-ausumai, Hemiquaver Lesatele, Lina-Jodi Vaine Samu Tuiloma and Sefita Hao'uli.

We thank the Kaitiaki Group for their input and support for this survey and we thank all the participants.

References

1. Foliaki SA, Kokaua J, Tukuitonga C, Schaaf D, for the New Zealand Mental Health Survey Research Team, Twelve-month and lifetime prevalence of mental disorders and treatment contact among Pacific people in Te Rau Hinengaro: the New Zealand Mental Heatlh Survey (NZMHS). Australian and New Zealand Journal of Psychiatry 2006; 40:924-934.
2. Spoonley P. Pacific Communities: Transforming the Politics of Place and Identity, In: Macpherson C, Spoonley P, and Anae M, eds. Tangata 0 Te Moana Nui: evolving identities of Pacific Peoples in Aotearoa New Zealand. Palmerston North, N.Z.: Dunmore Press 2001.
3. Krishnan V, Schoeffel P, Warren J. The Challenge of change: Pacific Island communities in New Zealand, 1986-1993. Wellington, NZ: NZ Institute for Social Research & Development, 1994.
4. Tongia M. Te Neke'anga i Porirua: Changing values in Aotearoa, In: Crocombe R and Crocombe MT, eds. Cook Islands Culture. Suva, Fiji and Rarotonga, Cook Islands: University of the South Pacific, 2003.
5. Office CIS. Population estimates & vital statistics, In: Islands SC, ed, 2008.
6. Tiatia J, Coggan C, Young Pacific suicide attempts: a review of emergency department medical records, Auckland, New Zealand. Pacific Health Dialog 2001; 8:124-128.
7. Flores G, Brotanek J, The healthy immigrant effect. Archive of Podiatry and Adolescent Medicine 2005; 159:295-297.
8. Kokaua J, Foliaki S, Schaaf D, Migration, ethnicity and twelve-month prevalence rates of mental disorders and treatment contact in Te Rau Hinengaro: The New Zealand Mental Health Survey. Pacific Health Dialogue to be published.
9. Hecht J. Physical and social boundaries in Pukapukan theories of disease, In: Parsons C, ed. Healing practices in the South. Hawaii: The Institute for Polynesian Studies, 1985.
10. Baddeley J. Traditional healing practices of Rarotonga, Cook Islands, In: Parsons C, ed. Healing practices in the South. Hawaii: The Institute for Polynesian Studies, 1985.
11. Worth M. Cook Islands Mental Health Cultural Competency Workshop. Auckland: Waitemata District Health Board, 2004.
12. Wells JE, Oakley Browne MA, Scott KM, McGee MA, Baxter J, Kokaua J, Te Rau Hinengaro: The New Zealand Mental Health Survey: overview of methods and findings. Australian & New Zealand Journal of Psychiatry 2006; 40:835-844.
13. Korn EL, Graubard BI, Confidence intervals for proportions with small expected number of positive counts estimated from survey data. Survey Methodology 1998; 24:193–201.
14. Korn EL, Graubard BI. Analysis of health surveys. New York: Wiley, 1999.
15. New Zealand Health Information Service. Mental Health Information National Collection: Data Dictionary, version 3.8. Wellington: New Zealand Health Information Service, 2006.
16. Curtis E, Wright C, Wall M, The epidemiology of breast cancer in Maori women in Aotearoa New Zealand: implications for ethnicity data analysis. New Zealand Medical Journal 2005; 119.
17. Schafer J, Multiple Imputation: a primer. Statistical Methods in Medical Research 1999; 8:3-15.
18. Harel O, Zhou XH, Multiple imputation: Review of theory, implementation and software. Statistics in Medicine 2007; 26:3057-3077.
19. Horton NJ, Lipsitz SR, Multiple imputation in practice: comparison of software packages for regression models with missing data. American Statistician 2001; 55:244-254.
20. Foliaki S, Kokaua J, Schaaf D, Tukuitonga C, for the New Zealand Mental Health Survey Research Team. Twelve-month and lifetime prevalences of mental disorders and treatment contact among Pacific people in Te Rau Hinengaro: the New Zealand Mental Health Epidemiology Survey (NZMHS), In: Oakley Browne MA, Wells JE, and Scott KM, eds. Te Rau Hinengaro: the New Zealand Mental Health Survey. Wellington: Ministry of Health, 2006.
21. Oakley Browne MA, Wells JE, Scott KM, for the New Zealand Mental Health Survey Research Team, Twelve month and lifetime health Service use in Te Rau Hinengaro: the New Zealand Mental Health Survey. Australian and New Zealand Journal of Psychiatry 2006; 40:855-864.
22. Ministry of Health. Te Orau Ora: Pacific Mental Health Profile. Wellington: Ministry of Health, 2005.
23. Gaines P, Bower A, Buckingham W, Eagar K, Burgess P, Green J, Mellsop G. New Zealand Mental Health Classification and Outcomes Study: Final report. Auckland: Health Research Council, 2003.
24. Wells JE, McGee MA, Oakley Browne MA. Methods, In: Oakley Browne MA, Wells JE, and Scott KM, eds. Te Rau Hinengaro: The New Zealand Mental Health and Wellbeing Survey. Wellington: Ministry of Health, forthcoming.
25. Wells JE. Prevalence and severity across aggregated disorders, In: Oakley Browne MA, Wells JE, and Scott KM, eds. Te Rau Hinengaro: The New Zealand Mental Health and Wellbeing Survey. Wellington: Ministry of Health, forthcoming.

Walking Apart But Towards the Same Goal? The View and Practices of Tongan Traditional Healers and Western-Trained Tongan Mental Health Staff

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Abstract

This study explored the mental health-related beliefs and practices of Tongan Traditional Healers and Tongan workers in the Western-style mental health services in Tonga. The groups showed very different explanatory models and treatment methods for mental health difficulties. A variety of methods, similar to those reported in other Pacific communities, were used by the Tongan Traditional Healers. The Traditional Healers had a negative view of the Western-style system, feeling it did not address the real issues in mental health that they considered more culturally and spiritually-based. Western-trained staff were generally more accepting of traditional healing, and incorporated aspects of Tongan culture into their practice, but did not typically include traditional healing practices. This study aimed to inform efforts to foster more synergy and collaboration between traditional and western healing approaches in Tonga and with Tongans elsewhere. The results may be relevant to other Pacific peoples.

Introduction

Recognising differences in the needs and context of people of different ethnic groups is important for developing culturally responsive and appropriate health services.[1] This is as important for Tongan people as for any others, regardless of whether they are living in Tonga or in other countries. The complexity for Tongan people may be increased by the parallel operation of Tongan Traditional Healers and the western-style mental health system, both in Tonga and elsewhere. Finau and Tukuitonga[1] reported the opinion that there is scope for Western healthcare approaches to operate alongside traditional Pacific approaches, as long as a suitable, mutually respectful and understanding attitude is adopted. However, there is also considerable potential for the two systems to work at cross-purposes or incompatibly, perhaps leading to higher risk and poorer outcomes for their clients. This study aimed to explore the similarities and differences between Traditional Healers and Western Trained Tongan Mental Health Staff (referred to in the paper as "Ward Staff"), and to explore the relationship between these two types of mental health care providers in Tonga at present. This study aims to provide information that could help strengthen the opportunity of the two approaches to work compatibly so that the contribution of each to the mental health of Tongan people in Tonga and elsewhere can be maximised, and the potential risks with interaction of the two systems can be minimised.

In some Pacific cultures there is a notion of illness that is particular to their cultural group and other

illnesses that are "introduced". For example, Cluny and La'avasa MacPherson[2] describe a widespread Samoan understanding of there being two types of illness: *ma' i samoa* (illnesses traditional to Samoa) and *ma'i palagi* (illnesses bought to Samoa by others). However, the use of traditional healing approaches is not limited to dealing only with "traditional" illnesses. Lui[3] argues for greater consideration of Christian and traditional spiritual factors in treatment of mental health difficulties of Samoan people. Lui also argues that western models may be inappropriate if they do not recognise and utilise the importance of traditional beliefs, understandings, and information in treating mental health conditions. Without this understanding, Western approaches may not be able to address the cause of the problem even if they are able to reduce some symptoms.[3]

There are similar but somewhat different concepts to those described above in Tongan health beliefs. Three traditional difficulties are 'avanga, te'ia and mala. Avanga and te'ia both refer to when a person is being possessed by spirits of the dead. Mala refers to a person who is being cursed due to reasons like breaking the cultural norms and values. Avanga is described as a spiritually induced psychosis that has several variants, and which is typically expected to respond in a few days to appropriate traditional healing approaches.[4]

In some Pacific cultures there is a notion of illness that is particular to their cultural group and other illnesses that are "introduced".

The Kingdom of Tonga has a population of approximately 117,000 people. It consists of three main island groups: Tongatapu, Ha'apai and Vava'u. Two thirds of the population live on Tongatapu. Tongatapu is the main point of contact with the outside world and is most exposed to western influences. The other two island groups tend to be more traditional. The Western-style mental health system in Tonga consists of a psychiatric unit attached to the general hospital that houses about 12 patients, although frequently more. This unit is staffed by a medical officer, a mental health welfare officer, nurses, psychiatric assistants and a social worker. There is also a forensic mental health unit at the Tolitoli Prison on Tongatapu. Government-funded community mental health services are provided by staff from the general hospital. On the other islands mental health services are provided by general health staff. Non-governmental organizations (NGOs) also provide a range of services for mental health clients, often in close association with the hospital services. Tongans who train and work in western-style mental health services in Tonga could be seen as adopting a non-traditional role and beliefs or, at least, needing to "walk in two worlds" to practice.

The Tonga National Disability Identification Survey [5] reported a relatively low prevalence of mental disorder in Tonga, but suggested this may in part relate to disabilities such as mental difficulties not being recognised, and/or the associated stigma leading to under-reporting. Murphy and Taumoepeau[6] reported a relatively low rate of psychosis in Tonga, which they suggested was due to the buffering effect of Tonga's stable, traditional, rural society. Foliaki[7] suggested the low rate may be due to people who are genetically predisposed to mental health conditions being spared expression of these due to the lower stress levels typically associated with life in the islands.

The Tonga National Disability Identification Survey[5] found a range of views, but described attitudes of fear and shame of people with mental health conditions as most prevalent. This was partly attributed to the influence of western media portraying people with mental health difficulties as dangerous. However, people with avanga (a spiritually induced psychosis) were viewed more positively. The social consequences of stigma were evident in rates of participation in society, where participation rates in both village life and church activities were lower than average for people with mental illness compared to people with a broad range of disabilities. However, people with avanga had a higher rate of participation in village life but a lower rate of participation in church life than the average of people with disabilities.[5] Roberts and colleagues[8] described similarly high levels of stigmatization of mental illness in Fiji, with particular stigma associated with an inpatient admission which they regarded as potentially leading to life-long stigmatization.

Achieving the kind of synergy of effort between traditional and western healing approaches advocated by Finau and Tukuitonga[1] and Lui[3] is likely to require understanding and collaboration between practitioners of both approaches. This study aimed to explore and compare the definitions and perception of the causes and symptoms of mental health difficulties, and their beliefs and practices regarding the management and/or treatment of mental health difficulties, of Tongan Traditional Healers, and Ward Staff who worked with western approaches. The study also explored the relationship between the Traditional healers and the Ward Staff. This information was seen as being useful in informing the development of greater synergy and collaboration between the approaches.

Method

Participants

Participants in this study were eight Tongan Traditional Healers living in Tongatapu and eight clinical staff from the psychiatric unit at Vaiola Hospital in Tongatapu who were primarily registered nurses and psychiatric assistants.

Traditional Healers

Four Traditional Healers were contacted using a Vaiola Hospital database of Traditional Healers who at times worked with the hospital. Another four healers who were not in the hospital database were contacted to provide a balance of those more or less engaged with the Western health system. Three of the four traditional healers not on the hospital list refused to work with the hospital. All Traditional Healers approached agreed to take part in this study. Four of the Traditional Healers were male and four were female. Their average age was 58 (range 36-78 years) with most being in their fifties or older. All were born in Tonga, and had developed their skills as healers in Tonga. Six of the healers lived in Nuku'alofa. Six Traditional Healers had practiced only in Tonga, and two had practiced briefly in New Zealand or Australia.

Ward Staff

Tongan staff who worked at the psychiatric inpatient unit at Vaiola Hospital in Tongatapu were approached and invited to participate. Eight Tongan staff of a total of nine approached (89%) participated. Three of the Ward Staff participants were males and five were females. Their average age was 47 (range 32-59), with most being in their thirties or fifties. All Ward Staff participants were born and raised in Tonga with Tongan as their first language. All Ward Staff had worked in mental health settings for at least five years, with several having worked in mental health settings for more than 20 years.

Procedure

In this qualitative study all participants undertook a semi-structured interview in which they were interviewed by the first author. The interviewer is a Tongan-born male who has lived in New Zealand for the last 10 years and who trained as a psychiatric nurse in New Zealand. He has practiced as a psychiatric nurse both in inpatient and community settings in New Zealand and Tonga. At the time of this study he worked with a Pacific Island specialist community mental health team in New Zealand.

In almost all cases only the interviewer and participant were present for the interview. The interviews lasted from 30 minutes to 3 hours. Interviews were conducted in Tongan. Participants were asked the seed questions detailed in Appendix 1. The interviewer took notes during the interview and extended these notes after the interview. The interviews were also electronically recorded. These tapes were reviewed later to complete the record of the interview. Notes were taken both on the responses to the seed questions and on other relevant matters raised by the participant.

Analysis

Interview notes were analysed using the Inductive Categorisation technique[9] to identify major and minor themes emerging from this data. This method involved the systematic categorisation of data into themes by reading through the interview responses, with the themes being noted. The themes that emerged were then grouped into categories, and each individual response was analysed against these categories. The results section of this paper is the summative commentary of the emergent data.

Results

Perceptions and Causality Models of Mental Illness

The Traditional Healers and Ward Staff showed very different definitions and beliefs about the cause of mental health difficulties. The Traditional Healers universally defined mental health difficulties from a traditional perspective, using the Tongan terms 'avanga, te'ia, and mala. These conditions were seen as covering most if not all people who presented with what would be considered mental illness in the west. They attributed these conditions to spiritual or social causes rather than physical illness. Four specifically expressed the belief that the sufferer was cursed and one expressed the belief that it was due to the person holding non-Christian beliefs. Breaking a tapu (taboo) was also expressed as a cause. Not conforming to the social context and expected norms was also seen by some traditional healers as pivotal.

The Ward Staff defined and explained the cause of mental health difficulties consistently with their western training and beliefs, with four participants defining it as an illness of the brain and four defining it as the result of abnormal thinking and behaviour. The Ward Staff offered both biomedical and social interpretations of the causes of mental health difficulties consistent with Western beliefs. Four of the ward staff cited chemical imbalances and three cited genetics as major causes of mental illness, while three cited social issues and environment as major causes of mental health difficulties. Ward Staff also expressed acceptance of beliefs consistent with traditional Tongan beliefs about mental health difficulties. Specifically, two reported being cursed and two reported spiritual issues as important causes. Both groups regarded Christian beliefs as important for understanding mental health difficulties.

The Traditional Healers and Ward Staff reported relatively similar perceptions of the signs and symptoms of mental health difficulties, although the Traditional Healers described the phenomena more in lay terms and the Ward Staff used more the language of professionals. The Traditional Healers mostly cited abnormal behaviour as the key signs of mental illness, whereas the ward staff tended to

cite a range of behavioural, perceptual, and cognitive signs.

To summarise, Traditional Healers and Ward Staff showed quite different definitions and models of causality for mental illness, but there seemed to be quite a high level of agreement over the signs and symptoms of mental illness. The Traditional Healers showed considerable consistency about the causes of mental illness, which was seen as being an issue of spirituality. The Ward Staff reported a view much more consistent with western understanding, but with room being left by most for Tongan traditional beliefs.

Treatment Methods

The Traditional Healers described a range of treatment modalities. The use of herbs (as drops, in drinks, or for bathing in) was common. Some also reported the use of massage. Some also reported the use of heat and/or a whip as a treatment method for mental health difficulties, with the aim of expelling troublesome spirits. Two of the healers specifically reported prayer as a modality. One healer reported seeking guidance from a spirit at a graveyard to determine the course of treatment required. Another provided a nurturing living environment for the client for the duration of the treatment, and used massage, traditional music, and chanting. Many regarded belief by their clients in the potency of their treatments as being important.

In all cases, the kainga (extended family) was very much involved in treatment, decision making, and supporting the client through treatment. For example, with Traditional Healers who used a whip as part of treatment, the kainga was involved in holding the person, and in the case where the client lived with the healer, a kainga member also stayed. The kainga were often more involved in decisions regarding treatment than the client themselves. The healers reported that the client recovered more quickly if the kainga was involved throughout treatment.

Instruction by the healer to the kainga to carry out specific actions or to change their family processes and/or lifestyle was a common part of healing activity for all the traditional healers. These instructions may have either been of a spiritual nature (either traditional or Christian) or about behavioural or systemic aspects of family life.

The Ward Staff adopted a more western approach to treatment of mental illness with use of medication being indicated by six participants and psychotherapy being mentioned by two participants. Two of the Ward Staff mentioned the use of Traditional Healers as a treatment method. They reported providing groups and outings for the hospitalised clients, and attempting to keep clients connected with society. The staff also described doing as much as they could to engage the kainga of clients, but found the stigmatisation of the western mental health service created a considerable barrier to this. Staff described themselves as becoming like the family to some clients who had been largely ostracised from their own kainga.

In summary, the treatment methods reported by the Traditional Healers and the Ward staff were markedly different; consistent both with their causal models and the resources they had available. Some of the Ward Staff saw a role for Traditional Healers in treatment of mental illness, but did not report using similar methods themselves.

Other Aspects of Treatment

The Traditional Healers generally reported no specific criteria for who they would and would not treat, and treated people with mental or physical health difficulties. Two of the Traditional Healer group reported that they would treat any illness themselves and did not refer on. Traditional healers tended to make themselves available to treat people as needed at any hour of the day or night, which they described as making access to them easier than to the western mental health service. All but one of the Traditional Healers tended to make contact with people at their own homes and if necessary treat then there.

Confidentiality was regarded very differently by the two groups. The Traditional Healers reported frequently naming previous clients by name and discussing their condition and treatment as part of the healing process.

Some difference was seen in the way that client dissatisfaction was dealt with by the two groups. In the case of Traditional Healers, dissatisfaction tended to be dealt with by disengagement from the therapeutic relationship, although one Traditional Healer described attempting reconciliation. In contrast, Ward Staff mostly described attempting to maintain the relationship and remedy the source of dissatisfaction.

Confidentiality was regarded very differently by the two groups. The Traditional Healers reported frequently naming previous clients by name and discussing their condition and treatment as part of the healing process. This approach was seen as motivating for change and instilling confidence in the healing process. As part of treatment process, the kainga of the client may visit or have contact with previous clients and their kainga. Ward Staff reported practice about confidentiality more consistent with western-style practice.

How Training was Acquired

Most Traditional Healers reported having been active as healers since young adulthood. Approximately equal numbers reported their healing abilities as having been a gift from God, passed on down through their family, or having come to them in a dream. In the case of the Traditional Healers who learned their healing from others, they had typically been informally "apprenticed" into that role and mostly learned through observation of an older healer, and through sharing activities such as gathering medicinal plants with the older healer. These healers reported following closely the healing practices they had been taught.

The Ward Staff had been trained in Tonga. The registered nurses had received their training at the local nursing school based at Vaiola Hospital. The psychiatric assistants mostly received on-the-job training but some had also undertaken brief training courses in the unit. Three of the Ward Staff had also worked in the mental health sector in New Zealand.

Relationship Between Approaches and Potential for Working Together

The willingness of the groups to work together was assessed. Three of the Traditional Healers reported that they did not believe in the western health system and were not willing to work with it. This was often because they regarded the causes of illness as being of a "Tongan" spiritual nature for which western approaches had little value and were inclined to make the problem worse rather than better. Both groups stated that Tongan people in general prefer Tongan healing methods and regarded Tongan healing more positively. Engagement with a western medical approach, particularly hospital, was seen as a last resort. Healers also were reported as adding to the stigmatization of people who use the western mental health system, by using them as examples of why a kainga should not trust that system.

Overall, the Ward Staff reported being relatively open to working with Traditional Healers. Three quarters expressed a willingness to work with Traditional Healers, although only two spontaneously mentioned working with Traditional Healers when asked about their treatment modalities. Two stated that they did not believe in traditional healing and one expressed reservations due to the potential dangers of traditional healing.

Discussion

This study has emphasized the strength of the place of traditional healing for mental health issues, and the beliefs underpinning these practices, in Tongan culture. Consistent with the report of Puloka[4] and Taylor[5] for Tonga, and the findings from other Pacific countries such as Samoa,[2] these beliefs continue to strongly drive the health-related practices of many Tongan people. Traditional healing and beliefs are also recognized as being influential with Pacific People living in countries such as New Zealand.[1,3] It underlines the importance for the western mental health system taking Tongan belief and practice into account when working with Tongan clients.

This study indicated that the Tongan Traditional Healers were drawing on Christian and on other traditional Tongan spiritual beliefs, and incorporated elements of a psychosocial and family-systems approaches consistent with western thinking in their treatment modalities, but there was in general little recognition or acceptance of the biological component of the western model. Previous research on Samoan healers[2] found that traditional healers base their practice on a wide range of beliefs about illness often derived from Christian and traditional Samoan spiritual and supernatural beliefs, and involving both Western and traditional understanding. Traditional Healers in this study seemed to take less inclusive perspective on the involvement of biological and western perspectives than was indicated by previous research with Samoan Traditional Healers. While some of the Traditional Healers were prepared to work alongside the Mental Health system, many regarded western treatment approaches as more of an impediment to recovery than as an aid because, in their view, it does not address the core culturally-based issues.

The Ward Staff reported beliefs based on the western understanding of mental health difficulties, but often also incorporating beliefs about the ability of Christian and traditional Tongan beliefs to contribute positively or negatively to mental health. Some Ward Staff reported involving Traditional Healers in their treatment while others reported a negative view of doing so. The Ward staff did not report using traditional healing methods themselves as part of their own practice. However, the use of other Tongan cultural practices, including efforts to provide a sense of community and "family" to clients, and to keep clients engaged with their communities were reported by the Ward Staff. While these objectives are also regarded as important by western-style mental health services, the extent and nature appeared somewhat different in this service. The Ward Staff did not describe particular struggles in reconciling their Western health training with their Tongan cultural identity.

Cluny and La'avasa MacPherson[2] suggested that with the social structure of Samoan society, which often requires people to subjugate their own needs to those of the group and which often makes expression of dissatisfaction or distress to higher status people undesirable, illness can (even more commonly than in Western society) be a socially acceptable way of drawing attention to distressing and difficult

social situations. Similar dynamics can be identified in Tongan society, leading to a valuable role for Traditional Healers in using their status to identify and attempt to resolve such situations. The mandate given in Tonga to Ward Staff to resolve similar issues is less clear, and may depend in part on the individual and disciplinary abilities of the staff member, the constraints placed on them by the system, and the latitude given to them by society to address these issues.

While many other factors may be important, the strength of these beliefs and practices may in part explain the reluctance of Tongan people to engage with western mental health systems, and to be adherent to western treatment approaches. The process of devaluing and stigmatization of western mental health practice that was evident with several of the Traditional Healers, and that has been reported more generally in Tongan Society[5] may also contribute to the reluctance of Tongan people to engage with western treatments.

Lui[3] has argued that there is a need for resolution of the conflict between traditional and western approaches to mental health intervention in the Pacific context. Similarly, Puloka[4] has argued that consideration and inclusion of folk-healing practice in Tongan mental health service provision will provide the least restrictive, most humane, and most cost-effective service provision for Tonga. These results do indicate some overlap, but also considerable divergence of models and beliefs about mental illness between the two groups. Some animosity between the groups was also evident, particularly articulated by the Traditional Healers towards the Ward Staff. This animosity may limit the extent to which the goal of maximising the value of both approaches, as articulated by authors such as Lui[3] can be achieved. This could contribute adversely to the care of Tongan clients by: 1) delaying access to useful health care from a Western perspective leading to deterioration in their mental status, with subsequent adverse outcomes such as injury, social disadvantage, or stigma, or 2) precluding or delaying their access to Traditional Healers who may be able to contribute to their recovery.

On the basis of the current findings, it appears that creating opportunities for dialogue between the Traditional Healers and Ward Staff in Tonga may be very useful to assist with building a basis for collaboration and understanding of the other perspective. Goals for such a dialogue may include: Building the understanding of practitioners from both approaches about the potential contribution that the other approach can make; building a consensus about situations when involving practitioners from the other approach may be of particular value; working towards a consensus about when “diagnosis” from a Tongan and from a western perspective may be most appropriate, and strengthening the personal relationships between practitioners of the different approaches so that there is a stronger basis for collaboration. Entering such discussions from a basis of mutual respect would be important. Part of this dialogue may involve learning more about the system of belief of the other approach, and understanding how these beliefs lead to particular interventions. This dialogue could also usefully focus on exploring ways in which the practices of both approaches, and the interaction between the approaches, does not reinforce the stigmatization of people with mental health conditions. The object of this dialogue would be to enhance understanding and appreciation of the other perspective, and explore ways of working synergistically, rather than aiming for assimilation of either approach by the other. The dialogue would be about walking two paths, but ensuring that the goal is the client’s wellbeing, and that the walkers of both paths are helping the client to walk their own (third) path to that goal as easily and safely as possible.

The Tonga National Disability Identification Survey[5] made several recommendations relevant to mental health, including: full implementation of the Mental Health Act, establishment of a transitional care facility to support people with mental health difficulties in a community setting, a greater range of allied health staff input at the Psychiatric Unit at Vaiola Hospital, and community awareness campaigns to reduce the stigma attached to mental health difficulties. The current study suggests that, if the more co-ordinated approach to care envisaged by Puloka[4] and Lui[3] is to be achieved, active efforts to develop a more positive and collaborative relationship between the Traditional Healers and the Western mental health system in Tonga will be needed. This is also likely to be true in other countries with significant Tongan populations.

There were two major limitations to this study. Firstly, all the participants lived and worked on Tongatapu. The outer islands, which tend to be more traditional and have less access to western-style services, were excluded so these results may not be representative of the outer islands. Secondly, funding of this study required that all of the data collection be undertaken within a two week period. This may have limited the opportunity to build up a level of rapport with the participants which may have increased the depth of the picture that emerged.

In summary, it is clear from this study that traditional beliefs about mental illness are still very persuasive within Tongan society, and traditional healers frequently treat people with mental health difficulties. The study, unsurprisingly, shows markedly different causal models between traditional healers and western-trained staff. This study indicates that there was significant distrust and animosity between the traditional and western approaches, particularly the negative attitudes of traditional healers towards

western approaches. This may create a major barrier to achieving the appropriate integration of the two approaches called for by writers such as Lui[3] and Finau and Tukuitonga.[1] This study, however, also suggests some pathways forward that may assist with maximising the potential for collaboration and synergy between the two approaches.

Acknowledgements

Funding for data collection and initial analysis was provided by Counties Manukau District Health Board. Final preparation of this paper has been undertaken as part of a New Zealand Health Research Council Foxley Fellowship awarded to Malcolm Stewart.

Appendix 1

Seed Questions for Structured Interviews

Questions for all participants

1. What is mental illness?
2. What causes mental illness?
3. What are the signs and symptoms of mental illness?
4. Explain the nature of the illness that you are treating?
5. How do you treat these illnesses?
6. Do you refer patients if they do not fit your criteria?
7. What are the materials and methods you use?
8. Explain how you acquired this treatment?
10. How many patients do you get a day/week?
11. Do you accept payments, gift, or tokens of appreciation for your service?
    If answer is YES, please explain.
12. Where is your preferred place of treatment? Please explain.
13 How do you approach your patients? (Prompt: individually or family,
    holistic or one dimension – e.g. only spiritual)
14. How long do you spend with your patients in one visit?
15. What are your discharge procedures?
16. Do you treat females differently from males?
    If answer is YES, please explain.
17. How do you deal with a dissatisfied patient?

Specific questions for Traditional Healers

9. Are there specific criteria for becoming a traditional heale?
   If answer is YES, please explain.
18. What do you think of the mental health services in the hospital?

Specific questions for Ward Staff

9. Are there specific criteria for becoming a (mental health) staff (member)?
   If answer is YES, please explain.
18. What do you think of Tongan traditional beliefs about mental illness?
19. What do you think of Tongan traditional healers?

References

1. Finau S, Tukuitonga C. Pacific Peoples in New Zealand. In: Davis P, Dew K, editors. *Health and Society in Aotearoa New Zealand (1st ed.)*. Melbourne Australia: Oxford University Press; 1999. p. 99-112.
2. Macpherson C, Macpherson L. *Samoan Medical Belief and Practice.* Auckland NZ: Auckland University Press; 1990.
3. Lui D. Spiritual Injury: A Samoan perspective on spirituality's impact on mental health. In: Culbertson P, Agee M, Makasiale CO, editors. *Penina Uliuli: Contemporary Challenges in Mental Health for Pacific Peoples.* Honolulu: University of Hawaii Press; 2007. p. 66-76.
4. Puloka M. A commonsense perspective on Tongan folk healing. *Int J Ment Health Nurs,* 1997;2:69-93.
5. Taylor D. *Tonga National Disability Identification Survey.* Nukualofa: Tonga Disability Action Committee; 2006.
6. Murphy H, Taumoepeau B. Traditionalism and mental health in the South Pacific: A re-examination of an old hypothesis. *Psychol Med,* 1980;10:471-482.
7. Foliaki S. Migration and mental health; The Tongan experience. *Int J Ment Health Nurs,* 1997;26:36-54.
8. Roberts G, Cruz M, Puamau E. A proposed future for the care, treatment, and rehabilitation, of mentally ill people in Fiji. *Health Promotion in the Pacific,* 2007;14:107-110.
9. Greene J, Whitmore E, Sappington H. *The Craft of Evaluation: Strategies for Qualitative Data Analysis.* 1987;8:5-11.

The Social, cultural and medicinal use of Kava for twelve Tongan born men living in Auckland, New Zealand

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Abstract

Kava consumption is a very popular practise amongst Pacific people especially amongst the Tongan communities. The purpose of this paper is to identify some of the key cultural, social and medicinal elements of kava use amongst Tongan men. Twelve face to face interviews in this study were undertaken. The paper argues that kava drinking is strongly linked to many of the ceremonial, social and cultural obligations that are deeply embedded within the Tongan culture. The positive uses of kava include medicinal purposes, male bonding, alternative to alcohol consumption, reaffirming and establishing relationships amongst other Tongan men, The men also stated negative uses of kava such as it made them lazy, tired so they were not able to go to work, a lack of sexual activities by being too tired have sex with their partners and very expensive to buy in New Zealand.

***Aim:** The aim of this paper is to discuss and examine the social, cultural and medicinal kava use amongst twelve Tongan born men living in Auckland, New Zealand.*

***Methods:** The study used qualitative methods, specifically individual interviews were conducted in Tongan or English. Participants were recruited through community networks in Auckland. A number of Tongan churches, Tongan medical clinics such as Langimailie, and kava clubs were approached to recruit participants.*

The open ended interview schedule covered themes such as access, quantity, frequency, and problems associated with kava use. The interviews were conducted by a Tongan researcher either in English or Tongan.

All interviews were translated and transcribed into English. A thematic analysis based on multiple readings of the transcripts was used. The analysis identified commonalities and differences.

The study was granted ethical approval by the University of Auckland Human Subjects Ethics Committee in December 2004. Interviews were conducted at the beginning of 2005. Interviews were undertaken in a place where the participants felt comfortable. Interview times were arranged at a time convenient for the participants. All participants were given information sheets prior to interviews, and participants were asked to sign consent forms before the interviews commenced. These forms were provided in Tongan and English versions. Most of the interviews ranged between one to three hours. Interviews were audiotaped, and confidentiality was maintained throughout the research.

***Participants:** Twelve men were interviewed. All participants were Tongan men born and raised in Tonga. The ages of men ranged between 30 and 75 years. Most of the men had been residing in New Zealand for over 30 years, although some men had only been in New Zealand between 2-18 years. Most of the men were employed and a few had retired from work. Most of these men also belonged to a church. All of the men who participated were married.*

Introduction

There are a number of studies about the effects of consuming kava among Pacific people.[1] There is little documented evidence about kava consumption amongst Tongan men living in Auckland, New Zealand. This paper aims to explore kava use by Tongan men living in Auckland.

The Tongan population is the third largest Pacific Islands group in New Zealand. There are over 50,478 Tongans settled in New Zealand. The Tongan population is also youthful with a median age of 19 years. Fifty six percent of the Tongan population were born in New Zealand. Twenty six percent of Tongans who were born overseas have lived in New Zealand for over twenty years. Most Tongans live in urban areas. For instance, over 80% of Tongans live in Auckland.[2]

There is evidence that kava originated from Melanesia, then moved into some of the Polynesian countries.[3] Kava has been consumed in countries such as the Solomon Islands, Ponape in the Carolines, Marind District of West New Guinea, New Hebrides, Wallis and Futuna Islands, Vanuatu, Hawaii, Fiji, Samoa, and Tonga.[1] Literature suggests that Pacific men are the main consumers of kava.[4,5]

Kava is a non-alcoholic beverage. The kava plant grows best at altitudes of 150-300 meters above sea level. It is grown and cultivated for its roots. The plant is also known as Piper methysticum. The plant is used not only in social activities but in many ceremonial activities throughout Oceania. It is also used to treat many medicinal aliments. The roots of the kava plant are dried pounded into powder and then soaked in water where cloudy water is produced and then it is consumed. When kava is consumed it leaves a temporary numb feeling in your mouth.[1]

Rogers thesis,[6] which examines kava use in a rural Tongan community found that kava use during the nineteenth century was used for a number of purposes such as sacred, religious ceremonies and for persons of high rank. Kava drinking is also linked to three separate kava categories. The royal kava ceremony is structured around the royal family protocols. Chiefly kava ceremonies are associated with status of the title holder and the chiefly title holder. Common kava involves church kava, work kava, social kava, courting kava and club kava. Rogers concludes that kava symbolizes the "ethos of hierarchy, status, latent competition, rivalry and exclusion" (Rogers 1975:416).

Finau, Stanhope & Prior[4] suggest that kava is an important part of Tongan culture, and that Tongans have maintained their cultural identity through kava ceremonies. Today kava is still an important part of Tongan culture, and kava is used by Tongan men in New Zealand, especially during traditional ceremonial and social occasions. For ceremonial purposes kava drinking allows rank and genealogies to be recited, whereas social kava drinking allows social, political, religious and current events to be discussed.[4]

James (1999)[5] suggests that Tongan men usually begin drinking kava before they turn 20. They are expected to drink kava because of "its traditional association with rank, title power".[5] Finau (1996)[7] reports that there are many kava clubs in Auckland such as church groups, ex-student associations, village groups and occupation groups. These kava clubs are exclusively for Tongan men.

The Pacific Drugs and Alcohol Consumption Survey (2003) survey looked at identifying drug use amongst the four main Pacific ethnic groups in New Zealand: Samoans, Tongans, Cook Islands Maori and Niueans. Thirty eight percent of Tongans reported that they consumed kava. 63% of Tongan men and 16% of Tongan women said they had tried kava at some stage. Older Tongans were more likely to try kava compared to people less than 30 years.

22% of people who had drunk kava in the past 12 months said that it had affected their home life negatively while 3% said it was beneficial.

Tongan men were identified as the main consumers of kava. In the past 12 months, 21% of Tongan men had consumed kava. Forty one percent of Tongan men and four percent of Tongan women had drunk kava. From the older age group 30% drank more than the younger age group of 13%. In the last 12 months Tongan men had a higher level of kava consumption compared to the overall average Pacific kava consumption rates. Tongan participants also mentioned that the frequency of kava consumption was 126 times per annum or at least once per week. Kava was mainly drunk at kava clubs, at home, parties and ceremonial festivities.

When Tongan participants were asked whether other people's kava consumption had any effect on them 6% said that it affected their home life negatively and 7% said that it was beneficial to their home life. Four percent said it harmed their friendships and social life and 2% said it was beneficial. Four percent said was harmful to their health and 3% said it was beneficial. When it came to asking questions about financial position, 7% mentioned that it was harmful and 3% said it was beneficial. 22% of people who had drunk kava in the past 12 months said that it had affected their home life negatively while 3% said it was beneficial.

Kava (2001)[8] suggested that kava use by Fijian men had an adverse effect on their marital relationships. The wives of kava users in the study reported that their sexual desires were not being fulfilled by their husbands due to excessive kava drinking by these men. A number of problems were reported by the wives, such as a husband's loss of sexual drive, other sexual difficulties, and extramarital affairs.

Results

Initial experience of kava

The men said that they started drinking kava when they were growing up in Tonga. The median age for beginning kava drinking was between 17-20 years of age.

There were mixed views when the men were asked about their initial reactions when they consumed kava for the first time. However, many said that they did not initially like the taste, but grew accustomed to it after a while.

> *"I felt nauseated and vomit at the beginning but after some kava sessions I was used to the taste."*

> *"I hated it at the beginning but when you get used to it, there is no problem".*

Reasons for drinking kava

There were four main reasons that men said they drank kava, as a social lubricant, to help reaffirm relationships and status, as an alternative to alcohol and medicinal purposes.

Social substance

Most of the participants said that they began drinking kava because there was a lack of social and leisure activities in Tonga.

> *"I grew up in a small Island in Tonga (Vava'u Group). There were no social functions (dancing halls or night clubs) it was only the kava drinking and clubs that was available at the time."*

> *"I started kava drinking in Tonga because we did nothing else at the time aside from drinking kava."*

> *"I started very young and the reason why is that, it was like a leisure time for me to attend the social kava clubs"*

Establishing and reaffirming relationships

Today these ceremonial uses of kava continue to be a major part of many Tongan communities in New Zealand and in Tonga. All of the men commented on how kava drinking was a way of forming and building relationships with other Tongan men.

> *"I drank kava because it helps me to improve my social relationship with my other friends and mates. For example when we plan with my friends to work in the garden the next day, or we plan to do other things during our youth, it was done through the kava bowl. Second, the kava meeting and drinking's provides opportunities for us to learn from each other."*

> *"I tend to know people, make and met new friends and I learn a lot in how to socialize with other friends and people."*

One individual commented on how the kava ceremony was used as a means of communication for important issues such as the wellbeing of the family.

For any important issues discussed in the family, homes and other places, the kava ceremony helps to bring everybody together.

A few of the men also mentioned how kava drinking helped them to communicate with other people.

> *"My main reason for drinking kava was that I was able to mix and relate with people. I learned how to interact and talk; I met with people of different age groups, and know new people. I was in my own little world but now I learn from many people."*

The men stated that consuming kava also avoided conflicts but encouraged communication amongst Tongan men.

> *"Kava drinking is and was also viewed or signified a "peaceful society", togetherness, "close bonding" of a society. That is another reason why I loved drinking kava and many others in Tonga."*

> *"Social relationship to me is the most positive impacts of kava consumption. History reveals that in Tonga during the older days, non of the youths were able to visit other's villages or suburbs due to the kinds of hatred and conflicts that happens during those days. However, with the impacts of "kava clubs", youths in Tonga are able to move around freely both in Tonga and here in New Zealand because of this "warm bonding" or relationship that was established in the kava parties by different people and men."*

Status plant

Some of the men described how the kava plant was identified as a plant which only individuals who had status had access to.

"There were other reasons why Tongans including us during our times drank kava was because kava was regarded as noble plants."

*"The most important thing for me is the **nobility** of the plant. For example if you are to attend a wedding, a funeral, visit a noble or the King, it is traditionally a must for you to take the kava. The reason why is because the Kava signifies the **Land** and the Land signifies the soil, the sea, the people and everything."*

Alcohol alternative

Some of the older men also mentioned that alcohol was used as a replacement or alternative for alcohol since alcohol consumption was limited because of the prohibition laws imposed by the colonial administrators.

*"Since my father did not want me to drink alcohol, I used kava as an alternative. Moreover, in my Island in Tonga the only alcohol available was the **home-brew**, but it was quite risky to drink these because our Island community did not accept us to drink."*

"When one compares alcohol and kava consumption kava to me is better because some parents fight a lot when the husband drink alcohol but for kava you feel lazy and you are very lazy to fight back to your wife if you slept a lot."

"Kava leads you to just laziness but alcohol will lead you to death."

*"I think drinking kava is still far better than alcohol. My advice for youths is **to go for the kava and not alcohol. Kava leads you to just laziness but alcohol will lead you to death**".*

Medicinal purpose

A number of the men mentioned that drinking kava often helped them with illnesses such as stomach pains, flu, and cancer.

"I viewed kava as a medication for the treatment of stomach pains etc. That was why I drank a lot of kava."

*"If you wear warm clothes and drink kava during the winter season, you will never get **flu** or **sick**".*

"I am 75 years now and don't feel any effects. I am still healthy; I don't get cancer because of the kava. I will continue to drink until I die."

Consumption patterns

Cultural uses

Some of the participants commented that the cultural use of kava was only available for certain individuals such as the nobles of Tonga.

*"No Tongan can deny the significance of kava and its positive contributions to the Tongan culture. I just want to add on its significance and why it is treated as a **royal plant** and a **royal drink**. It is said that kava was originally identified by Tagaloa the King of Tonga. Hence anything that belongs to Tagaloa was a noble or royal thing. There is a saying that Tongans came from the sky and kava also came from the sky. The missionaries stated that when they visited Tonga it was only the nobles that were regarded to have the so called **spirits**. The commoners had none. However, when the national drink (kava) was found, this national drink sealed the covenants between everybody (commoners and nobles) with God. This is why it is regarded as a royal drink."*

In this study a number of participants stated the cultural significance of kava use for social activities such as funerals, weddings, family functions, village functions and welcoming ceremonies.

"They were use in funerals, wedding and in family and village functions. Kava was regarded as a noble and highly respected thing by all Tongans. When kava is presented, that function looks loyal and respected. Kava signifies the significance, the status and values of that event. When you approach a community you are presented with a kava. When one deals with conflicts or seeking some mercies on social issues kava is presented. When a family awaits or welcomes a new or best friend, Kava is presented. Kava is significant."

One of the participants stated that kava was a drink for Tongans and alcohol was a drink for Palangi's (European).

*"It is also a **cultural drink** for Tongans. To me **beer** is for Palangi's but **Kava** is for Tongans."*

The kava ceremony also highlights issues such as barriers within the culture. For instance

*"To me the significant of kava to me is based on its natural usages. It brings about peace and harmony. It brings equality and oneness. For example it is a **royal drink.** The serving of the kava is significant because it allows each person to **serve for one another.** In a kava ceremony you can serve others with a kava cup and the other person can serve you. This shows there is no need for any boundary between people, races, countries, churches, and nations."*

Binge drinking sessions

A common theme amongst the Tongan men was that kava drinking sessions often took place for long periods during the night until the early hours of the morning.

> *"I am 75 years now, but when I was young (twenties), I consumed a lot. I mentioned earlier, I started at 9.00 pm and I left the place at about 4.00 am. The weekends, we even drank kava from 9.00 pm till 10.00 am the following day."*

> *"They drink kava every night from 10 pm till day break the next day."*

Relaxation

A number of men commented that kava was used as a form of relaxation in preparation for plantation work in Tonga.

> *"It was like a routine for us. We drank a lot. Some evenings we slept late but start early and as stated earlier kava gave us some form of relaxation for the next day's work at the plantation."*

Kava use amongst young men

Older Tongan men suggested that younger men are increasingly drinking kava.

> *"There are more Tongan youths drinking kava today than before. The main reason why is because youths can socialize with other youths both here and in Tonga. Some years ago, there were some feelings of hatred among them. Today they live and interact peacefully."*

Social effects

A number of participants commented on the social effects of kava consumption amongst family, church and community relationships. They thought that drinking kava made them more 'lazy' and tired. They talked about sleeping the whole day to recover from kava consumption.

> *"Kava does affect my relationships with my family, church, community involvement and my work as well. For example when I drink a lot of kava and being intoxicated, I am sleepy, lazy, does not want to do any other work but to sleep until you recover. In many cases you sleep the whole day, and you missed work, missed your plantation work and your other involvements. This is not good as it affects your relationships"*

A number of men talked about how kava influenced their relationships.

> *"There are also negative effects such as family conflicts between the husband and wife fighting. As a result divorce, fights, and court cases always happened as it affects many families."*

Some perceived positive effects from kava. For instance, participants mentioned how kava strengthened relationships.

> *"There are positive effects of kava such as it helps to establish good relationship within and between individual's families, communities and nations. It also helps to establish equality, love and harmony in societies. It helps to bridge indifferences between ethnic groups and nations."*

Economic effects

We asked about the economic impact of consuming kava. A number of participants emphasized that kava is cheaper than alcohol.

> *"Kava is cheaper than alcohol. That was the main reason why I liked drinking kava."*

Most of the participants mentioned how kava was cheaper to purchase in Tonga because people would grow their own kava plants for personal use. Some participants talked about how purchasing kava in New Zealand was expensive because they had to purchase the products from the supermarket.

> *"I don't think it does in Tonga because the kava is locally available and depending on the kinds of kava ceremony you attend, it is quite cheap. It costs only $10 per kilo if you buy from the market out here in New Zealand it costs $40-$45 per kilo. In most cases we share the cost for a kilo both in Tonga and here but as mentioned earlier most people have their own kava in Tonga and your still can get them free."*

Another person commented on how kava costs money because it is often associated with fundraising events.

> *"Kava affects your income only when Tongans participate in a fund raising kava club but it is not that expensive."*

One person commented on how kava affected his family income because he was not able to go to work and therefore his income was affected.

> *"Kava affects your life if you sleep too much and you never work because your family earnings will be too small."*

One man suggested that some young men were stealing money in order to contribute towards kava parties.

> *"Today many Tongan youths are in jail because they steal money so that they can contribute in a kava party and in fund raising activities."*

Health effects

A number of men acknowledged that kava affected their health status.

> *"Yes kava consumption is a health issue because when you wake up in the following morning you feel unfit, fatigue, tired, nauseated and you feel lazy. Other facts include sudden death although nobody knew the causes. One of my friend told me that, "one of our mate die suddenly due to stroke but he told me that the guy drank kava almost all week before he died" The other problem is that many men have haemorrhoids because they sit too long. This led to rectal cancer of Tongan men."*

Intimate relationships

The majority of participants mentioned that kava affected their sexual experiences with their partners, but they were often reluctant to discuss these issues openly.

> *"I still think that there are some wives who are complaining about their husband drinking kava especially on sex. If we ask some of the wives, they will tell us the truth but they are either **shy** or **scared** of their husbands or don't want to put down their husbands or friends."*

A number of the men mentioned how kava consumption made them 'lazy' or uninterested in sex.

> *"Yes, I think it is true, because when one is too drink of kava, he tends to be **too lazy** and he has no energy or drives to think of sex."*

Discussion

The results have identified a number of key areas and that kava drinking still remains a popular activity for many Tongan born men. There are a number of cultural uses of kava such as social and cultural ceremonies for funerals, weddings, welcoming ceremonies and village functions. Today the ceremonial use of kava continues to be a major part of many Tongan communities in New Zealand and in Tonga. Some men stated that kava was seen as a status plant and a highly respected substance. It can also be seen as the equivalent to a pig, which is a high status food. The work of Singh (1992)[3] discusses how kava has been strongly associated with a number of social and ceremonial activities such as welcoming an important visitor.

The consumption of kava was also linked to a sense of bonding, reaffirming and establishing relationships amongst Tongan men. Many highlighted that kava drinking was important for communicating with other Tongan men. Kava drinking remains an important way for Tongan men to bond with one another. Furthermore, there is still a strong sense of hierarchal and social structures amongst the Tongan men. Rogers (1975)[6] found in his work that kava ceremonies are used as a forum for communicating and open discussions on a number of social, cultural, and political issues.

The interviews suggest that long kava drinking sessions are common, whereby a group of men drink for a 12 or 13 hour period. When these sessions take place some men do not attend their paid work because they need to recover from the effects of kava. Most of the men stated that they tended to be 'lazy' and often missed going to work after consuming kava. Rogers (1975)[6] also confirmed that kava drinking involved long drinking sessions.

Drinking kava is now a popular practice for young Tongan men. A number of the older men said that young Tongan men have recently become actively involved in kava drinking sessions. Most of the men mentioned that when they first tasted kava they did not like the taste of it but gradually over time they became used to drinking kava. Many of the older Tongan men who were born and raised in Tonga suggested that they began to consume kava because there was a lack of social activities in Tonga.

There have been a number of studies into the health related illnesses of kava consumption such as Frater (1952), Ruze (1990), Kava (2001).[8,9,10] All the authors identify a number of health related illnesses such as poor health, feeling unwell, headaches, sleeplessness, tiredness & feeling lethargic. Participants said that kava did affect their health whereby they reported feeling tired and lazy after consuming it.

A few of the men mentioned that kava drinking was also used as a medicinal substitute for their medical aliments such as stomach pains, flu, and cancer. Ruze (1990),[10] Steiner (2000),[11] Bone (2002),[12] highlights in their papers that there was a strong correlation between the high use of kava and reduced health related ailments such as cancer, anxiety and niacin deficiency. Some of the men also mentioned that kava drinking was an alternative to alcohol consumption. Older men who were born and raised in Tonga said that alcohol was not readily available so they looked at other alternatives such as kava and homebrew.

In many Pacific cultures, sexuality is often a very

sacred and tapu subject and is not openly discussed. This is true in the Tongan community. Tongan men are reluctant to discuss some of their sexual difficulties since the topic of sexual intimacy is sensitive. Most of the men stated how they were too shy to talk about sex. Some acknowledged that there was a problem with kava drinking but did not elaborate what these difficulties were. The men did acknowledge that kava consumption made them 'lazy' when it came to sexual activities. The men said they felt too tired to have sex with their partners. This was also a key finding with Kava's (2001)[8] paper on the sexual difficulties for Fijian men. Many of the men also mentioned that when they drank kava in Tonga it was very cheap and very cost effective because they were able to grow kava in the plantations. In New Zealand kava was more expensive. This was due to not being able to grow kava in New Zealand.

Summary

The findings of this research suggest several key implications. There is a need to increase awareness of the health impact of kava consumption. Very little is known about the health impact of kava drinking, including among health professionals and among kava drinkers. Kava was strongly linked to friendships and status. These positive aspects need to be considered when undertaking further research. It may be useful to further investigate some of the traditional cultural features in the kava drinking environment and to see how these traditional practices could be maintained in other ways. One area that can have a greater impact is the role of policy implications of identifying key areas of developing educational awareness of the health effects and medicinal uses of kava. Public health programmes could explore the health related impacts of heavy kava use. Further research is needed to explore these topics among New Zealand Tongan born men and the views of Tongan women.

Study limitations

This study does not represent all Tongan born men living in Auckland but it is an exploratory study so further research is still needed. We acknowledge that the sample size of twelve men is very small. A number of issues were also not fully explored such as the political issues back home in Tonga and the biological effects of kava. Although a small part of the paper highlights some of the medicinal impacts of kava further work is still required in this area.

Acknowledgements

I would like to acknowledge the Health Research Council of New Zealand for providing funding to undertake this research. A special thanks to Dr Anne Potts from Canterbury University.

References

1. Pacific Health Research Council (2002) *Kava and Pacific Health*, Anthology Series No 2, Fiji School Of Medicine, University Of South Pacific.
2. Statistics New Zealand (2007) *Tongan people in New Zealand 2006*. Statistics New Zealand, Wellington, New Zealand.
3. Singh, N. Y. (1992) *Kava: an overview* in Pacific Health Research Council (2002) *Kava and Pacific Health*, Anthology Series No 2, Fiji School Of Medicine, University Of South Pacific.
4. Finau S, Stanhope, J. Prior, I. (1982). *Kava, Alcohol and Tobacco consumption among Tongans with Urbanization* in Social Science & Medicine Vol 16, pp 35-41.
5. James, K. (1999) *Alcohol: a threat to Tonga's time-honoured values?* in Pacific Health Dialogue Vol 6. No 2. Resource Books Ltd, Auckland.
6. Rogers, A. G. (1975). *Kai and kava in Nuiatoputapu: Social relations, ideologies and contexts in a rural Tongan community* Unpublished PhD Thesis, University of Auckland, Auckland.
7. Finau, S. (1999). *Alcohol and young Tongans: a FOBI perspective for change* in Pacific Health Dialogue Vol 6. No 2. Resource Books Ltd, Auckland.
8. Kava, R. (2001) *The adverse effects of Kava* in Pacific Health Dialogue, Vol 8. No.1. Resource Books Ltd, Auckland.
9. Frater, S. A (1952). *Medical Aspects of Yaqona* in Pacific Health Research Council (2002) *Kava and Pacific Health*, Anthology Series No 2, Fiji School Of Medicine, University Of South Pacific.
10. Ruze, P. (1990) *Kava-induced dermopathy: a niacin deficiency?* in Pacific Health Research Council (2002) *Kava and Pacific Health*, Anthology Series No 2, Fiji School Of Medicine, University Of South Pacific.
11. Steiner, G. (2000). *The correlation between cancer incidence and kava consumption* in Pacific Health Research Council (2002) *Kava and Pacific Health*, Anthology Series No 2, Fiji School Of Medicine, University Of South Pacific.
12. Bone, K (2002). *Kava a safe herbal treatment for anxiety* in Pacific Health Research Council (2002) *Kava and Pacific Health*, Anthology Series No 2, Fiji School Of Medicine, University Of South Pacific.

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Tau Fifine Fiafia: The Binge Drinking Behaviours of Nine New Zealand Born Niuean women living in Auckland

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Abstract

The aim of this paper is to explore the binge drinking behaviours and attitudes of nine New Zealand born Niuean women aged 18 to 45 plus years living in Auckland who are heavy binge drinkers. Taped interviews were conducted individually with nine Niuean participants, utilising a semi-structured interviewing schedule in both Niuean and English languages. This study argues that excessive drinking style of binge drinking commonly practised with the younger generation of Niuean women. The study highlighted the important role of supportive friends and women within a drinking circle compared to the cultural and gender restrictions when drinking with males. NZ born Niuean women outlined there were fewer limitations on alcohol use and behaviour associated with drunkenness; the reason for drinking was to reach a level of intoxication. Alcohol consumption was seen as a way of socialising, having fun, being happy and feeling safe primarily when drinking with other women, even though participants experienced negative behaviour when safety was threatened. The Niuean community needs to address alcohol related issues affecting Niuean women through education awareness within social and cultural gatherings. This study is not a representative study and it cannot be generalised to all New Zealand born Niuean women because the sampling size is too small.

Aim: *The aim of this paper is to look at the binge drinking behaviours of nine New Zealand born Niuean women living in Auckland.*

Methods: *A qualitative research methodology of face to face interviews was used to interview NZ born Niuean women and their alcohol consumption. Participants were recruited by using a snow ball methodology. Participants were also approached throughout the community on the telephone and via email/internet about the research. Participants were also from Niuean gatherings such as Niuean cultural workshops, weaving groups, church groups, and sports groups, Niuean websites. A semi-structured interview format was used making it more informal and comfortable for the participant by using open ended questions. These questions include first drinking experiences, reasons for drinking, drinking styles, drinking venues and environments, times to drink, risky behaviours and attitudes, pregnancy and sexual behaviours. The interviews ranged from 1-2 hours. Ethical approval for the research was obtained from the University of Auckland Human Participants Ethics Committee in June 2004. Interviews were done in Niuean or English optional for the participants in the study.*

An important feature of the research process and cultural appropriateness is that I am New Zealand born but was raised in Niue Island as a young child. I am fluent in both English and Niuean languages. My Niuean cultural back ground and knowledge will be beneficial in the formulation of ideas and interpretations in the interview discussions and research data analysis. The researcher will interpret the cultural knowledge and understanding throughout the discussions which will be useful when gathering and analysing empirical information gathered from the research.

Participants: *There were nine New Zealand born Niuean women aged between 18-45yrs plus living in Auckland who participated. Two of the participants are half palagi (European) and half Niuean. This is a reflection of the young population that many Niuean women today are born into in New Zealand, as the majority of Niues population is New Zealand born. The NZ born young women views were highlighted in this study because of the growing population of Niue communities in Auckland, New Zealand. The participants were from diverse backgrounds, from professional career minded women, beneficiaries, single, married, mothers, solo parent, tertiary students.*

Introduction

Niue is the fourth largest pacific ethnic group living in New Zealand, and most Niuean people are located in the Auckland region. The Niuean population living in New Zealand has increased by 2,325 from 2001 to 2006 census. The Niue population comprising of more then 22,473 Niueans were reported to be living in New Zealand.[1] Twenty five percent are able to converse in the Niuean language. The gender break down of the Niuean population was evenly balanced. Niuean females make up (51%) of the Niuean population. There is (74%) of the Niuean population living in New Zealand whom are New Zealand born, this shows a growing population of New Zealand Niueans in New Zealand.[1]

The ALAC (1997)[2] report states that binge drinking patterns (more than 6 standard drinks on one occasion) appear more prevalent amongst Pacific youth, and this is consistent with patterns of use observed and reported by Pacific adults from various studies of Pacific ethnic groups. This is also supported by a recent study looking at Pacific Island students in secondary schools in Auckland drinking alcohol, it was reported that both Niuean and Cook Island young women were over represented when it came to alcohol consumption. It was also highlighted that Pacific Island young people binge drink and that young Pacific women were matching their drinking levels to that of young Pacific men.[3]

It was also found that Maori and Pacific women who drank were more likely to drink in a risky way than they are to drink moderately.[4] It has also been identified that Pacific young people are drinking alcohol whilst legally under age. The kind of behaviour and drinking patterns that were reported by the young students is in line with a binge pattern of use.

Driver (1998)[5] who interviewed Pacific women for a development of alcohol harm reduction resources found that older Pacific Island women participants felt there were no alcohol related problems for Pacific Island women over 30 years. The problems were highlighted on Pacific Island men because drinking alcohol was part of the male culture. Most of these women were much older and were born in the Pacific Island. Their views were different from younger female participants in the Pacific focus groups. Most female participants strongly felt that pregnancy and drinking alcohol is a major concern for Pacific women and that alcohol consumption was a key factor in alcohol related problems.

Huakau et al (2005)[6] paper outlines the drinking patterns of Samoan, Cook Islands Maori, Tongan, Niuean, Fijian and Tokelauns living in New Zealand found that twenty five percent of Pacific females consumed enough to feel drunk at least weekly in comparison to only six percent for the general New Zealand population.

Tautolo (2004)[3] looked at the ethnic differences in the prevalence of alcohol consumption in Pacific high school students, and found that the common age for first consumption of alcohol was between the ages 13 to 15years. This was a common pattern amongst all the different Pacific ethnic groups involved in the study. About (75%) of students reported having even drunk alcohol at an earlier stage. One of the concerns highlighted was the number of female Cook Island (84%) and Niuean (79%) female students who reported having consumed alcohol. These proportions were actually higher than their male counterparts. This study found more Pacific females are starting to drink at a younger age in comparison to young Pacific males.

Tautolo's (2005)[7] thesis examined the Youth 2000 data on Pacific high school students found that when Pacific students do drink there drinking styles is heavy binge drinking. For the Niuean students thirty nine percent of Niuean female students reported there drinking style as heavy binge drinking. The study also highlighted that the Niuean students consume more alcohol in comparison to other Pacific students.

Schaaf's (2006)[8] PhD thesis on the Auckland High School Heart Survey on the prevalence of risk factors for cardiovascular diseases amongst Pacific adolescents found that Niuean female high school students (83%) had the highest rates for binge drinking in comparison to the other Pacific students.

Studies by Alcohol Liquor Advisory Council (1997),[2] Banwell (1986)[9] and Neich & Park (1988),[10] found that Pacific Island women living in New Zealand are drinking more and more compared to the past. One of these studies of Cook Island women and alcohol use drew the conclusion that drinking was associated with being happy, singing, dancing, a form of socialisation and a sign of shaking off missionary imposed controls on their behaviour.[9] The older male and female participants from the Niuean Alcohol Liquor Advisory Council Monograph No. 5 study stated that Niuean women were not seen drinking alcohol and it was not acceptable by Niuean culture, whereas others suggested that women did drink but kept it hidden compared with male drinkers. A Niuean woman participant of this study stated the following:

> *"Actually originally and traditionally men drink homebrew. They're known to be the drinkers, but there are a few women who drink in the islands, not many though. I'm talking about the 50's when I was in Niue. You don't see many women drinking, but they're there… Women do drink, but as a rule I think traditionally the men are the ones that you see drink, and you see men drink and get drunk on the road or in their*

homes or anywhere, but it's very unusual to see a woman drunk and walk on the street or making loud noises. That is degrading sort of life to the women in the islands. You're not supposed to do that…Men get drunk and do whatever they want and get away with it" (Vai mamali- ALAC, 1997)

Nosa's (2005)[11] research examined Niuean men's drinking styles. The research found that Niuean men were also heavy binge drinkers. This was largely due to the fact that Niuean men were heavily influenced by New Zealand heavy drinking culture such as the "six o'clock swills" of closing the pubs early during the 1960s & 1970s. Further more alcohol was strongly associated with many of the Niuean cultural, social and festive activities where large amounts of alcohol were available.

"Changes in lifestyle patterns relating to use of tobacco and alcohol may be important health hazards that need to be documented"

The increase in binge can also be linked with lifestyle changes in a new environment. As Stanhope and Prior (1979)[12] examined the alcohol consumption of Tokelauans and the impact of migration to New Zealand. However lifestyle changes in New Zealand led to an increase in drinking, especially among men. "Changes in lifestyle patterns relating to use of tobacco and alcohol may be important health hazards that need to be documented" (Stanhope and Prior 1979:419).[12]

Matatumua (1969)[13] examined the acculturation process and attitude of migrant Samoans living in Dunedin. After migrating there is much freer access to alcohol. Matatumua suggests that peer pressure from other Samoan men was another factor contributing to alcohol consumption. Many Samoans felt that upon arriving in New Zealand they could drink as much as possible without restrictions and the change in the New Zealand lifestyle. Matatumua suggests that migrant Samoans are more prone to consuming alcohol because it is the custom among their associates.

According to Wessen et al (1992)[14] Tokelau migrants who came to New Zealand had a number of lifestyle and dietary changes. The prevalence of drinking also increased. When Tokelaun's migrated to New Zealand, alcohol consumption increased. As Wessen et al comments, "social drinking has become woven into the fabric of the culture" (1992:310).[14]

Results

First Time Drinking

The participants recalled drinking for their first experience between the ages of 10 -15 years. Most experimented with alcohol with friends from school. A few participants were taught how to drink wine with meals with supervision of parents within the home. The majority of women learned off friends, and observed family members drinking alcohol in the family environment

Reasons for Drinking

A variety of reasons and excuses were given for drinking: to be cool, to fit in with friends and peer groups, to forget about problems, drinking to gain confidence, drinking for fun," getting a buzz", drinking to relax, drinking to wind down at the end of the working week. Other participants said that they drank alcohol to reconnect with other relatives (cousins, nieces, sisters) which they have not seen in a long time.

"About a year ago when I was 21 we used to binge drink every week, we drink till we die or you get con-cussed, like knocked out. Its like we'll see who's the last one standing, just stuff like that, we just drink until we can't drink anymore. Now at 22, I'll have a pretty good time on half a dozen bourbons, premixed. I can maybe take a couple of shots on top but that's about it that's as far as I can go or I'll be sick."

This participant describes her experience of going to a Niuean dance function.

"Theres heaps of Niuean women that drink over here [Auckland]. A lot of Niuean women I see drinking in their late twenties, and thirties. When I used to go with my mum to Niuean socials at "Sunset Palms" I used to see a lot of those Niuean ladies over there. There were older ladies in their 50's and over who used to call themselves "The Single Ladies Club" or "Widows Club", they used to go out to those Niuean functions and get drunk, and be loud and one of them would start stripping. We just [laughed] because they are old ladies".

Drinking Style

The women described their drinking patterns as "binge" drinking behaviour. The aim of binge drinking is to get drunk (intoxicated), drinking alcohol all at once until they feel sick or can't walk. The participant's described this kind of drinking as getting "wasted".

Venues to drink

The women prefer to drink at home before going to socials where you have to buy alcohol at the bar, or before going out to the nightclubs referred to as "clubbing". There is a tendency to drink more alcohol before going out, they view this as having fun, and

saving money. Another style of consumption involves drinking in the car parks. Women would sit in the car and drink before going into the socials, firstly to save money and also to disguise the amount they had consumed.

Many of the participants reported drinking in a variety of places from work place after work drinks to drinking on special occasions like Christmas, New Years, at a dinner, at parties, at birthdays, socials, at the casino, at night clubs, bars, pubs, weddings, graduations, at home and while visiting friends and family, in the parks, beaches (during summer).

> *"…..I would have drinks with friends after work before going home. We sometimes drink at their house or at a bar. And I drink at nightclubs and socials too. Sometimes I would drink at the beach for beach parties".*

Times to drink

Most of the women in the study preferred drinking at night. The popular days for drinking amongst the New Zealand born Niuean women were Thursdays, Fridays and Saturdays because it's the ending of the week, when there is money available from pay days, and also because these nights were popular for parties and going out to town:

> *"Usually Fridays and Saturdays at night time when the clubs were open, and everyone could wait for the weekend. We usually drink at home first then follow onto a night club or maybe to a function, socials, Niuean socials or anything to support Niuean friends and families. And after we would go to the night clubs and not spend money on alcohol."*

The women participants reported they preferred to drink with other women, whom they can relate too and have common interests, feeling safe and comfortable amongst other women. A participant in her forties did not like talking about, or hearing women problems. She described that she liked to drink and forget about problems.

> *"But the ladies they talk about their problems with their boyfriends and stuff with Niuean women they like talking about problems, and they talk about [other people].Its like a gossip session. But if you wanna drink, you drink hard. You wanna forget all of that. That's why you're there to drink."*

Drinking With Friends

Most of these women reported binge drinking behaviour when they talked about their drinking patterns. Their binge drinking behaviours were mostly reported to be practiced with friends, peer groups (which were a mixture of males and females).

Some of the women described their drinking style as; "to drink fast and hard to finish your glass and to drink more". There were no breaks you just kept drinking and drinking until you could no longer stand or walk. Friends would then have to help you out, or look after you. Some females could not remember what their behaviour was like when they were drunk or when they experienced black outs.

> *"We used to think the faster we drink, the faster we get drunk, the faster we would get our buzz, we used to drink fast. But now when I start drinking I drink slowly and when I start feeling the alcohol kicking in (tiddley) , I start to drink faster…….I usually drink until I black out, I can't see properly or I don't know what I'm doing, and walking around. I have no limits until I feel the affects of alcohol in my body".*

Another participant talked about meeting men when drinking and flirting when drinking with friends, she explains,

> *"….When you and your friends drink you become much more flirtatious yeah, flirtatious, loud and boisterous or you might talk about things more deeply. Where as with guys there's an ulterior motive why you are getting friendly with them (laughs). But if they were older Niuean men I would be careful and more self-conscious how I behave but it depends if everyone is getting drunk, and getting rowdy and the types of guys you are with, it's easy to get swept up in that."*

Drinking with Family

Drinking alcohol with family was not a popular choice for the women in the study. Many of the women felt judged by their families and agreed that culturally it was a sign of disrespect if you drank in front of the older people in your family, especially parents and older males. This point is an important one because it was a recurring theme throughout the study that drinking in front of family to the point of intoxication was disrespectful:

> *"When I drink with family I would totally restrict myself (laughs) because being drunk in front of family is not appropriate behaviour and therefore I would control myself if I ever drink in front of them. I think its totally disrespectful behaviour."*

Some of the participants also described the issues of male partners or husbands being controlling of them, to forbidding them to drink. Often they felt intimidated when their partners or relatives are around because they are over protective and "*watch you when you are drinking*". This might lead to arguments on issues of jealously, power and control of Niuean women drinking alcohol. A participant in her early 30's spoke of her experiences with her husband;

"I've been in that situation I feel intimidated because my husband is around and he has told me not to drink. So I've gotten to the point where I say "No, I drink when I want to drink, you can't stop me. I was drinking before I met you"…… ……"I'm totally different when my husband is around, you can't enjoy your self and feel free to enjoy your drink. I have to behave when he's around but when he's not around I don't have to look over my shoulder to see if he's watching me and telling me to behave. But that's before a few years after we got married, it got to the point where I wasn't allowed out of his sight at all. Because he thinks I'm gonna walk off with another man."

As one participant spoke of how alcohol was openly used in their home with the supervision of her parents:

"It was when I was really young, because mum and dad would give us a glass of wine when we had dinner. They would have wine and give us a little sherry glass of wine I was at least 8 years old back then. We were taught how to appreciate alcohol and we were taught how to drink alcohol responsibly. So when we reached 16 years old we didn't get into binge drinking or go out and have heaps of it, although we had access to alcohol. It was more like this is how you have it with your meal, blah, blah, blah, and this is the different types. We used to have a little bit of Khalua then with a bit of milk. My father is European but my mother is Niuean, so drinking was an open practice, I didn't have to hide any of that."

Another woman talked about being cautious when drinking with family because they would tell her off for behaving disrespectfully (drunk and disorderly), this is what she said:

"…..if it's my uncles and aunties I would have to behave when drinking because family would tell me off if they think I am being disrespectful. So I wouldn't joke a lot with family and I have to behave differently around family especially around the older ones, because you'll get a slap from them (laughs).

Another participant in her thirties commented,

"There are a lot of young Niuean girls who feel intimidated to drink because their parents are around, they wouldn't drink if their parents are there."

Most of the Niuean participants said they would only drink with close NZ born male relatives like a brother or cousin. Otherwise drinking with Niuean male relatives is not preferred by most of these women.

"In my family I only drink with 2 or 3 male/female cousins that are my age group that I really trust and stuff. But with my uncle and aunties and other family I hardly drink around them. …….. I just think with your own family they are the first ones to judge you the most and the meanest, the cruellest about it. You have uncles who say don't be bad, don't smoke, don't drink and its funny they're the ones who talk about it and now their kids are drinking at the age of 13 and 16. I just think its double standards."

Drinking whilst with family sometimes became competitive and could turn into arguments and fights. Some participants felt that drinking with family was frustrating because of these negative consequences.

"……because your family they like to compete against you, I can drink more than you, I can drink more than you. Then "hello" they are on the ground. Especially my [name of sibling], I think family like to scrap (fight). It's like they say things "that [whine] you up" and next thing you know you're having a fight.

The desire to be seen is cool, and being popular, pretending to handle alcohol use and to know how to drink fast and large amounts.

Risky Behaviour

Another younger participant reflected on her personal experiences with alcohol and drugs whilst among her peer group made up of female cousins of similar age and friends. The desire to be seen is cool, and being popular, pretending to handle alcohol use and to know how to drink fast and large amounts. To impress peers became a competition who can drink and smoke weed the hardest and who can last, with out getting sick or going to sleep or stopping.

"…..I think that night we had a 40-ounce of Jim Beam, mixed with coke. I was the youngest in the group and they were probably 2-3 years older. I pretty much started drinking at a young age its cos, at that age (13 years) we were smoking drugs already so I guess that night we just wanted a change and decided to have alcohol but I didn't tell them that I hadn't gotten wasted before. They thought I was a bit of a professional, "hello", not even (laughs). We were trying to be bad asses, you know back then trying to be down, impress them, yeah, pretty much! It's always a competition who can be the most hardest and smoke the most dak (Cannabis), or who can drink the most alcohol and handle, yeah that was it. We used to

scrape up our bus fare to get bottom shelf stuff (laughs); $10 bottles no mix we used to drink them straight like that. Like "Crystov 62", "Mad Jacks Rum", vodka, Mississippi Moonshine, all the grouse stuff you'll never see at the pub, we would drink it straight."

A few other participants talked about exceeding their limits when drinking alcohol, one young woman said she would drink until she blacked out. One participant talked about her drunken behaviour and another reported not being able to remember what had happened:

"…uh…I just keep drinking until I black out or I can't see properly or I don't know what I'm doing."

Drinking and pregnancy

Some of the women spoke of their drinking patterns which tended to be heavy at first prior to falling pregnant. Most women stopped drinking during their pregnancy. A couple of participants mentioned after the baby was born they resumed their drinking. But for others they found the amount of alcohol consumed and pace at which they drank reduced. Lack of finance and disposable income to buy alcohol drinks was limited and going out and staying out late was restricted due to their added responsibilities:

"I have a baby now, I have responsibilities, like I can't just go and get wasted and end up at somebody's house like I used too. I have to come home to my daughter, its like she's always on my mind when I'm drinking, that's a good thing, because it controls my drinking when I think about her, I don't get as wasted. Before I found out I was pregnant I was still drinking pretty hard but since I found out I went cold turkey, no alcohol what so ever! And now that I've had her, I can't drink as much, and I tend to come home earlier because she's constantly on my mind, when I'm drinking and stuff."

One of the participants reported falling pregnant as a consequence of getting drunk. It wasn't a relationship but more of a one night stand. Being pregnant and unaware of the consequence of alcohol she bravely shares her story with me, she mentions the following:

"My lifestyle changed, I was 18 years old when I fell pregnant and it was because of the drinking, it wasn't a relationship. I just woke up one morning and found myself in bed with a Niue man. Because I've been to their party it changed dramatically the day I started drinking and the day I was pregnant. Until the baby was born I didn't drink but after the baby was born I continued to drink which was a way of forgetting things. I had the baby at 18 years and almost 19 years I started drinking again. ….." It was a way of forgetting about the problems and falling pregnant at 18 years, there were a lot of issues I haven't addressed because in our culture it a bad thing falling pregnant without a father or partner, it was a problem".

Sexual Behaviour

The effect of alcohol on sexual behaviour and alcohol was also talked about it was a common concern affecting participants who drank with men in relation to being intoxicated from excessive alcohol consumption. The women were concerned about getting a reputation for encouraging sexual behaviour. It was common for the participants to be approached by men in drinking environments.

One young participant talked about her behaviour when she was drinking excessively;

"A lot of women are taken advantage of, sometimes you feel ashamed that you let yourself get used and stuff like that. I've seen a lot of violence, my cousin and her partner, they were so drunk that her partner came to wake us up to witness him giving her a hiding, they used to fight over the kids, they were tearing their child apart, down the middle, she stayed with him for years even though he was an arsehole to her. Some women disrespect their bodies and become skanky. I was like that especially when my dad died I drank a lot, I spoke to this guy who was describing me earlier, behaving disrespectful to herself, she was all up on this guy, I asked him if he knew who he was talking about. It was me he was describing. I used to be like that back then, I've change".

Discussion

The drinking styles of the NZ born participants in the study were described as at risk behaviour. The attitudes of New Zealand born women, is evolving into a dominant youth culture with attitudes regarding how much you can drink, how fast, or to be cool in handling your alcohol. Getting wasted was a sign of having a good time. The kind of behaviour spoken about by these participants clearly showed the extent of their risk taking drinking patterns. Binge drinking was described as the common drinking behaviour. The negative affects for some women included safety issues such as, unwanted pregnancy, unsafe sex, potential for rape or sexual abuse to occur, being taken advantage of sexually, permissive behaviour when drunk, giving the wrong messages, arguments and fights. New Zealand born women preferred drinking with other females but a few others participants liked to drink with males. Most NZ Born participants preferred drinking at night and going

out to functions. Drinking at home before going out was seen to be cheaper then drinking over the bars. Drinking with family was reported to be "boring" this was seen as an issue for most New Zealand born participants and also reported not drinking with older relatives because of the kinds of drinking behaviour that may be offensive to family, parental disapproval, cultural restrictions and always having to behave respectful to family.

Summary

The findings from this study show that Niuean women are drinking more now then before. New Zealand born Niuean women identified that the risky drinking style and excess consumption was a concern.

In the past it was not accepted that Niuean women were able to consume alcohol. However, this study shows that there is an increase in heavy alcohol consumption to the point of becoming unconscious from intoxication. This can have very harmful effects on a women's body. Intervention programmes could look at the health related effects on a women's body and identify the extent of heavy alcohol use, dependence and abuse patterns of consumption and the harm it has on their bodies and general health.

Drinking amongst family is also forbidden and most of the women preferred to drink with other women because of safety reasons, relating to each others common issues, a time to relax and socialise with others away from their daily responsibilities at home, the family and at work. Strategies for providing a safe and culturally appropriate environment, like the garage, could be promoted. Responsible host approaches to minimize harm and promote minimal to moderate drinking at home.

Health promotion and educational awareness programs on harm minimization strategies for alcohol consumption are an important aspect to reduce the harm of heavy alcohol consumption. For instance anti natal classes that are culturally appropriate within a Niuean context should look at the health and wellbeing of the Niuean women during and after pregnancy. Also focussing into other areas of concern around implementing safety strategies for women when going out for a drink at a party, club, pub or bar. For example, going out with other people that you trust and know who will look after you, awareness of drinking environments and ensuring safety for self and friends/family, organised transport if needed, carrying condoms, taking a mobile phone, tips on drinking slowly (pacing self) and eating food or snacks, having non-alcoholic drinks, having a break from alcohol, saying "no" or I've had enough.

There is further scope to develop education awareness packages based on the harm minimisation strategies, facts focusing on the effects of alcohol and substance use for community groups. For this recommendation harm minimisation would be preferable because of the younger Niuean population. Such strategies could include Pacific services dealing with youth culture, peer influence, relationships and family issues could include these as part of an alcohol education programmes.

The Community Development Model is also another strategy that challenges Niueans to look within your family, village, and the community and identify the issues related to alcohol consumption. This model empowers the Niuean community to identify and address problems within our Niuean community. This could start by changing our attitude and being more supportive to women in your family, village and community.

Acknowledgements

This study would not have been possible without the support from the Health Research Council of New Zealand, and Alcohol Advisory Council of New Zealand. A special thanks to all the Niuean women who participated and to Dr Helen Warren.

References

1. Statistics New Zealand Census. (2007). *Census New Zealand: Niuean - Population*. Retrieved 22 September, 2008, from http://www.stats.govt.nz
2. Alcohol Liquor Advisory Council of New Zealand (ALAC). (1997). *Vai Mamali: The Place of Alcohol in the Lives of Niuean people living in Aotearoa New Zealand* (Research findings No. No.5). Wellington, New Zealand.
3. Tautolo, E. (2004). *Ethnic differences in the prevalence of alcohol consumption in Pacific high school students.* Auckland: Health Research Council Summer studentship/ University of Auckland.
4. Alcohol Advisory Council of New Zealand (ALAC). (2004). *Guidelines for Alcohol and Drug Services Working with Women*. Wellington, New Zealand.
5. Driver, R. (1998). *A needs assessment regarding appropriate alcohol resources for Pacific Islands people* (No. Research report to ALAC). Auckland: Pacific Island alcohol and drug services/Alcohol Liquor Advisory Council.
6. Huakau, J, Asiasiga. L, Ford. M, Pledger. M, Casswell, S. Suaalii-Sauni. T, Lima. I, (2005). *New Zealand Pacific peoples' drinking style: too much or nothing at all.* The New Zealand Medical Journal, June Vol 118 No 1216 pp 1-10.
7. Tautolo, E. (2005). *Alcohol Consumption and associated protective factors among Pacific secondary school students.* Unpublished MHSci Thesis, University of Auckland, Auckland.
8. Schaaf, D. (2005). *Cardiovascular disease risk factors in Pacific adolescents: The Auckland High School Heart Survey.* .Unpublished PhD Thesis, University of Auckland, Auckland
9. Banwell, C.(1986). *The Place of Alcohol in the lives of Cook Island Women Living in Auckland (No. 2)*. Auckland: Department Of Anthropology, University of Auckland.
10. Neich, S.,& Park, J.(1988). *The Place of Alcohol in the lives of some Samoan women in Auckland. (No.12).* Department of Anthropology, University of Auckland.
11. Nosa, V. (2005). *The Perceptions and use of Alcohol amongst Niuean men living in Auckland,* Unpublished PhD thesis, University of Auckland, Auckland.
12. Stanhope, M. J & Prior M.A.I, "The Tokelau migrant study: alcohol consumption in two environments" in *New Zealand Medical Journal Nov 28, (1979).*
13. Matatumua, A. (1969). *Alcohol and the Islander, A study of the problems associated with alcohol amongst Samoans in Dunedin.* M.B.Ch.B Thesis, University Of Otago, New Zealand.
14. Wessen A, Hooper, A. Huntsman, J. Salmond, C. Prior, I (1992). *Migration and Health in a small society: Tokelau,* Oxford, The Claredon Press.

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The interface between cultural understandings: Negotiating new spaces for Pacific mental health

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Maui Hudson descends from the iwi of Whakatohea, Ngaruahine and Te Mahurehure. He works at the Institute of Environmental Science and Research Ltd (ESR) where he engages with Māori and Pacific communities, provides cultural and ethical advice to researchers, and develops research. He is actively involved in research projects at the interface of indigenous knowledge and science including Te Hau Mihi Ata: Mātauranga Māori and Science. Maui is also the principal investigator on the Health Research Council (HRC) funded project "Nga Tohu o te Ora: Traditional Maori Wellness Outcome Measures" and has research interests in the area of ethics. Maui is a member of the Health Research Council Ethics Committee (HRCEC) and the Advisory Committee on Assisted Reproductive Technologies (ACART). He currently lives in Rotorua with his wife and three children.

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Abstract

This theoretical paper introduces the concept of the "negotiated space", a model developed by Linda Tuhiwai Smith, Maui Hudson and colleagues describing the interface between different worldviews and knowledge systems. This is primarily a conceptual space of intersection in-between different ways of knowing and meaning making, such as, the Pacific indigenous reference and the dominant Western mental health paradigm of the bio-psycho-social.

When developing Pacific models of care, the "negotiated space" provides room to explore the relationship between different (and often conflicting) cultural understandings of mental health and illness. The "negotiated space" is a place of purposive re-encounter, reconstructing and re-balancing of ideas and values in complementary realignments that have resonance for Pacific peoples living in Western oriented societies.

This requires making explicit the competing epistemologies of the Pacific indigenous worldviews and references alongside the bio-psycho-social and identifying the assumptions implicit in the operating logic of each. This is a precursor to being empowered to negotiate, resolve and better comprehend the cultural conflict between the different understandings. This article theorises multiple patterns of possibility of resolutions and relationships within the negotiated space relevant to research, evaluation, model, service development and quality assurance within Pacific mental health.

Introduction

With a disproportionate burden of mental illness among Pacific peoples, there is increasing openness to developing services that are responsive to cultural needs of Pacific peoples affected by mental illness. The development of Pacific models of care, cultural competencies and Pacific research methodologies acknowledge the value of applying indigenous cultural values in contemporary settings.

It is recognised, however, that check-lists and menus of 'Pacific values' provide only one dimension, sometimes idealist and nostalgic, to the complex and multi-faceted contemporary realities faced by Pacific peoples living in New Zealand. This article examines the model of the "negotiated space" and discusses its potential application to the Pacific mental health sector.[1] This concept was originally developed to be applied to the often conflicting interface between indigenous Maori and Western scientific knowledge.[1] This paper draws on the model of "negotiated space"

to think about the relationship between Pacific indigenous knowledge and the dominant Western mental health paradigm. This paper provides an overview to a longer occasional paper sponsored by Le Va.

The negotiated space provides a model for using indigenous references as "foundation" while maintaining the capacity and scope to draw on any or all useful and relevant cultural nodes of knowledge. It also provides conceptual space in-between competing cultural paradigms (such as the bio-psycho-social and indigenous Pacific). This is purposive, open and creative space which allows tensions and conflicts to be understood, sometimes mediated but ideally always approached constructively.

Ultimately negotiated space provides a way of thinking about the process of indigenous theorising. Practical examples include Pacific models of care, development of Pacific cultural competencies, Pacific research development and knowledge production. The key assumption underpinning the 'negotiated space' is that Pacific peoples have the agency and ability to choose from multiple knowledge bases. It is assumed that Pacific peoples are able to resolve cultural conflict, as opposed to being trapped between cultures. It is also implied that having more than one culture is advantageous over a mono-cultural existence.

Ultimately negotiated space provides a way of thinking about the process of indigenous theorising.

In this article, we theorise a multiplicity of processes and outcomes possible within the negotiated space, such as: bonding and establishing synergies via similarities with other cultural knowledge perspectives; leveraging off the creative energy and dialectics of opposing cultural viewpoints; synthesising new cultural responses that draw from multiple cultural influences; dialogically choosing to approach some things wholly as prescribed by the wisdom of indigenous paradigm, and in other contexts, choosing to be guided completely by Western knowledge, such as the bio-psycho-social. The ideas put forward here are not intended to be prescriptive or exhaustive; rather they describe initial attempts at theorising a range of intercultural options that might be possible with the "negotiated space".

An Overview of Pacific Mental Health in Aotearoa

It has only recently been recognised, courtesy of the over-sampling in Te Rau Hinengaro (The New Zealand Mental Health Survey) that Pacific peoples in New Zealand experience mental disorders at higher proportions than the general population: 25 percent compared with 20.7 percent of the overall New Zealand population.[2] Close to half (46.5%) had experienced a mental disorder at some stage during their lifetime.[2]

This same study showed us that only one quarter (25%) of Pacific peoples with a serious mental disorder access mental health services compared to more than half (58%) of the total New Zealand population.[2] This pattern of "greater need" compounded by the trend of being less likely to have this need met, is a disempowering combination which one becomes quite familiar with when reviewing Pacific peoples' health in New Zealand.

Information from the primary health care setting shows that Pacific peoples are less likely to have a mental health issue arise as a problem - a rate of 0.8 for Pacific peoples, compared to 8.3 for the total New Zealand population (per 100 visits).[3] The same data reveals emergency referral rates in the primary care setting for Pacific peoples are sevenfold (4.3) the rate of the total New Zealand population (0.6).[3]

Particularly concerning are the high rates of schizophrenia, paranoia and acute psychotic disorders among Pacific peoples, accounting for two thirds (66%) of Pacific inpatient episodes compared to 39% of New Zealand European episodes and less than half (48%) of the overall population.[4] Among young people (2002-2006), the most common reasons for inpatient mental health admissions amongst Pacific young people (aged 15-24) were for schizophrenia, (48.0 per 100,000) followed by schizotypal and delusional disorders (15.1 per 100,000), compared to 26.8 and 10.9 respectively, for the total New Zealand youth population.[5]

The Ministry of Health have identified that Pacific peoples are more likely to use acute inpatient units (198 versus 170, per 100,000) and stay longer compared to the total New Zealand population.[7] Other research shows that Pacific peoples have the highest average cost of adult inpatient and community episodes; with the average (cost) weighting for Pacific peoples being 25% above the national average for inpatient episodes and 44% above the national average for community episodes.[4]

Add to this picture, the fact that Pacific people make up 6% of New Zealand's total population, yet they constitute 12% of all involuntary inpatient consumers.[4] And Pacific peoples' utilization of forensic psychiatric services is described by the Ministry of Health as "significantly elevated" (164%) compared to the general population.[6]

To summarise, the most current evidence informs us that Pacific peoples have a higher prevalence of mental illness, particularly in the area of serious mental illness, with high rates of involuntary, forensic and acute admissions.[2,3,4,5,6,7] This is compounded by

low or late presentation to services[2,3,4,5,6] and when mental health services are accessed by Pacific peoples, they are recorded as having the longest and most costly stays.[4,7] Integrating all of these research findings establishes a fairly bleak vista of the state of Pacific mental health in New Zealand.

It is perhaps not surprising that the Ministry of Health has identified that building "responsive" services for Pacific peoples who are severely affected by mental illness and/or addiction "requires immediate emphasis".[8] There is an openness in this directive, to recognise that "responsive" services: "focus on recovery, reflect relevant cultural models of health, and take into account the clinical and cultural needs of people affected by mental illness and addiction".[8]

Many Pacific health and community leaders, such as Fuimaono Karl Pulotu-Endemann, have tirelessly advocated for Pacific peoples in the field of mental health. They have negotiated vital spaces for the articulation and development of cultural models of health for Pacific peoples.[9] One can assume that it is partly in deference to the "bleak vista" provided by empirical accounts of Pacific mental health and the documentation of the evidential failure of mainstream solutions that resources for such spaces have been possible. It is also testament to the mobilisation, commitment and passion demonstrated by the Pacific community.

There is now a growing body of writing about Pacific models of care,[10] with the publication of "Seitapu" being one contribution to ways of recognising cultural and clinical competencies in mental health practice.[11] As the work developing 'Pacific models of care' in mental health has gained impetus, there have been repeated calls for research into the theoretical thinking underpinning Pacific cultural models of care.[12,13]

Oceania's Library

If we are to understand the beliefs, ideas and values that influence and inform the behaviour and experiences of Pacific peoples relevant to mental health – then we have to understand the corresponding Pacific indigenous knowledge traditions these derive from. This recognises that systematic bodies of Samoan, Cook Islands, Tongan, Niue, Fiji, Tokelau, Tuvalu and other indigenous knowledge provide a phenomenological foundation for the cultural beliefs and ideas about mental illness; prevention, cause and treatment. The more the focus is on culture for cultural competency development, models of care, quality assurance, tool development and research, the more important it is to understand the operating logic and the foundational philosophy which filter worldviews and which direct culture 'as it is lived'.

The kind of research is what one Pacific scholar has called: "An exploration into "Oceania's library" (the knowledge its people possess)".[14] This is described by Okere, Njoku and Devisch as the process of "appropriation by cultures of their own rich genius".[15] It has been recognised that such exploratory work begins from ethnic-specific starting points (of cosmology, chants, language, rituals, protocols, collectively-owned stories, 'legends', songs, symbols, genealogies and festival) which provide rich sources of analytical, theoretical, and conceptual information and tools, as well as an abundant mine of ancient Pacific core values and ethics.[16]

When culture is understood as a system of logic with its own underpinning assumptions and internal coherence, words such as indigenous knowledge, cultural paradigms, worldview, and epistemes are often used interchangeably. Such terms tend to emphasise culture as a knowledge tradition which has epistemological and ontological functions.

Metaphorically, such views of culture invoke an entire eco-system of interrelated ideas, beliefs, values, knowledge and behaviours. This recognises that all parts of the system are all connected and are often interdependent. Within this vast interconnected system, there is a particular focus on the philosophical foundations directing the congruency and internal consistency of ideas, thinking, values and behaviours.

In mental health, this kind of work involves piecing together cultural beliefs, ideas, practices, and values relevant to mental health that are easily identified. It then involves attempts to ground and locate their place within indigenous knowledge systems and paradigms. This can be likened to taking small clusters or stars of existing thought and behaviour and trying to piece together their place in a greater constellation – within a wider universe of meaning. The night sky may hold the same set of stars, yet different people from different cultures see different constellations and ascribe different meanings to exactly the same night sky. This gives an idea of how mental health practitioners can be looking at the same symptoms but ascribing meanings from different cultural systems. For example, one sees Matariki and the other sees Pleiades, and applies the body of knowledge associated with those different perspectives.

A colonial legacy has meant that Pacific indigenous knowledge systems have been actively rejected by dominant Western paradigms (i.e., theological, philosophical, scientific) from initial cross-cultural contact. This experience of colonisation has meant that indigenous knowledge is not always easily accessed in contemporary settings.

Contemporary Pacific societies are challenged to develop theories of how ideas and perspectives

within indigenous knowledge systems cohere with each other, align, connect and form pathways of logic; create discourses of "truth" and dominoes of "reason". In contrast to being under-documented and difficult to access, the dominant Western paradigms of mental health are well documented and well recorded. In mental health currently, the reigning paradigm is described by Southwick & Solomona (up against indigenous Pacific understandings) as the "bio-psycho-social".[12] The bio-psycho-social model is informed by, but not identical to the empirically driven "medical model".[12]

Negotiated Space

The "negotiated space" is a model developed by Smith, Hudson and colleagues[1] to describe the interface between different worldviews and knowledge systems in a Maori and Western science context. This could be understood as an intercultural space: the in-between terrain where distinctive worldviews and knowledge bases enter into some form of engagement or relationship to potentially be expanded and innovated. This has parallels with Bhabha's third space, but is differentiated by being purposeful, controlled and reconstructive – with a range of intercultural outcomes (rather than deconstructive with hybridity as exclusive product).[17]

In an insightful study looking at Pacific mental health recruitment and retention issues, Southwick and Solomona identified several salient points. They write:

> *"Work has been conducted to establish that that there is a cultural difference of understanding between the body of knowledge that constitutes the western bio-psycho-social explanation of mental health and mental illness and Pacific peoples' holistic world-views… Little research has occurred to mediate this polarity… To date these world-views have been presented as polar and mutually exclusive bodies of knowledge".*[12]

Southwick and Solomona go on to suggest that the failure to translate western concepts of mental health and illness into Pacific concepts and vice versa results in "disconnected discourses" for both the Pacific community and Pacific mental health workers.[12] The "negotiated space" provides the conceptual opportunity for establishing coherence, connections - and at the very least, 'relationship'. This is in direct contrast to the dissonance and disengagement of "disconnected discourses".

A simple (Pacific) and somewhat appropriated definition of negotiated space is that it creates a relationship of *va* between cultural knowledge systems. *Va* is a concept shared among many Pacific cultures which refers to a "space that relates" between people, a "socio-spatial" way of conceiving of relationships.[18] With regard to negotiated space, we talking about a purposive spatial site of relationship between knowledge systems; a terrain of intersection where both commonalities and differences can be explored and understood. As *va* is a culturally located concept, it necessitates that this *va* is guided by principles of balance, reciprocity and respect - although all is possible in the *va*.

The negotiated space is a mandated, deliberately depoliticised space that provides room for engagement and knowledge exchange. It is 'neutral' yet requires an acknowledgement of the shared histories of both parties and a commitment to ongoing relationship. It is a reprieve from an explicitly political (and often polemic) relationship (or lack of relationship). It is a place that is stimulated by recognising basic tenets of mutuality and focusing on purposive adaptation and retention, a balance between self-determined growth and self-conscious maintenance. This requires strategies of recurring separation for reflection as well as engagement with other knowledge traditions. This ideally triggers regenerative critique: an ever-shifting spiral, constantly extending and retracting which draws on the stimuli of other and returns reflectively back to core, not necessarily ever returning back to exactly the same place.

The "negotiated space" is characterised as being *purposive* in the sense that it engenders both agency and power. It provides a theoretical alternative to the well established paradigm of being "caught-between-two-worlds".[19] Often people in this situation are often cast as conflicted, stressed and susceptible to maladies such as "cultural schizophrenia".[19]
Rather, the negotiated space model opens up the confined quarters of the "caught-between" model of intercultural clash. It provides a larger landscape of different ways of tending, resolving, negotiating and mediating a *relationship* (that is, *teu le va*) between cultures and knowledge traditions. This requires having the confidence to establish a relationship and the confidence to negotiate the nature of that relationship.

Constructing knowledge is an important feature of maintaining the vitality of a culture as (cultural) knowledge must constantly expand and evolve to deal with new environments and situations.[1] All knowledge is first and foremost local knowledge.[15] The difference between knowledge systems lies in the ways people move and assemble knowledge and in the ways in which people; practices and places become connected and form knowledge traditions.[20]

As cultural knowledge systems come into contact with each other and interact, the cross-cultural contact creates a stimulus for exchange and growth. One of the drivers for creating and engaging in a "negotiated space" is the desire to be transformed by the "Other" on the basis of appropriating that which is useful from the 'Other' on one's own terms. As Smith et al write:

"The resilience of a cultural knowledge system is dependent on its ability to respond to transformation and change, to adapt and explain new phenomena in a way that retains a sense of resonance and coherence with the existing philosophies and psychologies of their own knowledge system".[1]

It is argued here that the concept of negotiated space has relevant application to some of the most difficult issues facing the Pacific mental health sector. This includes mediating some of the polarity between Western and Pacific indigenous paradigms of aetiology, illness, treatment.

While the rebuilding and vitalisation of paradigms as separate coherent knowledge systems is a necessary pretext to engagement and interaction, the adoption of separation strategies can potentially lead to an insular lack of critical reflection and analysis. Not being open to critique in the face of changing environments creates challenges to how one's cultural knowledge maintains relevance as the environment changes over time. Implicit to the negotiated space is balancing the desire to uphold distinctive cultural knowledge spaces with openness to innovation and change.
The negotiated space affords opportunities for people to negotiate:

- their relationship with existing cultural knowledge; [critical reflection]
- their relationship with new cultural knowledge; [knowledge exchange]
- their relationship with different systems of meaning and knowing; [understanding the limits of knowledge systems]
- their relationship with culturally distinctive parties; [power relationships] and
- how individuals manage cultural choices that arise from having awareness and access to more than one culture [dealing with multiplicity].

As well as being useful between "paradigms", it is proposed that the negotiated space has applicability when thinking about how Pacific individuals and families in New Zealand live intercultural realities.

Possible Process and Outcomes

Theorising about the patterns of possibility engendered in the "negotiated space" has led to hypotheses about many different combinations of process and resolution of intercultural difference (and similarities). All of these possibilities refute narrowly conceived, linear models of "acculturation" which imply one-way-traffic from indigenous to Western.

In the context of Pacific mental health there is recognition that there will be no single best model. Gaining the best outcomes for Pacific mental health consumers requires having a range of services to choose from. This will vary from mainstream services enhancing the effectiveness of their cultural interface through to Pacific-centred service models that selectively use mainstream expertise. Increasing diversity will create an innovative service environment, more responsive to specific, situated and local challenges.

Reconciliation and Connections

While the negotiated space provides opportunities for conceptual fight, it also values principles of equation, balance and alignment.[21] *Teu le va* is often translated as "making beautiful the *va*": balance, symmetry, beauty – these are unapologetically "Pacific" aesthetic values strongly linked to wellbeing and good outcome.[22] It is suggested that the link between balance, aesthetic, beauty and health / wellbeing / optimal outcome, remains a salient insight critical and applicable to contemporary conditions.

As a matter of preference, connections are made and conflict minimised out of concern for the relationship and a desire for harmony and symmetry within the engagement.[22] Incongruence may be reconciled via a process of *talanoa* and dialogue,[23] or the distance between concepts may be found to be incommensurable. In these cases, the ability to know the nature of the distance between ideas or values that cannot be mediated or reconciled is understood to be a valuable outcome.

The negotiated space is a consciously neutral place where points of "same" can be discovered. This resists binary positioning of culture and enables room for common ground. It seems unlikely there are not some shared elements - if not many shared elements - that betray the binary ways cultures are understood to be different.

Dialectical Energy: The dynamic interplay of opposing viewpoints

The title above was taken from one of the few research projects on Pacific mental health examining the Samoan perspective of self and how this is connected to wellbeing.[24] When comparing Samoan and Palagi conceptualisations of self the research team discovered considerable differences: collective versus individual, spiritual versus secular, holistic versus reductionist, relativist versus universalist.[24] The team identified challenges associated with these differences but chose to consider "these distinctions as *dialectics* as this term captures the potential for change that can occur through the dynamic interplay of opposing viewpoints".[24]

This draws on Hegel's famous theory of dialectics, which has three stages: thesis, antithesis and synthesis. In brief, this suggests that the mind generally moves one position (thesis) to the other

side of this argument (antithesis) finally discovering a deeper unity from which the two sides are derived (synthesis). Finding unity in contradiction and incongruence with a preference for balance, affinity and equation is in alignment with the way Tamasese Efi describes the Samoan indigenous reference.[21]

Dialectical interplay and resolution is a creative response to situations where one is faced with incongruent values and ideas sourced to different cultural knowledge systems. In a practical sense this would be a "best of both worlds" synergy or balance that can be evidenced in "Seitapu".[11]

Dialogic Independence and Choices

Another potential outcome of the negotiated space is a 'dialogic' response to choices that arise from having access to more than one knowledge tradition. In this case, two cultural knowledge systems come into contact with one another yet remain intact without blending or fusing. This enables the option of deliberately weighing, sifting and then choosing ideas (based on merit and applicability) from one coherent knowledge paradigm over the other. This contrasts to a dialectic process, whereby there is a merger of some sort into a new position. Here different positions do not intertwine. For example, models of care (either bio-psycho-social or Pacific) remain largely unaffected by the other, but there is consequently a greater appreciation of when each is most useful. Thus, the nature of the difference or distance (or the va) between two positions is well understood and it not necessary to mediate these differences.

The agency and freedom of Pacific peoples to choose an indigenous (treatment) option or a bio-psycho-social option depending on context is affirmed. This resists acts of familiarizing and appropriating "the other into the controlled world of the self, to own the other".[25] It recognises the freedom of the 'other' to exist as 'other' without being constrained (or contained) by expectations (or obligations) to be *same* to enter or maintain a relationship.

Conclusion

To us, the negotiated space is the watering hole, the marae atea, the debating chamber, the kava circle. It is a space where intercultural negotiation and dialogue is given permission to take place. It is proposed that this space enables and empower cultural innovation, acts of imaginative rediscovery, indigenous knowledge theorising and the creation of new relationships (va) with other forms of cultural knowledge and understanding. In a culturally diverse society, negotiating intercultural space is an on-going and never-ending process which both promotes and upholds individual as well as community identities.

Given the increasing prevalence of mental health issues amongst Pacific peoples in New Zealand it is vital that culturally appropriate models of care are developed. While there is a growing body of articulating Pacific cultural values and beliefs, often such texts are silent on the ways that these values are in tension with "mainstream" values and beliefs.

Ideally, the negotiated space is a conceptual enabler aiming to harness the dialectics of that tension and open up the interface to enable a multitude of creative possibilities. Within this space we can understand, mediate, and negotiate intercultural conflict, hopefully emerging with the most optimal resolutions that will serve Pacific peoples. It is expected that outcomes, agreements or solutions sourced from within the "negotiated space" will always be local, specific, situated, contingent and peculiar to their own time, space and context.

Theorising the negotiated space concept has drawn on the Pacific indigenous reference, centring the notion of 'va' and privileging balance, symmetry, aesthetic and beauty as ideal outcomes within a broader harmonic unity of alignment and equation.

The model of "negotiated space" affirms that Pacific peoples have the agency and ability to choose the "best of both" worlds, to negotiate and resolve cultural conflict – and that these are the opportunities afforded by a multicultural existence. Whether it is dialectic fusion, carefully considered dialogic choices, seeking surface similarities or quests for deeper unity – the aim is establishing positive and life-affirming relationships across cultural divides.

To us, the negotiated space is the watering hole, the marae atea, the debating chamber, the kava circle.

There is a need to re-value Pacific indigenous contributions to world or "commonwealth" knowledge about mental health and wellbeing. The negotiated space provides one option for indigenous theorising. The negotiated space models a way of sourcing the indigenous reference and providing continuing energy and momentum to the rich knowledge legacy passed on to us by our ancestors. It aims to locate this work meaningfully in the heart of the complex, changing and challenging contemporary realities faced by Pacific communities living in Aotearoa / New Zealand.

References

1. Smith, LT, Hudson, M, Hemi, M, Tiakiwai, S, Joseph, R, Barrett, A, Dunn, M. The Negotiated Space [unpublished paper Te Hau Mihi Ata: Mātauranga Māori, Science and Biotechnology]. Waikato: Waikato University; 2008.
2. Foliaki, S, Kokaua, J, Schaaf, D, & Tukuitonga, C. Pacific People. In: Oakley-Browne, MA, Wells, JE, Scott, KE, editors. Te Rau Hinengaro: The New Zealand Mental Health Survey. Wellington: Ministry of Health; 2006. p. 178-208. *(p185)*
3. Davis, P, Suaali'i-Sauni, T, Lay-Yee, P, Pearson, J. Pacific Patterns in Primary Health Care: A Comparison of Pacific Patients and all patient visits to doctors. Wellington: Ministry of Health; 2005. *(pg 35)*
4. Pulotu-Endemann, FK, Annandale, M, Instone, A. A Pacific Perspective on the NZ Mental Health Classification and Outcomes Study (CAOS). Wellington: Mental Health Commission; 2004. *(pg20)*
5. Craig, E, Taufa, S, Jackson, C., & Yeo-Han, D. The Health of Pacific Children and Young People in New Zealand. Auckland: Department of Paediatrics, School of Population Health, University of Auckland. In press 2008. *(pg 268)*
6. Ministry of Health. The Health of Pacific Peoples: Pacific Mental Health Profile. Wellington: Ministry of Health; 2005.
7. Ministry of Health. Te Orau Ora: Pacific Mental Health Profile. Wellington: Ministry of Health; 2005.
8. Ministry of Health. Te Kokiri: The Mental Health and Addiction Action Plan 2006-2015. Wellington: Ministry of Health; 2006. *(pg27)*
9. Mental Health Commission. Te Haerenga mo te Whakaoranga 1996-2006: Journeys of Recovery for the New Zealand Mental Health Sector. Wellington: Mental Health Commission; 2007. *(pg172)*
10. Agnew, F, Pulotu-Endemann, FK, Robinson, G, Suaali'i-Sauni, S, Warren, H, Wheeler, A, Erick, M, Hingano, T, Schmidt-Sopoaga, H, Pacific Models of Mental Health Service Delivery in New Zealand "PMMHSD" Project. Auckland: Health Research Council of New Zealand; 2004.
11. Pulotu-Endemann, K. Suaali'i-Sauni, S, Lui, D, McNicholas, T, Milne, M, & Gibbs, T. Seitapu Pacific Mental Health and Addicition Clinical and Cultural Competencies Framework. Auckland: Te Pou; 2007.
12. Southwick, M, & Solomona, M. Improving Recruitment and Retention for the Pacific Mental Health Workforce: Feasibility Study" Auckland: Te Pou o te Whakaaro Nui; 2007. *(pg23)*
13. Tiatia, J. Pacific Cultural Competencies: A Literature Review. Wellington: Ministry of Health; 2008.
14. Subramani. The Oceanic Imaginary. The Contemporary Pacific. 2001;13(1):149-162.
15. Okere, T, Njoku, C, Devish, R. All Knowledge is First of all Local Knowledge: An Introduction. Africa Development. 2005;XXX(3):1-19.
16. Mila-Schaaf, K. Workshop Report. Regional Pacific Ethics of Knowledge Production Workshop. 2007 Nov 13-15; Tofamamao, Apia, Samoa. Wellington: UNESCO; 2008.
17. Bhabha, H. Cultural Diversity and Cultural Differences. In: Ashcroft, B, Griffiths, G, Tiffin, H, editors. The Post-Colonial Studies Reader, New York: Routledge; 1995. p. 206-212.
18. Ka'ili, T. Tauhi va: nurturing Tongan sociospatial ties in Maui and beyond. The Contemporary Pacific. 2005;17(1):83-115.
19. Waldram, J. Revenge of the Windigo: The construction of the mind and mental health of North American Aboriginal Peoples. Toronto: University of Toronto Press; 2004
20. Turnbull, D. Comparing knowledge traditions: working with multiplicity, sustaining criticism and avoiding 'epistemic charity'. In: Proceeding of the Indigenous Knowledges Conference: Reconciling Academic Priorities with Indigenous Realities. June 22-25. Wellington: Victoria University; 2005. p. 169-178.
21. Tamasese Efi, T.T.T. Keynote Address: Bio-Ethics and the Samoan Indigenous Reference. Mila-Schaaf, K. Workshop Report. Regional Pacific Ethics of Knowledge Production Workshop. 2007 Nov 13-15; Tofamamao, Apia, Samoa. Wellington: UNESCO; 2008. p79-89
22. Ka'ili, T. Tauhi Va: Creating Beauty through the art of Socio-spatial Relations [dissertation]. Department of Anthropology: University of Washington; 2008.
23. Halapua, S. Peace, Conflict and Development: Walking the Knife-Edged Pathways to Peace [article on the internet]. Fiji: Pacific Islands Report. [Updated July 8 2003; Cited July 1 2008]. Available from: http://166.122.164.43/archive/2003/July/07-08-halapua.htm
24. Bush, A, Collings, S, Tamasese, K, Waldegrave C. Samoan and Psychiatrists' perspectives on self: qualitative comparison. Australian and New Zealand Journal of Psychiatry 2005; 621-626
25. Gurevitch, V.D. The Power of Not-Understanding: The Meeting of Conflicting Identities. Journal of Applied Behavioral Science 1989; 25; 161-173

Exploring the 'cultural' in cultural competencies in Pacific mental health

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Abstract

Cultural competency is about the ability of individuals and systems to respond respectfully and effectively to the cultural needs of peoples of all cultures. Its general attributes include knowledge, attitudes, skills and professional judgment. In Pacific mental health, 'the cultural' is generally understood to be ethnic culture. Accordingly, Pacific cultural competencies assume ethnic specific markers. In mental health Pacific cultural competencies has seen a blending of cultural and clinical beliefs and practices. This paper provides an overview of five key theme areas arising from Auckland-based ethnic-specific Pacific workshop data: language, family, tapu relationships, skills and organisation policy. Workshop participants comprised of Pacific mental health providers, Pacific consumers, family members of Pacific consumers and members of the Pacific community members. This paper purports that identifying the perceptions of different Pacific groups on ethnic-specific elements of cultural competencies are necessary to build and strengthen the capacity and capability of mental health services to provide culturally relevant services.

Introduction

Pacific peoples are a dynamic part of the New Zealand (NZ) population who have influenced this country's culture via sports, arts, music, television, academic, political and other mediums. Pacific motifs and languages have been adopted and incorporated into many facets of NZ life.

In terms of a demographic profile of Pacific peoples living in NZ, this population continues to increase age, and influence the demographic pattern, social cultural characteristics and overall health status of NZ. Currently they represent 6.9% of the total population. The largest Pacific group are the Samoans (49% of the Pacific population) followed by Cook Islands Maori (22%), Tongan (19%), Niuean (8.5%), Fijian (3.7%), Tokelauan (2.6%) and Tuvaluan (1%) groups.[2] The Pacific population is ethnically diverse,[3] with some commonalities and differences.††

When speaking of Pacific cultures, beliefs and values; it generally encompasses key principles such as respect, love, service and reciprocity. For the majority of Pacific peoples, good health is perceived as a balanced state of physical, spiritual, mental, family and relational wellbeing, that is, more than just an absence of disease. An individual's identity, health and well being are dependent on family connections, heritage, roles and responsibilities. Mental illness and addictions are perceived differently to western understandings and therefore the treatment sought is one that is matched to their understandings.[1] These treatments include the important role of kin networks in diagnosis and treatment recovery and the recognition of the role of traditional healers in treatment.

Current literature suggests that they are more exposed to risk factors for poor health, have high rates of mental illness and experience barriers to

†† Commonalities include mythology, genealogy, belief in Christianity, and family importance. Areas of diversity include language, protocols, etiquette, belief systems, perceptions of illnesses and treatment and prevention (See Table 1 for a description of Anthropological diversities).

accessing any health service.[4-6] In terms of mental health, the National NZ Mental Health survey (Te Rau Hinengaro) conducted between 2003 and 2004 found that Pacific peoples had high rates of mental illness (25%) compared with 20.7% for the general NZ population. Pacific peoples also had a higher prevalence of suicidal ideation (4.5%) and suicide attempts (1.2%). Of those who had experienced a serious mental disorder only 25% visited any health service compared with 58% of the general population. The prevalence of mental disorder was higher among NZ-born Pacific people than Island-born Pacific people. Relative to need, Pacific peoples are less likely than the total population to access mental health services.[6]

This paper argues that because of the heterogenous nature of Pacific cultures, Pacific cultural competencies must be flexible.

Working with Pacific people in mental health requires working through the cultural nuances of their perceptions of illness, treatment and wellbeing. This process requires appreciation of the ethno-cultural beliefs and values of Pacific peoples. With most traditional Pacific groups, cultural competency includes understanding the spiritual aspects of Pacific mental illnesses and health belief systems.[7] This involves exploring notions of *tapu* (or the sacred). These concepts must be understood within their cultural contexts in order to have meaning. According to Sutton,[8] understanding the meaning frameworks of ethnic groups is "integral to eliminating health care disparities and providing high-quality patient care" (p58). Reports by the Ministry of Health,[9] and the Mental Health Commission,[10] highlight the need for more nuanced understandings of cultural competency.[‡‡]

This paper is an overview of the findings from five ethnic-specific Pacific workshops on cultural competency in mental health, held in Auckland, 2004. This paper argues that because of the heterogenous nature of Pacific cultures, Pacific cultural competencies must be flexible. It suggests that Pacific culture in mental health is about ethnic culture and so cultural competencies are defined by ethnic markers. Issues of language, family and *tapu* feature prominently as core to what constitutes these markers. Also important in the discussion of cultural competencies is how workers skills and organisational policies might employ cultural perceptions and markers to promote culturally relevant service provision for Pacific peoples. It is important to note that this paper is a synthesis of Pacific voices of the five ethnic workshops and a full discussion of each of the five workshops can be found online at: http://www.crrc.co.nz/publications.php.

Method

Data Collection

Five Pacific ethnic-specific workshops were carried out in 2004 on the concept of cultural competencies.[§§] These five ethnic groups include Cook Island, Tongan, Fijian, Niuean and Samoan ethnic groups. All focus groups were held in Auckland however some participants came from Wellington, Christchurch and Rarotonga[***]. The participants included Pacific mental health providers, Pacific consumers, family members of Pacific consumers and general community members. Participants were invited to participate in facilitated focus groups, in Auckland, to discuss indigenous perceptions of mental health and cultural competencies. There were approximately 200 participants collectively from the ethnic-specific workshops.

The focus groups provided discussion on these areas: ethnic culture and mental health; ethnic culture and mental health treatment; practical application skills; and evaluation and/or assessment and/or measurements of cultural competency. These areas derive from a framework that was adopted by the majority of the workshop groups. This was aimed to ensure a level of consistency in discussion areas. Focus group discussions from each workshop were conducted both in the English language and in the ethnic languages of Samoa, Tonga, Niue, Cook Islands and Fiji. Most of the focus group sessions were audio-taped and transcribed verbatim and comments in the differing ethnic languages were translated into English.

Analysis

Analysis of the focus group discussion data was informed by grounded theory and general inductive methodologies,[11,12] whereby participants' experiences and dialogue formed the themes for analysis and discussion. However the level of analysis for this study does not extend towards the development of a theory which is customary with these methodologies. Analysis of the data involved collecting the data from the five workshops and dividing them into common themes that emerged. This collective thematic

[‡‡] See Table 2 for more detailed description and definitions on culture and cultural competency. [§§]The research was carried out as an internal service project on behalf of the then Pacific Mental Health and Addictions Service (PMHAS), Waitemata District Health Board (WDHB). Written and verbal consent to participate was obtained from participants before focus group sessions began. *** It is assumed that those participants who stated being from Rarotonga were in Auckland at the time of the focus group and so were invited to participate.

data was then summarised and presented under appropriate headings. To avoid interpretive bias and to triangulate the reliability and validity of the data the data was coded independently by the authors of this study and comparison of these was conducted.

Results

Five themes emerged from the collective data of the five workshops: language; family; tapu considerations; workers skills and organisational policy.

Language

Participants from the various workshops argued that efforts to destigmatise perceptions of mental health within the community require addressing the derogatory connotations employed by these terms (Table 3, no. 1).

The Samoan, Fijian, Cook Islands and Niuean workshops specifically talked about the need to examine the use of current ethnic specific words, in terms of the negative impacts they might have on mental health consumers. Words such as: neneva and pana'marama meaning 'stupid' or 'gone bonkers' in Cook Island Maori; ulu heketia and ulu kelea meaning 'silly' or 'mentally ill' in Niuean; cavuka, meaning 'broken' or 'snapped' in Fijian; and valea, meaning 'stupid' or 'crazy' in Samoan. Contemporary use of these terms is often derogatory. The Fijian workshop explained that the term cavuka usually describes the situation when a female becomes mentally ill following childbirth. This contextualises the types of situations in which these terms arise. As with the other ethnic terms noted above, the derogatory use of words like cavuka often occurs in colloquial spaces where harm is not necessarily intended. The Cook Islands workshop participants discussed how this colloquial use of terms can carry stigma and so inflict shame, whether intended or not.

Within Samoan workshop discussions, the term valea (meaning to act crazy, foolishly or with stupidity and or ignorance) is in formal public contexts increasingly being replaced by the more polite phrase 'gasegase o le mafaufau'. This phrase was coined to address the stigma attached to terms such as valea. (Table 3, no.2) provides a quote that illustrates this shift in the use of these terms.

All five workshops acknowledged that the issue of destigmatising terms used within the community to negatively or erroneously describe mental health clients involves a complex exercise of sorting through the nuances of ethnic and medical vocabularies. It is a task that all groups argued was nevertheless necessary. In particular, Samoan participants suggested that medical terms and conditions such as schizophrenia and bipolar disorders be incorporated into local language frameworks. This point was also suggested by a Niuean workshop participant (Table 3, no.3).

The case for developing new terminology was suggested by another Niuean participant, as something that is necessary more for the younger generation than the old (Table 3, no.4). In comparison, the Cook Islands workshop suggested a need to develop processes that can enable them to build a common language structure for destigmatisation in specific Cook Islands spaces. Coining appropriate terms capable of describing new contexts often requires negotiating the impact of replacing one with another. The origins of terms such as the Fijian cavuka described above, suggest, as noted specifically by the Tongan workshop, that appropriate consideration of the historical and cultural significance of terms are at least recorded before abandoning. Unpacking the cultural or traditional significance of old terms, metaphors, expressions, similes and proverbs is argued to be necessary in order to capture the traditional 'Pacific' way of life. This was specifically advocated for by both the Tongan and Samoan workshops. Of all the groups, the Tongan participants were the most adamant in their claim that Tongan values and culture could only be captured using Tongan words or expressions.

Family

All workshops assumed that working with families is central to Pacific cultural competence. When discussing how to best address the involvement of families in mental health treatment processes, the Samoan workshops cautioned against the assumption that all Pacific consumers have supportive families. The Samoan workshop suggested that there are Samoan mental health consumers who in fact rely more on the State, church or other types of support than on family. This raises interesting implications for the privileging of family in Pacific mental health service delivery practices.

Moreover, assumptions of extended family support often belie the reality in some Pacific families of a more nuclear arrangement. For many Pacific groups and individuals, while family is still a major focal point in their lives, it is one that is often configured more in nuclear than extended family terms. This raises another interesting point for closer examination. Either way, as one Samoan group participant noted, assessments of a consumer's mental health should involve assessments of his or her wider family context, namely an assessment of how the individual's mental illness might have also affected his or her mother, father, sister or brother. This participant assumes the centrality of family to the mental health process, namely to making appropriate assessments of the mental health condition, something that he suggests is reflective of the 'holistic perspective' employed by Pacific peoples (Table 3, no.5). There was caution

raised by some participants of making blanket applications of cultural guidelines or assumptions of family and reminds of the need to consider each case in its own context.

Tapu considerations

Each of the five Pacific groups, implicitly and explicitly, suggested a relationship between mental illness and breaches of *tapu*. For all five Pacific workshops, to talk of *tapu* relations is to talk about the sacred bonds between people. For Pacific people these bonds stem from their stories of creation and the cosmic and spiritual relationships between them, their environment and their god(s) (Table 3, no.6). These five groups suggest that to breach a *tapu* relationship is arguably to invoke the wrath of the god(s), ancient and/or Christian. In most cases this is the wrath of the ancient gods. This wrath is often manifested in, among other things, the sudden occurrence of mental illness.

In the Tongan workshop discussions, it was noted that beliefs about the relationship between the body and spirit and between life and death is sacred, and breaches of *tapu* occur when this sacredness is not respected. *Te'ia* and *Fakamahaki* are Tongan accounts of mental illness involving, among other things, 'running to the graveyard' and 'making references to the deceased'. Both suggest a possible connection between mental illness and possible breaches of a *tapu*. The Samoan workshops provided the most detailed account of notions of *tapu*. They note that it is a concept that affects all human relationships. The list offered ranged from individual relationships with the ancient gods or Christian God to relationships between chiefs; between parents and children; between brother and sister; and between husband and wife. Curses such as *malamatua* (curses by parents), and *mala o le ilamutu* (curses imposed by sisters as *feagaiga*[†††] or other *feagaiga*). The significance of the Christian God to other contemporary Pacific contexts is noted in discussions by the Cook Islands groups on the Holy Spirit. Here the Cook Islands workshops implied that spirituality not only includes notions of the Holy Spirit, but that this notion of spirituality as Christian-oriented is central to what they describe as 'human wellness' on the one hand, and to perceptions of 'mental illness' as 'sinful' on the other. The Niuean argument that breaches of the holistic self are breaches of *tapu* resonates with the other four groups. A breakdown of this holistic self is believed to result in mental illness, most commonly the possession of one's body and mind by a demon or ghost. In Niuean the common term for spiritual possession is *hu aitu*. This is similar to the Samoan term, *ma'i aitu*. Both mean 'to be possessed by a demon or ghost'. To be possessed in this way is, according to one Samoan participant, to lose "your sound mind". For the Fijian group, cultural principles governing Fijian social relationships, such as the *tau-vu* principle, reflect the sacred connection between peoples through the explicit acknowledgment of a common ancestry and land and the ability to trace this ancestry back to their gods of creation. Hence, *tapu* relations or bonds assume inextricable links between the mind, body and spirit – the three parts of a Pacific person. These bonds and the bonds of 'land, kinship and spirituality' are each part of the 'holistic' self, as suggested by the Niueans. Breaches of these bonds are breaches in the *tapu* essence of this self and its inextricable relations other living things.

Collectively participants from the five workshops expressed the view that the gifts of traditional healers are *tapu*. Traditional healers often specialise in 'treating' a particular type of mental illness believed to be a direct result of a breach in *tapu*. To restore harmony traditional healers are usually called upon. According to the discussions of the five workshops, today the Christian pastor can also play a role in restoring the harmony upset by these breaches. The tools of a traditional healer include traditional massage techniques and herbal remedies, concocted through the special recipes of different healing traditions. In case of *hu aitu* or *mai aitu*, massage using herbal combinations is usually prescribed. Christian prayers may also be used to support the work of traditional healers.

Worker skills

Competence in a Pacific language was considered by all five ethnic focus groups as necessary to working mostly with 'older' or 'non-English' speaking clients or family members. That is, with those clients or family members who were more comfortable or could only converse in their mother tongue. In situations where staff do not have ethnic language competence, access to and use of translators is considered important. Being able to translate foreign English medical terms appropriately was highlighted as another dimension to language competence.

Competence in ethnic cultural protocols also requires competence in ethnic language(s). The Tongan workshops suggested that in working with families, or in more workplace-based settings, the services of skilled orators may also become necessary. Skilled orators have considerable status in all five ethnic cultures and can provide cultural supervision of workers if required, at least in terms of developing

[†††] A Samoan expression meaning: a covenant between two or more parties.

language competency. Discussion from the Samoan and Tongan workshops raised the importance of conceiving language competence as inclusive of non-verbal forms of language, such as understanding humour, body and other communication forms. The Fijian and Tongan workshops explicitly noted that humour is nuanced in ways that if used inappropriately can cause great offence. All focus groups highlighted the point that a key part of language competence is the skill of listening.

For all five ethnic workshops, knowledge of cultural relationships was about knowledge of relationships between people as members of families, villages, island-groups, confederacies or other political configurations. The principle of the Fijian *cross cousin*[11] and *parallel cousins*,[12] the Samoan *feagaiga* and the Tongan *Mehikitanga*[14] relationships provide particular examples of gender-specific relationships. Having knowledge of the specific differences in Pacific cultural relationships infers the ability to build appropriate rapport and give respect to the different cultural contexts of Pacific clients and their families. The importance of the notion of reciprocal service was also addressed particularly in the Samoan workshop where this is referred to the notion of *tautua* (service).

All five groups noted the value of utilising a combination of clinical, spiritual and/or traditional healing practices to address Pacific mental health problems. Participants also noted that being able to make appropriate professional judgements involves appropriately assessing their cultural or clinical limitations and to be able to draw support from appropriate cultural or clinical supervision or training, or for translators or orators.

Organisational policy

The Fijian and Samoan workshops were most explicit in their address of organisational policy. In particular, they suggested the need to develop policy and management systems that are capable of incorporating Pacific health beliefs, are efficient and of high quality. In terms of cultural supervision, the implication from all groups was that management structures be able to assess the efficacy of incorporating cultural experts (in culturally sensitive ways), not only in the provision of cultural supervision where appropriate, but also in the design and assessment of 'cultural' training or supervision packages.

The Tongan workshops suggested the need for professional standards that ensure the incorporation of cultural and clinical competence; and for management support structures that are to give (culturally) safe avenues for staff, clients or family members, to express any concerns about their cultural or clinical or professional safety.

The Niuean workshops noted the value of interagency collaboration. This, together with the findings for service efficiency and quality assessors, suggests the need for a governance or management structure that is capable of enabling the incorporation of cultural into professional standards without compromising the integrity of either.

As with most health or social services, appropriate resourcing is an ongoing need. The different types of resourcing needs highlighted by the five workshops include:

- appropriate cultural supervisors;
- appropriate clinical and cultural training resources;
- appropriate Pacific specific consumer-centred services;
- appropriate treatment models (including easy-to-read information on medication types and effects, illness symptoms and/or various rehabilitation models);
- information about care options (e.g. respite care);
- information about inter and intra ethnic differences (i.e. across Pacific ethnic groups; between 'Island-born' and 'NZ-born'; and between 'young' and 'old'); and information about creating greater Pacific community responsiveness.

The formula for accessing or defining what resources a service might need depends on the size and make-up of the service's Pacific clientele.

Discussion

Mental health services in NZ have traditionally focused on a medical model that prioritises disease and disorder. It has only been in the last 10-15 years that NZ health services have recognised the importance of working within a framework that is sensitive to the diversity of the NZ's ethnic make up.[14] This greater awareness and growing sensitivity to the impact of culture in the presentation, assessment and treatment of serious mental illness has led to the recognition of the need for culturally appropriate frameworks and/or services.[15]

The discussion on cultural competencies is not a new one but has involved a gradual process of discussions and debates both at District Health Board (DHB) and

[11]The notion of first cousins who share sibling parents of the opposite sex. [12]First cousins who share sibling parents of the same sex. [14]The Mehikitanga refers to a female of high status on the father's side, usually the eldest sister or a female cousin of the father.

Non-Governmental Organisation (NGO) level (Table 4). The importance of cultural competence is that cultural appropriateness may be the most important factor in accessibility so developing culturally-sensitive practices helps reduce barriers to effective treatment and reduce disparities in health.[16]

A number of important factors need to be considered in the design of an appropriate cultural competency framework. In terms of language competencies discussions were raised regarding the development of new terms. However this is a complicated process and attempts to destigmatise key terms or phrases assumes at a minimum, the availability of a common lexicon, language structure and network of meanings. While all five ethnic groups raised the importance of developing a 'destigmitisation' campaign that can meet culturally-specific productions of stigma, the issue for the Cook Islands workshops also involved concerns of the more structural-type. Also important for participants' was the exercise of unpacking the cultural histories associated with certain terms or concepts, some of which were considered derogatory, others less so. In some cases, especially in the efforts of the Fijian workshops, the benefit of removing and discussing the layers of meaning associated with some terms, such as *cavuka* for example, was unquestioned – especially for their younger participants. For the purposes of this exercise, all five workshops confirmed the expectation that language is a *taonga* or treasure and as such is core to the preservation of ethnic identity and culture. In Pacific mental health services, a large proportion of all five groups are fluent speakers of the English language. These differences need to be accounted for in Pacific cultural competence packages addressing language. Careful examination of the language issues of Pacific youth is also important and requires consideration of ethnic, religious, neighbourhood, age and/or gender differences.

The other important factor to consider for cultural competency frameworks is family. Focus groups ideologies of the importance family assume that Pacific families are an integrated part of the lives of most Pacific mental health consumers. This is not at issue here, what is, is the suggestion that models of Pacific families are fixed and incommensurable. The practical implication of adopting such a position on families is that strategies or programmes designed accordingly may well overlook those Pacific families that do not conform to the model. Models of family that purport to reflect the changing dynamics of Pacific consumers and their families must be flexible enough to account for these changes.

There is little debate amongst the workshop participants of the continued importance of *tapu* relations and the contemporary significance of Christianity to Pacific peoples, both in NZ and in their island homelands.[3,17] In Pacific mental health the relationship, even if somewhat philosophically uncomfortable, between ancient Pacific *tapu* beliefs and Christianity is also generally accepted.[1] This is illustrated in the working together of traditional healers and Christian pastors in Pacific mental health sector.

A point of interest that this work seeks to raise is how best to address the spirituality needs of Pacific youth. The issue is that the 'Pacific youth' population may be considered a population group capable of being distinguished from their 'elder/older' counterparts. This raises interesting points not only for philosophical debate but also for advancing discussion on how best to operationalise 'cultural competency' markers for population groups within ethnic groups (such as youth), and what the ramifications might be of doing so. These points are raised as 'food for thought' in the project of advancing this work.

In terms of cultural knowledges and skills, the core points for discussion surround the general issues of 'knowledge of cultural relationships'; 'language competence' and 'cultural supervision'. There is a lot of debate currently engaged in by the Pacific mental health sector on how best to approach these issues. At a DHB level there have been initial steps taken to implement cultural advisory groups that may be seen as vessels in which workers can draw these cultural knowledges from.

Cultural competency, like cultural appropriateness and cultural safety, seeks to challenge those involved in the exercise of governing, managing and delivering services to Pacific peoples and their families in NZ, and to always remember who the service is for. As such cultural competency is as much a strategic exercise as it is a professional, philosophical and ontological one. The impetus for this work was to generate debate and find effective ways to continue to provide appropriate services to Pacific peoples. Developing cultural competency frameworks that privilege the needs of clients can remind workers of the importance of culture and cultural differences in the politics of service delivery.

[15] Tangata whenua refers to the indigenous Maori peoples of Aotearoa/New Zealand. The seminal work of Maori psychiatrist Mason Durie for example on Maori measures of wellbeing is of obvious significance to Pacific developments of the same (see for example, Durie,M. 2006. Measures of Maori Wellbeing see online: http://twor.ac.nz/docs/pdfs/Papers%20by%20Mason%20Durie.pdf. Measuring Wellbeing of Communities, The Genuine Progress Index. Porirua, Takapuwhia Marae) [Accessed 21 October 2008].

Whilst there have been efforts to progress work on cultural competency in NZ[1] (Table 4), in order to establish any real foundation for policy recommendations, there is a need to combine these efforts or have them aligned. This will help to ensure that efforts are not unnecessarily duplicated. A streamlining of the Pacific cultural competency work would therefore benefit from appropriate regional, if not national, coordination. This is the first step towards making policy considerations.

Cultural competency must be seen to permeate and influence within health all areas when providing care for Pacific people. The supposition of this work is that to create successful outcomes for Pacific mental health service delivery it is important to identify what the Pacific cultural markers in cultural competencies. Successful processes needed for wellbeing and recovery need to be contingent on well-designed innovative initiatives. These initiatives need to incorporate holistic approaches and beliefs; include appropriate cultural and clinical competencies; are practiced by competent health workers (both at clinical and cultural levels); are based on Pacific models of health and Pacific belief and values;[1] and that has key elements of Pacific involvement in governance and management. If services do not adopt these concepts in the design of their initiatives then they may encounter barriers that limit successful outcomes for mental health services.

Cultural competency must be seen to permeate and influence within health all areas when providing care for Pacific people.

Developing cultural competencies among mental health service workers; from medical through to community support staff involves integrating cultural and clinical knowledge and applying this knowledge to service delivery. Attempts to develop cultural competency frameworks, guidelines and/or performance specifications capable of covering its wide reach are complicated. The politically contentious nature of any attempt to define culture, let alone cultural competency, plays a significant role in the difficulties associated with the project. Nevertheless, in health and social services the importance of culture to people's behavioural patterns is well accepted. Determining how best to understand and operationalise competency frameworks based on culture is the challenge. Acknowledging the place of *tangata whenua*[15] is perceived by the mental health sector generally as a basic core component of working 'culturally appropriately'.[18]

This project records Pacific people's perceptions and practices of cultural competency in Pacific mental health. Identifying key perceptions and elements of cultural competencies from different ethnic Pacific groups are necessary to build and strengthen the capacity and capability of mental services to provide access to Pacific peoples who are considered a high needs group.

Acknowledgements

We would like to thank the Pacific leaders who have gone before us to pave the way in the Health sector. Also thank you to Waitemata DHB Pacific Mental Health and Addictions Services who funded the project, the organisers, facilitators and the participants. Special thanks to the Waitemata District Health Board Pacific Mental Health and Addictions Services and its staff for their support of this work. In particular Dave Davies, Kirk Mariner, Dr Francis Agnew and Levaopolo Seupule Tiava'asu'e. Faafetai, Meitatki Maata, Malo aupito, Fakaaue Lahi, Vinaka!

References

1. Agnew F, Pulotu-Endemann FK, Robinson G, et al. Pacific models of mental health service delivery in NZ: final report. Auckland: Clinical Research and Resource Centre (CRRC), Waitemata District Health Board; 2004.
2. Statistics New Zealand. QuickStats about Pacific people. In: Statistics New Zealand, 2006.
3. Anae M, Coxon E, Mara D, Wendt-Samu T, Finau C. Pasifika education research guidelines: report to the Ministry of Education. Wellington: Ministry of Education, 2001.
4. Ministry of Health, Ministry of Pacific island Affairs. Tupu Ola Moui: Pacific Health Chart Book. Wellington: Ministry of Health; 2004.
5. Davis P, Suaalii-Sauni T, Lay-Yee R, Pearson J. Pacific patterns in primary health care: a comparison of Pacific and all pateint visits to doctors. The National Primary Medical care survey (NatMedCa): 2001/02 report 7. Wellington: Ministry of Health; 2005.

[15]Tangata whenua refers to the indigenous Maori peoples of Aotearoa/New Zealand. The seminal work of Maori psychiatrist Mason Durie for example on Maori measures of wellbeing is of obvious significance to Pacific developments of the same (see for example, Durie,M. 2006. Measures of Maori Wellbeing see online: http://twor.ac.nz/docs/pdfs/Papers%20by%20Mason%20Durie.pdf. Measuring Wellbeing of Communities, The Genuine Progress Index. Porirua, Takapuwhia Marae) [Accessed 21 October 2008].

6. Foliaki SA, Kokaua J, Schaaf D, Tukuitonga C. Twelve-month and lifetime prevalences of mental disorders and treatment contact among Pacific people in Te Rau Hinengaro: The New Zealand Mental Health Survey. Aust N Z J Psychiatry 2006;40(10):924-934.
7. Bathgate M, Pulotu-Endemann FK. Pacific people in New Zealand. In: Ellis PM, Collings SCD, editors. Mental Health in New Zealand from a Public Health Perspective. Wellington: Ministry of Health, 1997. p. 104-135.
8. Sutton M. Improving patient care: cultural competence. 2000;7(9):28-62.
9. Ministry of Health. Strategic direction for the mental health services for Pacific islands people Wellington: Ministry of Health; 1995.
10. Mental Health Commission. Recovery competencies for New Zealand mental health workers. Wellington: Mental Health Commission; 2001.
11. Thomas DR. A general inductive approach for analyzing qualitative evaluation data. 2006;27(2):237-246.
12. Glaser B, Strauss A. The Discovery of Grounded Theory: Strategies for Qualitative Research. New York: Aldine Publishing Co, 1967.
13. WHO. Primary Health Care review project. Region specific report. In. Manila, Phillipines, 2002.
14. Barwick H. Improving access to primary care for Maori and Pacific peoples. A literature review commissioned by the Health Funding Authority. Wellington: Ministry of Health; 2000.
15. Mental Health Commission. Pacific Mental Health Services and Workforce: Moving on the Blueprint. Wellington: Mental Health Commission; 2001.
16. Nursing Council of New Zealand. Guidelines for nursing and midwifery education. Wellington: Nursing Council of New Zealand; 1996.
17. Herda P, Terrell J, Gunson N. Tongan culture and history: papers from the 1st Tongan history conference held in Canberra 14-17 January 1987. Canberra: Department of Pacific and Southeast Asian history, Research School of Pacific Studies, ANU, 1990.
18. New Zealand Standards. The National Mental Health Sector Standard: He Whariki Oranga Hinengaro. NZS8143. Wellington: New Zealand Standards; 2001.

Table 1: Anthropological diversities of 5 Pacific groups

Main Pacific ethnic groups	Geographical differences	Language differences	Political structures
Cook Islands	15 islands spread across the Pacific	3 main ethnic languages: Cook Island Maori, Pukapukan and arguably Tongareva	Traditional Ariki system that is island-based
Fiji	An archipelago of 300+ islands. But only 100 islands are inhabited. A further 200+ are too small for human habitation	(Not including Indian) Indigenous Fijian language have many dialects	Traditional federation of chiefs that is province-based
Niue	A single coral island	Mixture of Tongan, Samoan and Pukapukan speech	A village-based political system with no formal national chiefly system
Samoa	3 main islands	One homogenous language across the islands	Traditional Matai system
Tonga	An archipelago of 170 islands but only 36 are inhabited and divided into 3 main groupings	One homogenous language across the islands	A Feudal monarchy system

Table 2: Definitions of culture; cultural competency and Pacific cultural competency

Themes	Definitions	Authors
Culture	[Culture] refers to integrated patterns of human behaviour that include the language, thoughts, communications, actions, customs, beliefs, values, and institutions of racial, ethnic, religious, or social groups.	Cross, T., Bazron, B., Dennis, K. (1989). Towards a culturally competent system of care (Vol. 1). Washington: Georgetown University Child Development Center, CASSP Technical Assistance Center.
Culture	A process; not fixed, not predetermined: constructed by individuals, expressive of interplay between individual subjectivities and collective objectiveness	Airini (1997). Dreams of woken souls: the relationship between culture and curriculum. PhD thesis, University of British Columbia.
Cultural Competency	Competency is having the capacity to function effectively as an individual and an organization within the context of the cultural beliefs, behaviours and needs presented by consumers and their communities	Cross, T., Bazron, B., Dennis, K. (1989). Towards a culturally competent system of care (Vol. 1). Washington: Georgetown University Child Development Center, CASSP Technical Assistance Center.
Pacific cultural competency	[Is] the ability to understand and appropriately apply cultural values and practices that underpin Pacific people's worldview and perspectives on health	Tiatia, J., Foliaki, L. (2005) Pacific Cultural Competency Framework for DHBs (Draft 4). Unpublished report.

Table 3: Some quotes from ethnic-specific workshops

No	Theme	Workshop	Quotes
1	**Language**	Niuean workshop	It's embarrassing [the] stigma attached to mental illness [labels]…that's another reason why Niueans haven't moved on with the [de]stigma[isation process], because of the culture and things like that.
2	**Language**	Samoan workshop	In my opinion and to my understanding, this phrase we use now to describe mental health, '*gasegase o le mafaufau*', well, when I was growing up in Samoa, I never heard this phrase used to describe someone who was mentally ill. The only thing I recall was that whenever someone acted strangely, in the village or family, people would call them '*valea*', they would say that they were '*valea*'. Or when referring to the family, they would say, the family with the '*valea*' person. But the other thing is, we didn't really take much notice of the impact of the words, the phrase '*gasegase o le mafaufau*', well we used to live together with people of our family, who now we know were weak in mind, but they lived with us in our homes, we didn't ostracise them, we treated them as if they, as the palagis say, were '[a] normal person'. They would do chores, they would be given responsibilities in the home and in the church (Translation of the original).
3	**Language**	Niuean workshop	There is no Niuean name for schizophrenia or bipolar, psychiatrists have their own tools so I believe that's what we should look at to find [our] names [for] these diagnoses, getting it right.
4		Niuean workshop	Young people are okay because they understand English in comparison to older folks…you're lucky with the young ones, at least they are brought up with the [destigmatised] language terminology (sic) around mental illness.
5	**Family**	Samoan workshop	We can't separate mental health from family health because it does affect the mentality of the family. Unlike other countries and cultures that only look at one part, we look at the holistic perspective…*o le tagata ma lona aiga* (the person and their family), for example, when we look at the person, we also look at other members of the family such as the mother, father, sister or brother and how they are affected by their mentally sick family member.
6	**Tapu considerations**	Fijian workshop	Relationships are formed around tribal structures. These structures are based on three elements: land, kinship and spirituality. In Fiji all three elements underpin a person's birthright. It is believed that within these three elements are many sacred relational bonds. When one of these bonds is broken, Fijians believed [that] in traditional times… [when] people can become fragmented and vulnerable…mental illness occurs.

Table 4: A snapshot of some of the progression of cultural competencies in health in New Zealand

Year	Cultural competency work	Description
1996	New Zealand Nursing Council cultural safety guidelines	In 1996 with the public release of the work on cultural safety in nursing and midwifery education. The impact of the health reforms of the provision and delivery of services during this time was significant.
1997	Ministry of Health Pacific peoples charter	In 1997 the MOH's Pacific peoples health Charter in the Pacific Health and Disability action plan addressed culturally appropriate health service provisions. These provisions were aimed at providing cultural appropriate and relevant services to Pacific people and that it included the recruiting of Pacific staff at training and clinical level.
2001	Alcohol Advisory Council (ALAC) Alcohol & Drugs Practitioner competencies	In 2001, the A&D practitioner's competencies were released and demonstrated a commitment to the Pacific people's health charter.
	Cultural competency work for Child and Adolescent in Mental Health by Mua'autofie Tueipilesi'ufofogaosamoa Leavea-Clarke	The work by Mua'autofie Tueipilesi'ufofogaosamoa Leavea-Clarke was a 6 month programme aimed to provide training for clinicians on language and protocols.
2005	DHB Pacific cultural competencies framework by Jemaima Tiatia and Lita Foliaki	Work commissioned by WDHB and is aimed to address cultural competencies at a policy level.
	DHB Pacific cultural competency programmes/workshops	DHBs (e.g. CMDHB, WDHB) provide programmes aimed to inform and train clinicians/health workers on Pacific cultural competencies.
2007	Seitapu cultural competency frameworks by Fuimaono Karl Pulotu-Endemann, Tamasailau Suaalii-Saunid, David Lui, Tina Mcnicholas, Moe Milne and Tony Gibbs	Work commissioned by Te Pou O Te Whakaaro Nui in association with Pava. It provides a framework designed for use by all mental health workers in New Zealand. It espouses four competency areas that involve a three-level stair-casing continuum.
2008	Cultural competency literature review by Jemaima Tiatia	A comprehensive review of the literature on cultural competencies.
2008	Pacific cultural competency training by David Lui	A two-day training workshop that introduces participants to the foundation knowledge and principles to assist in understanding and working with pacific peoples. The programme will assist the participants with their work in mental health both in terms of cultural and clinical practice. It could also assist people working in other sectors like, Police, Justice, Corrections, Social Services, Housing, Primary Health and Addictions. It will also assist participants in carrying out assessments for pacific clients using a culturally appropriate Assessment Tool.

Development of a Mental Health and Addiction Pacific Cultural Practice Framework for the Auckland Region: Promoting expertise that is "visible, valued and understood."[16]

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Introduction

Pacific Mental Health and Addiction services in the Auckland metropolitan region employ staff in a range of Pacific cultural roles. These roles have emerged over time in response to local community needs and the titles, nature and function of the roles vary. A practice framework for these roles has not previously been defined and the scope of the roles is not easily communicated to consumers, families, other professionals and the general public. Recognising that cultural responsiveness is critical to improving health outcomes for Pacific peoples, the Northern District Health Board (DHB) Support Agency (NDSA), on behalf of the Auckland metropolitan DHBs and in collaboration with Moana Pasifika, undertook a project from March to July 2008 to define a practice framework for Pacific cultural roles within the mental health and addiction sector.

The overall goal of the project was to develop a Pacific Cultural Worker Practice Framework for the Pacific Mental Health and Addiction Sector in the Auckland metropolitan region.

This discussion paper outlines the processes and findings of the project, presenting a draft Mental Health and Addiction Pacific Cultural Practice Framework for the Auckland metropolitan area that is supported by Pacific stakeholders.

Project processes

The following processes were undertaken in order to achieve the project goal:

1. Members of the Moana Pasifika working group acted in the capacity of a Project Steering Group to guide and monitor the project.
2. Representatives of all Pacific mental health and addiction services in the Auckland metropolitan region were invited to participate.
3. A review of selected literature and documentation was undertaken to inform the development of a discussion document for consultation. This included recently published review material, web-based documentation, relevant key documents such as position and service descriptions and other related data as available.

[16] College of Nurses Aotearoa National Professional Development & Recognition Programmes Working Party, 2004.

4. Group and individual interviews (six in total) were undertaken to identify issues relevant to role definition and elements of a practice framework. Participants included Pacific consumers, Matua, Peer-Support Workers, Cultural Assessor/Advisors, Cultural Workers, Community Support Workers, Youth Workers, Community Living Services Workers, Service Managers and Team Leaders.
5. A discussion document was developed, based on the findings of 3 and 4 above and disseminated for consultation to all those who had participated in the development of the document and others who had expressed interest. Feedback was gained via fono, email and telephone.
6. A final draft Mental Health and Addiction Pacific Cultural Practice Framework was developed on the basis of feedback provided.

What is a practice framework?

As used in this paper, a practice framework defines the various duties that may be provided by a professional and the limits of services or tasks the professional performs.[17]

A practice framework begins to formally define a response to questions such as: Is the professional legitimately allowed to do a professional task? and Is the professional adequately prepared educated/trained/experienced to do it?[1] Analysis of a wide range of scopes of practice of relevant health professions suggests that a practice scope or framework spells out the nature of the role, the body of knowledge and core skills utilised to perform the role, the qualifications required for the role and the authority that endorses the role and framework.

A practice framework does not stand alone but must be located within a broader system which aims to improve consumer care and safety such as, agency accreditation, sector standards, clinical guidelines, organisational policy, procedures, protocols and other initiatives relevant to service quality.[1] It also links to and raises other issues in relation to funding, workforce development, supervision and education.

Why develop a practice framework?

The Health Practitioners Competence Assurance Act (2003) provides for the regulation of selected health practitioners in order to protect the public and has created pressure to define the place of those health practitioners who currently do not fit within its auspices.[2,3] A scope of practice is a crucial element in the administration of the Health Practitioners Competence Assurance Act. Pacific cultural work practice in mental health and addiction services is not governed by the Health Practitioners Competence Assurance Act.

A practice framework could assist with making explicit the nature and scope of Pacific cultural work in a mental health and addiction service context so that consumers, families, employers, funders and cultural workers themselves more clearly understand the roles.[4,1] A practice framework could:

- Provide a clear statement of tasks and responsibilities that a professional is properly qualified and skilled to perform thus supporting public understanding and accountability.[1,2,4,5]
- Support consistency within the profession and across service provision.[1,6]
- Establish a benchmark of knowledge and skills for entry level into the profession of Pacific cultural work.
- Assist with protecting Pacific cultural workers against “role creep” ie not to work outside the scope of their practice (Network North Coalition, 2006).
- Enable differentiation between the different levels of practice.[6]
- Assist with improving recognition of the profession and defining parity in relation to other professions.[6]

Draft Mental Health and Addiction Pacific Cultural Practice Framework

The draft Mental Health And Addiction Pacific Cultural Practice Framework incorporates three key roles: Matua (working in mental health and addiction services), Specialist Pacific Cultural Worker and Pacific Cultural Worker.[18]

The draft framework is underpinned by the following:

- Seitapu Pacific Mental Health and Addiction Cultural & Clinical Competencies Framework (*Seitapu*).[7] [19]
- *Let’s get real:* Real Skills for Real People Working in Mental Health and Addiction *(Let’s get real)*.[8]

[17] In this paper a practice framework is best described as a “close cousin” of a “scope of practice”. The term scope of practice was not used because it implies legal and professional requirements which were considered to be beyond the scope of a regional project. [18]Note: Pacific models of care are not discussed in this paper, however the Pacific Cultural Worker Practice Framework is developed on the basis of an understanding of such models. For further information see Agnew et al, 2004. [19]Note: It is understood that work is underway to align Seitapu and Let’s Get Real and it is expected that the updated versions will be applied to this draft framework.

Seitapu outlines four key dimensions of Pacific cultural competence for mental health and addiction workers: language; family; tapu relationships and organisational policy. Three levels of competence are described for each dimension: basic, advanced and specialist. *Let's get real* outlines seven competencies expected of every mental health and addiction professional. Each of the competencies has three sets of performance indicators: essential, practitioner and leader. In combination, these documents outline the knowledge and skill base for Pacific cultural practice in mental health and addiction services.

The following table presents as a framework in summary form:

Role	Body of knowledge & skills	Qualifications	*Authorised by*
Matua	Pacific cultural values knowledge and skills - language, family, tapu relationships and organisational policy (*Seitapu*) Mental health and addiction core skills (*Let's get real*)	*Seitapu*: ***Specialist*** level; extensive experience in one/ more Pacific cultures; recognition by community *Let's get real*: Essential or Leader level	Panel: Representatives of the Pacific community including Matua, consumer, family member
Specialist Pacific Cultural Worker	Pacific cultural values knowledge and skills - language, family, tapu relationships and organisational policy (*Seitapu*) Mental health and addiction core skills (*Let's get real*)	*Seitapu*: ***Specialist*** level; experience of one/more Pacific cultures *Let's get real*: Essential level; Mental health cert or alcohol and other drug (AOD) cert	Panel: Matua, consumer, family member, Specialist Pacific Cultural Worker
Pacific Cultural Worker	Pacific cultural values knowledge and skills - language, family, tapu relationships and organisational policy (*Seitapu*) Mental health and addiction core skills (*Let's get real*)	*Seitapu*: ***Advanced*** level; experience of one or more Pacific cultures *Let's get real*: Essential level; Mental health cert or AOD cert or working towards this	Panel: Matua, consumer, family member, Specialist Pacific Cultural Worker

The framework in full:

Matua (working in mental health and addiction services)

Scope of the role

Matua utilise wisdom and extensive ethno-cultural knowledge along with an understanding of mental health and addiction services to ensure service responsiveness and accountability to Pacific peoples. The involvement of Matua is essential if excellence is to be achieved in any Pacific initiative. The status of Matua enables them to advocate for Pacific peoples and challenge practices that are inappropriate for Pacific peoples.

Matua provide a vital link between services and Pacific families demonstrating strong cultural identity and cultural fluency (including language fluency) in one or more Pacific cultures.

Matua contribute to mental health and addiction services within the following key dimensions:

- Assisting to engage and retain Pacific consumers and families within treatment processes to support recovery
- Leading formal occasions
- Guiding, advising and supporting service development in all matters relating to Pacific values, processes, traditions, protocols and cultural safety
- Developing and supporting the Pacific mental

health and addiction workforce, contributing to a supportive environment for practice.

Matua advise on policy and practices concerning:

- cultural protocols and processes
- cultural support for Pacific people and their families
- cultural assessment
- community engagement
- intersectoral relationships.

Matua attain their cultural knowledge, skills and wisdom through Pacific experience and have earned the acknowledgement and respect of Pacific communities. Key areas of the knowledge and skills required by Matua working in mental health and addictions services are outlined in *Seitapu Pacific Mental Health and Addiction Cultural & Clinical Competencies Framework*[7] and *Let's Get Real: Real Skills for Real People Working in Mental Health and Addiction.*[8]

Qualifications

Matua are qualified for working within the context of mental health and addiction services via their extensive experience of one or more Pacific cultures and explicit recognition by their community i.e. as expressed in the position they hold in the community such as Justice of the Peace, or minister.

Matua demonstrate **specialist** competencies as defined within the *Seitapu Pacific Mental Health And Addiction Cultural & Clinical Competencies Framework* and essential or leader competencies outlined in *Let's Get Real: Real Skills for Real People Working in Mental Health and Addiction.*

Authority

Competency to fulfil a Matua role within the context of mental health and addiction services is determined by the Pacific community including but not limited to a panel comprising consumer and family representatives and other Matua.

Specialist Pacific Cultural Worker

Scope of role

Specialist Pacific Cultural Workers utilise ethno-cultural knowledge and judgment along with an understanding of mental health and addiction treatment to assess cultural needs and provide effective cultural interventions and/or advice to assist Pacific consumers and families to manage recovery from mental illness and/or addiction.

Cultural practice by Specialist Pacific Cultural Workers is undertaken with the guidance of Matua, in accordance with Pacific values, adopting a holistic treatment approach. Comprehensive cultural assessments are undertaken to provide a basis for developing, implementing and evaluating effective cultural intervention plans, in the context of mental health and addiction treatment.

Specialist Pacific Cultural Workers practice in collaboration with other health and cultural professionals and community members, in a range of settings, in partnership with families, individuals and communities.

The knowledge and skills utiltised by Specialist Pacific Cultural Workers are detailed in *Seitapu Pacific Mental Health and Addiction Cultural & Clinical Competencies Framework*[7] and *Let's Get Real: Real Skills for Real People Working in Mental Health and Addiction.*[8]

Qualifications

Specialist Pacific Cultural Workers must demonstrate **specialist** competencies as defined within the *Seitapu Pacific Mental Health and Addiction Cultural & Clinical Competencies Framework* and essential competencies outlined in *Let's Get Real: Real Skills for Real People Working in Mental Health and Addiction.*

The typical minimum qualification set of Specialist Pacific Cultural Workers will include extensive experience of one or more Pacific cultures
and
a National Certificate in Mental Health (either completed or in progress) **or** a certificate in AOD Studies at a minimum level 5 on the New Zealand Qualification Authority – National Qualifications Framework.

Authority

Competency to fulfil a Specialist Pacific Cultural Worker must be assessed by a panel consisting of a Matua (from the same ethnic community), a Pacific consumer, a Pacific family member and a competent Specialist Pacific Cultural Worker.

Pacific Cultural Worker

Scope of role

Pacific Cultural Workers utilise ethno-cultural knowledge and judgment and understanding of mental health and addiction treatment to assess cultural needs and provide effective cultural interventions and/or advice to assist Pacific consumers and families to manage recovery from mental illness and/or addiction.

Cultural practice by Pacific Cultural Workers is undertaken with the guidance of Matua, in accordance with Pacific values, adopting a holistic treatment approach. Comprehensive cultural assessments are undertaken to provide a basis for developing, implementing and evaluating effective cultural

intervention plans, in the context of mental health and addiction treatment.

Pacific Cultural Workers practice in collaboration with other health and cultural professionals and community members, in a range of settings, in partnership with families, individuals and communities.

The knowledge and skills utiltised by Pacific Cultural Workers are detailed in *Seitapu Pacific Mental Health and Addiction Cultural & Clinical Competencies Framework*[7] and *Let's Get Real: Real Skills for Real People Working in Mental Health and Addiction*.[8]

Qualifications

Pacific Cultural Workers must demonstrate **advanced** competencies within the *Seitapu Pacific Mental Health and Addiction Cultural & Clinical Competencies Framework* and essential competencies outlined in *Let's Get Real: Real Skills for Real People Working in Mental Health and Addiction.*

The typical minimum qualification set of Specialist Pacific Cultural Workers will include experience of one or more Pacific cultures
and
a National Certificate in Mental Health (either completed or in progress) **or** a certificate (diploma) in AOD Studies at a minimum level 5 on the New Zealand Qualification Authority – National Qualifications Framework.

"I support the framework, I think it is a positive step forward. When I first started I had to make up the job myself. I am always explaining my role to our families."

Authority

At a minimum the competency of Pacific Cultural Workers must be assessed by a panel consisting of a Matua (from the same ethnic community), a Pacific consumer, a Pacific family member and a competent Specialist Pacific Cultural Worker.

Discussion

Overall Pacific stakeholders in the Auckland metropolitan region have indicated that there is a high level of support for the draft Mental Health and Addiction Pacific Cultural Practice Framework. Stakeholders were almost unanimous in supporting a more formalised approach to defining Pacific cultural roles and specifying the body of knowledge and the qualifications relevant to the roles. Most stakeholders viewed the development of a practice framework as beneficial to all Pacific stakeholders.
The following practitioner comment provides an example of this view:

> *"I support the framework, I think it is a positive step forward. When I first started I had to make up the job myself. I am always explaining my role to our families."*

While supporting the framework, stakeholders also outlined a number of issues and these are outlined below.

Diversity

The issue of diversity within the Pacific population cannot be overlooked. Diversity relates not only to ethnicity but also to generational divides[9] and this issue was noted repeatedly by many stakeholders, for example one stakeholder commented:

> *"It is not acceptable to lump us together in one Pacific word."*

Stakeholders noted differences between Pacific cultures and the issues these differences raise in relation to defining cultural competency. Notwithstanding this, there appears to be a level of consensus that shared Pacific values, beliefs, philosophies and connectedness form the basis on which it is possible to provide Pacific services and to be culturally competent in Pacific terms. This shared perspective is reflected in *Seitapu* which forms the basis for defining cultural knowledge and skills in the draft Mental Health and Addiction Pacific Cultural Practice Framework. The use of *Seitapu* as an underpinning document for the practice framework was well supported by stakeholders and in the absence of other widely accepted formulations of Pacific cultural competence this appears to be an acceptable way forward while respecting the diversity within the Pacific population.

The inclusion of Matua within the framework

Most stakeholders support the inclusion of Matua in the framework and Matua consulted during the course of the project supported this inclusion. Stakeholders also indicated that they would welcome further definition and recognition of Matua roles. The following comment is illustrative of this view:

> *"There is a need to value our Matua the same way in which they are valued in the Islands. In New Zealand we need to work together with palagi therefore there is strong support for the framework as this demonstrates how Matua fit into the structure and design of services."*

A smaller group of stakeholders expressed uncertainty regarding the inclusion of Matua in the framework, highlighting that the role of Matua within Pacific communities is much broader than a professional designation, for example:

> *"Are we trying to fit what doesn't fit? Are we fitting moulds rather than developing moulds?"*

> *"The role of Matua is much wider than just*

a profession or professional designation. Matua have status which is earned and they are appointed by their communities".

Given the above, there would be benefit in further defining the scope of the Matua role within mental health and addiction services. See for example the recent publication by Ihimaera,[10] which outlines a workforce strategy for kaumatua in Maori mental health and addiction services.

Similarities between Community Support Worker role and Cultural Worker Role

There was no consensus regarding whether or not Community Support Workers (CSWs) employed in Pacific specific services ought to be recognised within the draft framework as Pacific cultural roles. Alofi[11] provides a compelling argument that Pacific CSWs provide cultural expertise that is fundamental to their effectiveness and that ought to be formally recognised.

Some CSWs who participated in the project agree and argue that they are doing the same job as cultural workers or advisors and that there is a need to recognise the cultural skills that they bring to their work over and above the "mainstream" CSW role. Those who hold this view are very keen to see Pacific CSW included as a role within the draft Mental Health and Addiction Pacific Cultural Practice Framework.

However, others stated that CSWs are an existing professional group, nationally and CSWs already operate within a practice framework which includes a clearly defined qualification pathway. It was also suggested that adding further competency requirements to roles that are already complex and not well-remunerated would place an unfair burden on the Pacific CSW workforce.

At this point there is no consensus as to the inclusion of the CSW role in the draft framework. A fundamental issue is whether or not the roles of Pacific Cultural Worker and Pacific CSW can be properly distinguished or whether they are largely the same roles with different titles. This issue requires further investigation and the implications of including Pacific CSW as an additional role in the framework need to be more fully determined.

Qualifications

Qualifications for Pacific Cultural Workers and Matua were the subject of much debate by stakeholders throughout the project. Some stakeholders were supportive of the inclusion of mental health and AOD certificates as recognised qualifications to underpin the framework, but overall there appears to be a need for further investigation of this. One suggestion was that an audit of the curricula for existing mental health and AOD certificates and diplomas is required to determine whether they are sufficiently relevant to Pacific Cultural Workers. A further suggestion is to incorporate more work-based assessment which would allow Pacific services to better determine appropriate knowledge and skills for Pacific cultural roles and the "qualifying" benchmarks associated with these. This could also allow for more consumer, family and peer participation in the assessment process.

Conclusion

Overall Pacific stakeholders in the Auckland metropolitan region have expressed considerable support for adopting the draft Mental Health and Addiction Pacific Cultural Practice Framework. The framework could usefully serve as an interim guideline for competent Pacific cultural practice within the Auckland region. Planning, funding, pricing and contracting processes for Pacific mental health and addiction services could then reflect the elements outlined within the framework.

A regional implementation plan for the framework would be required and this would need to include measures to actively support the existing Pacific cultural workforce, where necessary, to obtain the qualifications to meet the requirements of the framework.

Further development of the framework could focus on a number of issues raised by Pacific stakeholders including:

- Analysis of the Pacific CSW role as compared with the Pacific Cultural Worker role to clarify the differences between these roles and determine advantages and disadvantages of including the Pacific CSW role within the framework.
- Development of a work-place based competency assessment process.
- In-depth definition of the scope and function of Matua roles within mental health and addiction services.

References

1. National Highway Traffic Safety Administration. The National EMS Scope of Practice Model. Washington, DC: U.S: Department of Transportation/National Highway Traffic Safety Administration; 2005. Available at: http://www.soundrock.com/sop/
2. Ministry of Health. Proposal that Psychotherapy Become a Registered Profession Under The Health Practitioners Competence Assurance Act 2003: A Discussion Document. Wellington: Ministry of Health; 2004.
3. Steenhuisen R, Theuerkauf W. Current Trends in the National AOD Workforce development and implications for further training and recruitment directions for the Alcohol and Regional Community Alcohol and Drug Services 2005 – 2010. CADS Auckland: paper provided by the authors; 2005.
4. Jones S, Ross J. Describing Your Scope Of Practice: A Resource For Rural Nurses Christchurch, New Zealand: Centre For Rural Health; 2003. Available at: http://www.moh.govt.nz/moh.nsf/pagesmh/6992/$File/NursingDescribingYourScope2003.pdf
5. Canadian Medical Association, Canadian Nurses Association, Canadian Pharmacists Association. Joint Position Statement Scopes of Practice. April 2003. Available at: http://www.cnaaiic.ca/CNA/documents/pdf/publications/PS66_Scopes_of_practice_June_2003_e.pdf
6. College of Nurses Aotearoa National Professional Development & Recognition Programmes Working Party. National Framework for Nursing Professional Development & Recognition Programmes & Designated Role Titles: Report to the National Nurses Organisations Version 2. 2004. Available at: http://www.nurse.org.nz/guidelines/gl_pdrp_1exsum.htm
7. Polutu-Endemann FK, Suaali'i-Sauni T, Lui D, McNicholas T, Milne M, Gibbs T, Seitapu Pacific Mental Health and Addiction Cultural & Clinical Competencies Framework. Auckland, New Zealand: Te Pou O Te Whakaaro Nui; 2007.
8. Ministry of Health. Let's Get Real: Real Skills for Real People Working in Mental Health and Addiction. Wellington, New Zealand: Ministry of Health; 2008.
9. Suaalii-Sauni T, Samu K. Exploring 'Cultural competency': An exploratory study of cultural competency in Pacific mental health. Auckland, New Zealand: Pacific Mental Health Alcohol and other Drugs Services (PMHADS), Waitemata District Health Board (WDHB); 2005.
10. Ihimaera L. Whiria Te Organga Kaumatua Workforce Strategy for Mental Health and Addictions Services. Palmerston North, New Zealand: Te Rau Matatini; 2008.
11. Alofi S. The Role of Pacific Island Community Support Workers in Mental Health Services (ADHB). A research report presented in partial fulfilment of the requirements for the Degree of Masters in Social Work (Applied). Auckland: Massey University; 2007.

Development of a child, adolescent and family mental health service for Pacific young people in Aotearoa/ New Zealand

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Abstract
This paper describes the development of a dedicated Pacific child, adolescent and family mental health service based in Porirua, Aotearoa/New Zealand(NZ). Particular reference is made to, firstly, the social and demographic characteristics of the population we serve, and referrals to our service, and secondly, to key Samoan research findings which emphasize the Samoan relational concept of self as a fundamental concept underpinning Samoan notions of mental wellbeing[1]. We discuss the practical application of this concept in our work with Samoan and other Pacific young people and their families, including implications for engagement, assessment and treatment processes.

E lē tulolo fua la'au o le vao
E falala ona o le matagi
(When the trees bend in the forest, there is always a reason)
Samoan proverb

Introduction

Pacific young people and their families living in Aotearoa/NZ often choose not to use mainstream child and adolescent mental health services[2]. In 2003, the Pacific adult and child access rate for Aotearoa/ NZ mental health services was only 0.56%[2]. This compared with a Maori access rate of 1.35% and the remainder of the population at 1.86%. Figure 1 shows Pacific access rates for child and youth age groups, compared with the total population in the first 6 months of 2004, and benchmark targets for CAMHS. These targets were set by the Mental Health Commission in New Zealand.

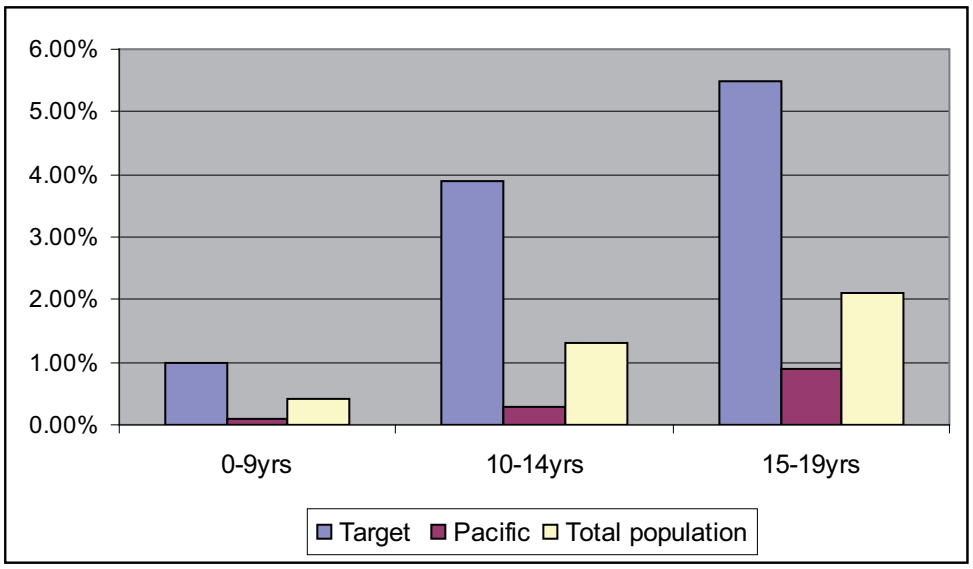


Figure 1. New Zealand CAMHS access rates January to June 2004[2]

A number of hypotheses have been suggested to explain this low acceptance of mental health services by Pacific people. Pulotu-Endemann et al have observed that mainstream mental health services in Aotearoa/NZ have generally been acute and crisis focused, and have shown a lack of appreciation for holistic perspectives favoured by Pacific people[3]. Services have often not been "culture friendly" and emphasis on the medical model has meant that practitioners commonly fail to acknowledge a possible role for traditional diagnoses and healing practices, which are often valued by Pacific families. Services have usually been delivered in a hospital or institutional setting rather than in the community[3]. Following a call from Pacific communities, policy advisors and researchers, New Zealand Ministry of Health initiatives in the late 1990's led to establishment of dedicated Pacific mental health services in Auckland and Wellington, catering to the mental health needs of the Pacific adult population.[1,4,5,6]

The context of Health Pasifika Child, Adolescent and Family Service

The first dedicated Pacific child adolescent and family mental health service in Aotearoa/ New Zealand was established in Porirua in 2005, under the auspices of Capital and Coast District Health Board (CCDHB). This serves the Pacific communities residing in Wellington City, Porirua City and the Kapiti Coast region, in the lower North Island of New Zealand.

The total pacific population in this region, from the 2006 New Zealand census, was 22200. Figure 2 shows the geographical/social origin. The 'Other' group included Tuvaluan, Kiribati and Tahitian people.[7]

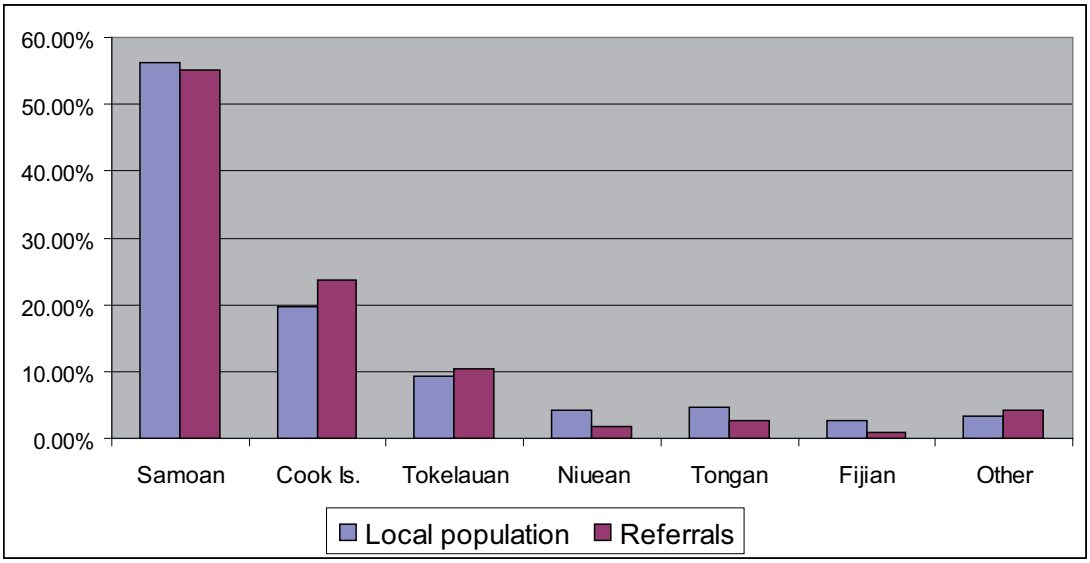


Figure 2. Proportion of different Pacific nations groups in our local community compared with the first 100 referrals to our service.

Pacific people make up 13.5% of the under 20 age group in the area we serve. The highest proportion of Pacific young people is in Porirua city where Pacific children and youth make up 34.8% of the under 20 population.[7]

The service has an outreach approach to meeting with families and young people, offering home visits or school visits for most appointments depending on the family's preference. It has 2 fulltime clinicians, a Samoan registered mental health nurse (TF), and a Samoan family therapist (MD) with prior experience in mainstream CAMHS services. We have 0.5 FTE Palagi (NZ European) child and adolescent psychiatrist (AB) and our Pasifika consultant is a Samoan matai (Fa'amausili) who works with both our adult and child teams at Health Pasifika. We are fortunate in being able to seek cultural advice from Tokelauan, Tongan, Fijian, and Niuean colleagues in the adult Health Pasifika team. The work of the team is further enhanced by strong support from our Pacific reference group which comprises members from seven Pacific nations in our community.

Referrers

Figure 2 shows the referral sources for the first 100 referrals to our service.

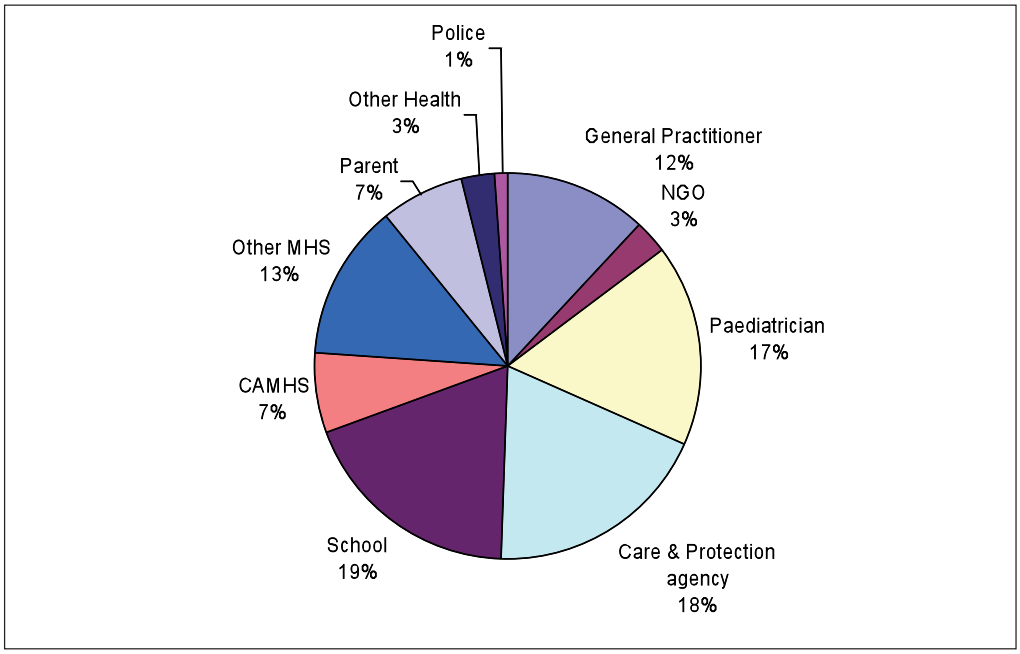


Figure 3. Referrers for the first 100 referrals to our service. (NGO=non-governmental organisation, other MHS=other mental health service eg emergency psychiatry service, other health=allied health practitioner such as audiologist, private psychologist.)

Our service works independently of other local CAMHS services and referrals are forwarded to us by CAMHS intake staff when families identify as Pacific and agree to be referred to Health Pasifika CAFS. Acute assessments for mental health crises with Pacific young people are carried out jointly with other local CAMHS staff. We also participate in joint assessments with other services when this is requested by mental health staff and/or Pacific families, for example in new referrals for young people with first episode psychosis.

Age of referrals

Of the first 100 referrals to our service, 4% were preschoolers (0-4 age group), 41% were primary school age (5-12 age group), 52% were high school age (13-17 age group) and 3% were aged 18-20 years.

Diagnoses

There is evidence supporting the use of DSM-based diagnostic categories in young people from non-Pacific cultures, and they are useful as a guide to assist clinicians in choosing treatment interventions that are likely to be effective for young people in general[8]. They are widely used in CAMHS services, and are essential from a planning and funding perspective.

Of the first 100 referrals to our service we accepted 95 for assessment and met with 81 of the young people and their families. Of those seen and assessed, 70 met criteria for a DSMIVTR diagnosis[8]. Figure 4 illustrates the range of problems affecting this group of young people.

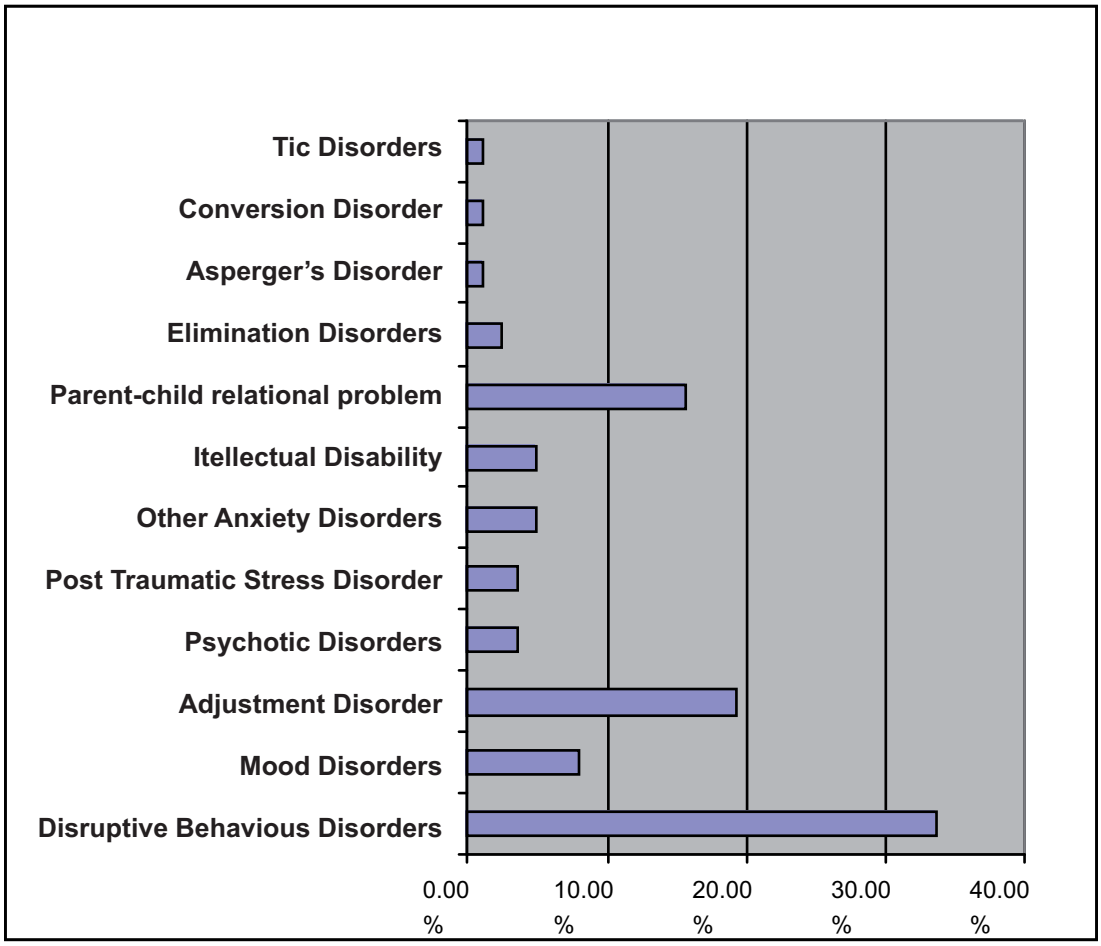
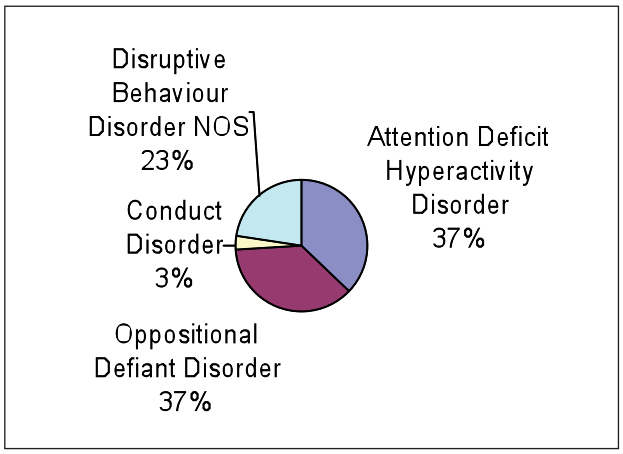


Figure 4. DSMIVTR Diagnostic groups for first 100 referrals to our service

15.7% of these children and adolescents had more than one diagnosis. The low rate of psychotic disorders in this group is explained by local referral patterns in which young people with their first episode of a psychotic illness (including Bipolar disorder with psychosis) are usually seen at a separate early intervention service. Of the seven adolescents with mood disorders, one had bipolar disorder and six had major depressive episodes. Four of these six young people and their families opted for antidepressant treatment for the young person and one required inpatient treatment.

It is clear from this data that the most common presenting problems related to disruptive behaviour. Figure 5 shows the proportions of the different disruptive behaviour disorders.



Of children diagnosed with Attention Deficit Hyperactivity Disorder (ADHD), six out of ten had a co-morbid diagnosis of another disruptive behaviour disorder or tic disorder. Half of the parents of children with an ADHD diagnosis opted to commence stimulant or other pharmacological treatment for their child's ADHD symptoms. This was more likely when symptoms were more severe and the school was having difficulty managing the young person's behaviour.

Figure 5. Disruptive Behaviour Disorders

Samoan-specific clinical and social practices in our daily work

Despite their common usage, diagnostic labels arising from the DSM system have not been established as an acceptable way of communicating with Pacific families about their young person's predicament. Furthermore mainstream clinical practice may not readily accommodate important social practices that are critical for both credibility and engagement with services. Each of our team members has been influenced by clinical practices handed down by our clinical disciplines, training and relationships with mentors and other colleagues. In developing our service it has been essential for us to make time to reflect on clinical and social practices as they do not always serve Pacific families and young people well. For example greeting rituals in many mainstream CAMHS settings could be considered rather underdeveloped, if not perfunctory and rude from a Pacific family viewpoint.

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Our discussions have been informed by the cultural wisdom of our Pasifika consultant, and cultural knowledge and perspectives of Pacific team members and the Pacific families we see. In addition we have turned to key research findings that highlight Samoan concepts of wellbeing and mental ill health.

A Samoan relational concept of self

"Ole Taeao Afua-The New Morning" by Taimalieutu Kiwi Tamasese and colleagues, describes the Samoan concept of self as a relational being rather than an individual entity.[1,9] This study found that Samoan elders and Samoan mental health service providers described the Samoan self as "a relational self having meaning only in relationship to others". It is "a total being comprising spiritual, physical and mental elements which cannot be separated". It "derives its sense of wholeness, sacredness and uniqueness, from its place of belonging in family and village, genealogy, language, land environment and culture".

Samoan elders and mental health service providers in this study considered this concept to be essential for understanding the world view of Samoan people and necessary as a foundation for any mental health clinical work with Samoan people and their families.[1,9] Later research with experienced psychiatrists in the Wellington region showed that psychiatrists of non-Pacific origin struggled to understand this relational notion of self[10]. In our work this concept informs our practice in many ways.

Attending to the vā or relational space

In a first meeting with a family with Samoan born or Samoan speaking parents and/or grandparents our Pasifika consultant would take as much time as necessary to attend to traditional Samoan processes of acknowledgement, sacredness and connection. By attending to the "vā" or relational space between people, by taking care to foster and maintain vā fealoaloa'i (particular relationships of mutual respect) in relation to titled heads of families and cultural status of elders in the families we meet, there is much greater chance of rapport building and more chance that families will feel comfortable to share painful stories that may shed light on their young person's predicament. Alternatively attending to these processes can help facilitate difficult processes with a Samoan family with strong traditional values. An example of this was a 12 year old Samoan girl who presented with acute suicidality and major depressive symptoms in a context of physical abuse by her father. In meeting with her family to explain our decision to notify the care and protection services, our Pasifika consultant was able to facilitate traditional Samoan processes which provided containment for an otherwise tense meeting.

Humility is an attitude that is considered implicit in vā fealoaloa'i and is highly valued in fa'a samoa (Samoan customs and traditions). In reflecting on our work we have realized that it is necessary for us as clinicians to retain humility in order to foster rapport and build trust with the Pacific families we meet.

This raises a dilemma about how to balance the more conventional role of clinician as expert, with an attitude of humility. The 'decentred positioning' described in the Narrative Therapy literature allows the young person and family's views to remain central to the therapeutic process while not denying the power and expertise implicit in the therapist role[11]. This idea has influenced our practice in a number of ways.

Relational self and exploring genealogy

Frequently young people and their families feel anxious about meeting CAMHS clinicians for the first time, perhaps anticipating some kind of interrogation that might focus on their deficits. After greeting the family we would often take some time to explore the young person's genealogy, mapping out a family tree over three or four generations. This allows us as clinicians to step into a 'decentred position', and enquire about key cultural information such as island and village of origin, as well as migration stories, and relationships within the family. Who does the young person live with, and who do they turn to for nurturing? Have they

lost key figures such as grandparents and what did those relationships mean to them? What roles and responsibilities are implicit in their positioning in the family from a cultural point of view? For example, from a Samoan perspective, the relationship between a brother and sister, known as 'feagaiga' has clearly defined roles and responsibilities for both siblings, and significant consequences if there is a breach of 'tapu and sa' in these roles.

From a relational perspective, these details help us to get to know the young person beyond their individual self. In sharing family stories, the family are the experts and they get a chance to experience our responses and attitudes towards these stories and decide if they can trust us with the more painful stories that may have brought them to see us. In the course of such an enquiry sometimes there is an opportunity for the sharing of rich family stories and cultural knowledge that the young person may not have heard before.

An example of this was a family of a 12 year old boy of mixed Pacific descent who presented with symptoms of depression with his family. His grandmother was asked in some detail about her background and began speaking about her own mother's early life on Banaba (Ocean Island, Kiribati), the impact of the Pacific Phosphate Company, the tragic events of the Japanese occupation during WWII and the subsequent removal of the whole population to Rabi Island in Fiji and the difficulties they faced there. It was a very moving story and it transpired that her grandson had never heard the story before. Almost all Pacific families in New Zealand will have stories of migration, of survival, loss and hardship which connect them with the hopes, dreams and purposes of their parents, grandparents, extended family and previous generations. Such stories connect young people with a sense of belonging and identity and to their cultures of origin. For young people who are struggling with making sense of their identity in their complicated school and community environment, connecting with this sense of belonging can help address presenting problems such as depressive symptoms.

Allowing for relational timeframes

Tamasese has referred to "relational timeframes" that may determine a Pacific family's readiness to participate and trust a clinical assessment process[12]. A Palagi greeting style and a conventional 1 hour appointment slot in a clinic room, may be an efficient way of operating to meet institutional expectations, but such "Palagi timeframes" may alienate Pacific families and reduce their acceptance and attendance at assessment and treatment appointments. If the relational space or vā has been established and a Pacific family feels ready to trust the clinicians they are meeting with, then they may be ready to talk at length and may require an extended period such as 1 ½ or 2 hours or occasionally longer to tell their story.

In meeting with families from other Pacific nations, we would aim to attend to these cultural processes of greeting, acknowledgement, sacredness and connection. Even if we are not able to greet the family more formally in the language of their culture of origin, we know that attending to appropriate greeting rituals will frequently help Pacific families feel more comfortable and able to talk about what has brought them to us.

In other situations we may be meeting with a young Samoan person on their own, and even if they do not consent for us to include their parents or other family members, the concept of the relational self supports us in remaining mindful of the aiga or extended family system around this young person, and the roles and responsibilities that may be expected of the young person, and other pressures that may result from this. Cutting themselves off from aiga connections may seem like a promising option to some young people, especially after traumatic experiences in their family of origin. However the concept of a relational self alerts us to possible risks of the "cut off" situation for the young person, that could be missed by a Palagi therapist. These risks could include symptoms of anxiety or depression or other manifestations of the stress of alienation from their aiga.

An example of this dilemma is a 16 year old New Zealand born Samoan girl who had been removed from the care of her family by care and protection services because of sexual abuse by her stepfather. She was referred individually by her care and protection social worker, for treatment of self-harm, nightmares and flashbacks. After much discussion in the team it was decided that, alongside individual work with this young person, it would be important to offer to meet (with her consent) with her mother and maternal grandparents, using traditional Samoan processes to seek their permission for this work to proceed. This approach was effective in reducing the disconnection associated with her placement away from the family, and paved the way for later family therapeutic work with the extended family.

The relational self and breaches of tapu and sa

Without an understanding of the Samoan relational self, it is not possible to grasp the impact of breaches of 'tapu' and 'sa'. In Ole Taeao Afua, 'tapu' is defined as "that which is forbidden to the ordinary" and 'sa' refers to sacred relationships. Traditionally in Samoa, mental illhealth was viewed as a consequence of breaches of sacred and forbidden relationships or breaches of 'tapu' and 'sa'. Such breaches could be addressed effectively only within protocols laid down in the culture. Even though NZ born Samoan young people might be less familiar with the deeper meaning of some of these cultural ideas they were

still considered relevant when a young person faces a crisis in their life.

A 16 year old Samoan born male was referred to our service after attempting to hang himself. Despite a number of stressors in his life, he was not depressed and did not have another mental disorder. However he was very distressed by the idea that his parents may have disowned him, a Samoan relational sanction known as fa'a malaia, because of his disreputable behaviour. For a Samoan young person with a relational sense of self, whose identity may primarily be defined collectively rather than individually, it makes sense that this would be a catastrophic predicament. In this case, the crisis was resolved by his Samoan case manager who realized the cultural predicament this young man was facing, and also knew that the remedy could be found in cultural processes of apology and reconciliation. Contacting the family led to his parents achieving greater understanding of his fears, and this led to a rapid resolution of the crisis.

Relational self and New Zealand born Samoan young people

The situation is even more complicated for Samoan young people who have grown up in Aotearoa/NZ, in a family with strong traditional Samoan values, who may be fluent in the Samoan language but have also been exposed to the individual values embedded in their schools, the news media and peer pressure from other young people. Such young people may well identify with both a relational and individual sense of self and this could lead to substantial role confusion and conflict with parents and grandparents. Understanding the nuances of this predicament and finding a way of naming this dilemma for the young person and their family of origin frequently helps take some of the heat out of battles that may be damaging the young person's relationship with their parents and other elders. Referring to the concept of a relational self, helps us in illuminating this predicament for Pacific parents, who often find this idea easy to relate to.

Relational self and 'itu lua'

Findings from Ole Taeao Afua make it clear that Samoan people view the Samoan self as having physical, mental and spiritual aspects that cannot be divided up (a concept known as 'itu lua'). From this perspective it does not make sense to think of a broken leg as a non-spiritual problem, let alone a mental health problem such as depression. In contrast there is a tacit assumption in most Western psychiatry settings that assessment and treatment is a secular undertaking. Even outside psychiatry there is an assumption from a non-Pacific worldview that it is rude to impose your own spirituality on others and therefore the right thing to do when meeting new guests (or clients, let alone patients!) would be to abstain from assuming they would like a prayer at the beginning of a meeting or interview, in order to avoid offence. The concept of 'itu lua' would suggest that the opposite may be true for Samoan and other pacific families. Not attending to spiritual wellbeing could cause offence or may lead families to feel uneasy about the lack of care taken over spiritual aspects of care. When we meet with families for the first time, and at subsequent meetings we take care to offer the family the choice of whether we start the session with a prayer. This frequently makes a positive difference to engagement with the family and families for whom spirituality is less important don't seem to be offended by the offer.

'Itu lua' and assessment of possible culture mediated spiritual experiences

Sometimes young people presenting to our service, describe experiences that are not 'typical' psychiatric symptoms but may be distressing to them. For example, a 15 year old NZ born Samoan girl described looking in the mirror and after a few moments one side of her face began to take on a skull-like appearance. She associated this with old stories she had heard in her aiga of a spirit woman who falls in love with men, seduces them, then ends their lives. While from a clinician's point of view, it may have been possible to interpret this young person's experience as dissociative, her New Zealand born Samoan case manager recognised elements of the story as resembling cultural descriptions she had heard in her family of origin of some kinds of traditional illness. She was also familiar with the cultural story the young person was referring to. She therefore sought advice from Samoan colleagues who advised her to monitor this experience with the young person and if it persisted or became distressing for her, to suggest that the young person and her family could seek advice from a traditional healer (Taulasea), most appropriately one known to the family and trusted by them.

The Ole Taeao Afua study participants called for dedicated Pacific mental health services to recognise and remunerate traditional healers from Samoan and other Pacific cultures to allow these services to comprehensively address mental health problems from both a cultural and clinical viewpoint[1,9]. At this stage we are unable to offer this service directly, but on occasions where there are clear indications, Pacific clinicians endeavour to support families in making contact with traditional healers in their own communities, with ongoing monitoring of symptoms and any safety concerns.

Itu lua and 'other pressures'

The proverb quoted at the beginning of this paper could be taken to refer to mental illhealth that may be precipitated by social and economic pressures faced by Pacific families, especially in Aotearoa/

New Zealand. The Ole Taeao Afua study referred to the many financial pressures that Samoan families face providing financially for their extended family as well as church obligations, and responsibilities and financial contributions to their families, villages and districts of belonging back in Samoa[1,9]. Poverty places many stressors on a family. As Pacific CAMHS clinicians, we lose credibility with families if we don't attend to this. If a family has no food in the fridge or cupboard then therapy for other problems is likely to seem irrelevant for them. Sometimes addressing personal needs can lead to a break through in engagement with a young person. A clinician noted a marked improvement in rapport with a 12 year old boy after she arranged for care and protection services to fund his rugby team fees and found a second hand pair of rugby boots for him. This made it possible to work with him on clinical issues such as anger and defiant behaviour that had been threatening his school placement and disrupting home life.

In Ole Taeao Afua, conflicts of cultural identity between Pacific values and the dominant culture were emphasized as a big pressure on teenagers in particular. Racial stereotypes and prejudices held by non-Samoan peers and teachers as well as pressure to achieve academically in a palagi environment were also noted. Further factors identified included drug and alcohol abuse, unresolved grief, physical and sexual abuse and isolation due to the breakdown of traditional collective support systems. In our clinical work we attempt to create space for families to reflect on the many pressures in their lives and incorporate these factors into our clinical formulation.

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Fostering a spirit of collaboration

"In Samoan Culture there are three perspectives. The perspective of the person at the top of the mountain, the perspective of the person at the top of the tree, and the perspective of the person in the canoe who is close to the school of fish. In any big problem the three perspectives are equally necessary. The person fishing in the canoe may not have the long view of the person on the mountain or the person at the top of the tree, but they are closer to the school of fish." Tui Atua Tupua Tamasese Efi.[1]

In Ole Taeao Afua, this metaphor as well as the Samoan concept of fa'afeletui were used to describe the research process which attempted to interweave the different voices and views of participants in the study to create the final research findings[1]. Similarly, towards the end of an assessment process with a family, we feed back to the young person and their family our understanding of what brought them to see us, and the context of this. We commonly use a white board to visually represent this, and we have been exploring Pacific metaphors to help make these discussions easier for Pacific families to relate to. While clinical themes are presented in language used by the family, we also strive to present them in a way that helps explain a psychiatric diagnosis when that is relevant, alongside holistic aspects of family, culture, physical wellbeing and spirituality including all relevant aspects of a conventional CAMHS assessment.

Such a joint formulation and resulting discussion naturally flows into the next step of treatment options or "what will we do next?" (if anything). What do the family want our assistance with?

In making it clear that the family and young person have choices about what we do next and that our role is to offer advice and guidance, there is an increased likelihood that they will be motivated to participate further in any treatment that is agreed upon.[12]

Relational self and Western theories of psychological development

Reflecting on the Samoan relational self has led us to question tacit assumptions in Western theories of emotional and psychological development taught to us in clinical training programmes. These theories commonly privilege individuation as a key developmental task or developmental pathway to emotional maturity. Such theories contain implicit assumptions that point to western individual notions of self as universally applicable.[10] In contrast, the Samoan relational concept of self leads us to consider an expanded view of psychological development in which interdependence is valued as a mature state and a Pacific young person's roles and responsibilities towards their aiga and community are important to consider in any clinical exploration of their sense of identity.

In our Pacific CAMHS setting, these ideas would become relevant when we are considering the situation of, for example, an 18 year old Pacific young person, who, having moved out of home, later moves back to his parents' home to help care for his elderly grandparents. From a Palagi psychological viewpoint this could be viewed as a retrograde step that renders him more dependent on his parents, and might meet with covert or overt disapproval from his therapist. However, we would be open to the possibility that this move might represent a step towards emotional maturity and may strengthen his interdependence and sense of identity.

Conclusions

"E poto le tautai ae sesē le atu i ama"
(Even experienced fishermen can make mistakes while fishing)
- Samoan proverb

Although we are experienced and qualified in some ways, we don't see ourselves as experts. We offer these perspectives in the hope that they will contribute to further development of child and adolescent mental health services in different parts of the Pacific. The early development of our Pacific child adolescent and family mental health service has focused on accessibility and engagement with Pacific families. Samoan research has strongly informed our reflection on our clinical practice.

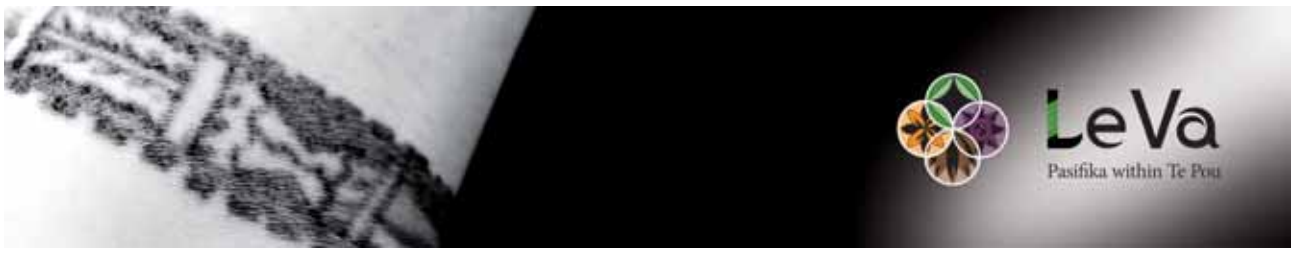
Similar qualitative research focused on cultural concepts of mental health and wellbeing with other Pacific nations groups is necessary to support the development of Pacific CAMHS services, as well as outcome studies to show which mental health treatments work for Pacific young people and their families. Dedicated Pacific CAMHS in Aotearoa/NZ have a responsibility to foster the development of qualified CAMHS practitioners from all Pacific nations and support the development of child and adolescent mental health services in less well resourced communities across the Pacific.

Acknowledgements

We acknowledge Taimalieutu Kiwi Tamasese, from The Family Centre, Lower Hutt, for her comments on this paper, and Tui Atua Tupua Tamasese Efi and the participants in the Ole Taeao Afua study for their legacy. Thanks to Dr Sunny Collings of the Social Psychiatry & Population Mental Health Research Unit, University of Otago Wellington, and Dr Alan Doris from Health Pasifika for comments on the paper and Folole Esera and the Health Pasifika team for their support in its preparation. We acknowledge Salevao for the Samoan proverb at the beginning of the paper.

References

1. Tamasese K, Peteru C, Waldegrave C. Ole Taeao Afua: a qualitative investigation into Samoan perspectives on mental health and culturally appropriate services. Report for the Health Research Council of New Zealand. Wellington: The Family Centre, 1997.
2. Ramage C, Bir J, Towns A, Vague R, Cargo T, Niumata-Faleafa M. Stocktake of Child and Adolescent mental health services in New Zealand. 2005. Auckland: The Werry Centre for Child and Adolescent Mental Health workforce development. The University of Auckland.
3. Pulotu-Endemann FK, Annandale M and Instone A. A Pacific Perspective on the New Zealand Mental Health Classification and Outcomes Study (CAOS), 2004, Wellington. Mental Health Commission.
4. Mental Health Commission. Blueprint for Mental Health Services in New Zealand. How things need to be. 1998. Wellington, Mental Health Commission.
5. Ministry of Health. Making a Pacific difference: strategic initiatives for the health of Pacific people in New Zealand. Wellington: Ministry of Health, 1997.
6. Bathgate M, Pulotu-Endemann FK. Pacific People in New Zealand. In Ellis PM, Collings SCD eds. Mental Health from a public health perspective. Wellington: Ministry of health 1997:104-135.
7. New Zealand Department of Statistics. 2006 New Zealand census figures.
8. American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision. Washington DC, American Psychiatric Association, 2000.
9. Tamasese K, Peteru C, Waldegrave C, Bush A. Ole Taeao Afua, the new morning: a qualitative investigation into Samoan perspectives on mental health and culturally appropriate services. Australian and New Zealand Journal of Psychiatry 2005, 39:300-309.
10. Bush A, Collings S, Tamasese K, Waldegrave C. Samoan and psychiatrists perspectives on the self - qualitative comparison. Australian and New Zealand Journal of Psychiatry 2005, 39:621-626.
11. White M. Narrative Practice and Exotic Lives. Resurrecting diversity in everyday life. 2004. Dulwich Centre Publications. Adelaide.
12. Taimalieutu Kiwi Tamasese, personal communication, July 2008.
13. Kingsbury S, York A. The 7 helpful habits of effective CAMHS and The Choice and Partnership Approach. A workbook for CAMHS, 2nd edition. 2006. CAMHS network, UK.



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A Samoan perspective on infant mental health

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Abstract
This paper describes background to the development of the relatively new field of infant mental health and why this may be important for Pacific communities in Aotearoa/New Zealand(NZ) and elsewhere. There is a discussion of Samoan concepts and research that could inform infant mental health theory and practice.

A Pacific home visiting programme based at Taeaomanino Trust in Porirua, Aotearoa/NZ has formed a collaboration with child and adolescent mental health service clinicians with an interest in infant mental health, to further develop infant mental health understandings and practices in this early intervention service. The benefits and practical application of this collaboration are discussed.

The paper ends with a personal perspective from one of the authors on her Samoan reflection on the relevance of attachment ideas to her family relationships and work with Pacific infants, mothers and their families.

> *"O fanau a manu e fafaga i fuga o la'au,*
> *o fanau a tagata e fafaga i upu"*
> *(Birds feed their young seeds,*
> *While people nurture their young with words) Samoan proverb*

Introduction

Until comparatively recently, little research and clinical attention has been paid to the mental health needs of infants and preschoolers in Aotearoa/NZ. However this is beginning to change. Recently a District Health Board with a large Pacific population commissioned a report that looked at options for infant mental health services in their region[1]. This report noted that there was one Child and Adolescent Mental Health Service(CAMHS)-based infant mental health service in New Zealand, the Hutt Zero to Five Team, at the Nikau Centre in Lower Hutt. In 2006, an Affiliate of the World Association of Infant Mental Health [WAIMH] was established in Aotearoa/NZ. One of the authors (PM) was appointed as a Pacific member of the NZ committee.

Here is a definition that outlines what this relatively new field encompasses:

> *"Infant mental health is the developing capacity of the child from birth to three to experience, regulate and express emotions; form close and secure interpersonal relationships; and explore the environment and learn - all in the context of family, community, and cultural expectations for young children. Infant mental health is synonymous with healthy social and emotional development".*[2]

A key focus in infant mental health is promoting secure attachment relationships between infants and their parents and other caregivers. Benefits include greater social competence from early childhood through to adulthood, stronger friendships, more acceptance by peers, more competence with play, greater empathy for others, and greater ability to achieve to their

potential academically[3]. There are many factors that can hold parents back from tuning in to their infant's needs in ways that promote attachment security. These include domestic violence, the financial stress of poverty, parental mental illness, parental substance abuse, teenage pregnancy, current unresolved loss as well as unresolved trauma when parents have experienced abuse, neglect and loss in their own childhood[1]. Infants with prematurity, developmental delay or other chronic health problems are also more at risk of poorer social and emotional wellbeing.

Although many people may be doubtful about the idea that an infant may have mental health problems that justify clinical intervention, Pacific families have traditionally placed a high value on families and the nurturing of infants and preschoolers, and social relationships are cherished.

Evidence suggesting increased rates of mental illness among Pacific adults in Aotearoa/NZ, with a 12 month prevalence of 25% compared with 20.5% for the Non-Pacific population, has implications for the wellbeing of caregivers of infants in this population[4]. In addition mothers in some Pacific communities in Auckland have been found to have elevated rates of post-natal depression, which is associated with increased rates of insecure attachment[5]. Treating the mother on her own, does not necessarily address the attachment problem[1]. Pacific families in Aotearoa/NZ have lower incomes on average than NZ European families[6]. Higher rates of teenage pregnancies in Pacific compared with non-Pacific communities in Aotearoa/NZ may put the infants of these teenage mothers at greater risk of poor nutrition, inadequate living conditions, lack of support from the baby's father and negative responses from the teen's family[7]. These factors put the mental wellbeing of both teen and baby at risk.

Although many people may be doubtful about the idea that an infant may have mental health problems that justify clinical intervention, Pacific families have traditionally placed a high value on families and the nurturing of infants and preschoolers, and social relationships are cherished.

Home visiting programmes and infant mental health

We know that the first year of life is a key time for rapid brain development. Trauma occurring during this vulnerable time has been shown to have lasting effects on brain structure and function, especially on the parts of the brain associated with the infant's emotional, social and cognitive development[1]. This suggests an important role for prevention of child abuse and neglect.

The work of Taeaomanino Family Start, a Pacific early intervention home visiting programme for infants and toddlers and their families, is founded on ground breaking research from the 1970's onwards that showed that intensive home visiting for at risk infants, parents and their families could improve social and health outcomes for infants. Early randomized trials of home visiting programmes, for example in Elmira, New York, showed that these interventions, carried out by skilled practitioners, could be associated with reduced child abuse, improved school achievement and reduced criminal activity in later teenage years[8,9]. Recently, researchers in Christchurch, Aotearoa/NZ, have demonstrated that a nurse home visiting programme known as Early Start was effective in improving child health and preschool education outcomes for Christchurch infants. They found increased positive and non-punitive parenting practices and reduced rates of child abuse and internalizing and externalizing behaviours in the children who received the programme.[10]

How Samoan concepts can inform infant mental health theory and practice

Samoan relational self and infant mental health

"I am not an individual; I am an integral part of the cosmos.

I share divinity with my ancestors, the land, the seas and the skies.

I am not an individual because I share a tofi with my family, my village, my nation.

I belong to my family and my family belongs to me

I belong to my village and my village belongs to me.

I belong to my nation and my nation belongs to me.

This is the essence of my sense of belonging."

Tui Atua Tupua Tamasese Efi[11]

The Ole Taeao Afua study carried out by Samoan researchers in Lower Hutt, Aotearoa/NZ, has described the Samoan relational self as a key concept for understanding Samoan ideas of mental health and wellbeing[12,13]. This finding has implications for infant mental health theory and research. The internal working model is a concept from the attachment literature that captures the idea that an infant over time begins to internalize a sense of self in relation to others from myriad experiences with caregivers[14]. How would the internal working model of an infant or toddler from a Samoan family be shaped differently from a child from a family with a Western individual sense of self? How might these ideas be enriched by

the Samoan concept of 'va' or relational space? Va is 'the space between', it is 'space that connects' a baby to all the relationships surrounding its being.

Most attachment research has been carried out in Western countries such as United States, Netherlands, Germany and Britain by Western researchers. Yet the overwhelming majority of the world's infants are born into cultures in which collective rather than individual value systems predominate[15,16]. Until recently little attention has been paid to this distinction in the infant and attachment literature. With the exception of some recent triadic research from France and Switzerland, by far the majority of attachment research has been dyadic research usually focused on mothers and babies[17]. Attachment research methods have been generally designed with dyads in mind. Yet in Samoan culture, infants from their first moments are embraced by multiple relationships with parents, grandparents, siblings, aunties, uncles and cousins. To understand the nuances of an infant's relational system in this setting, ethnographic research mapping the infant's interactions with multiple caregivers and siblings and cousins over time, in the natural setting of the family, may be more likely to yield rich data for understanding the interplay of the multiple relationships than a series of dyadic observations. And such research could only be rendered meaningful if the attachment researcher has deep insider knowledge of fa'a Samoa (Samoan customs and traditions), Samoan language and the Samoan relational self, which by definition means they would need to be a Samoan researcher.

Recent infant mental health literature has focused on culture and the development of identity[18]. From a Samoan point of view this topic raises a number of questions. At what point does an infant and child start to form their relational sense of self as opposed to an individual sense of self? What are the cultural mechanisms and interactions that allow this sense of self to be passed from one generation to the next? What effect do migration and interactions with preschools, schools and media and other non-Samoan people in Aotearoa/NZ have on this developing relational self? How is this different for the next generation of Samoan people who were born in Aotearoa/NZ?

Tui Atua Tupua Tamasese Efi has talked about the cultural practice of "fagogo"[19]. We include an extended quotation here in order to convey the deep cultural meaning as he describes it:

> *"A rough translation of fagogo is a fairy tale told by the elderly to the young by which the young are soothed to sleep at night. On the face of it seems simple. But it is not, because its value to the Samoan Culture is deep. Because it is the process of weaning, of nurturing, of sharing stories, values, rituals, beliefs, practices and language. It helped sustain and could still sustain a nation.*
>
> *During the height of the fagogo the young did not acquire their values from the cinema, television, the radio or from a public spectacle. They heard it from the loving tones of their grandparents or their parents, they were literally fed it from the mama which is lovingly lined along the arm of the matua, their grandparent or parent. Thus the Samoan saying: "Ai lava le tagata i le mama a lona matua"- meaning you derive substance and direction from the mama of your matua."*
>
> *"Matua is not necessarily your biological parents. Matua in this context are mostly the grandparents or the elderly in the family. The role of the matua is to nurture the young so that the young will inherit from them the stories of their struggles and survival, their values, their alofa and their vision for the future.*
>
> *'Mama' is literally and symbolically food for the young . Literally the elderly chew food in order to soften and then they roll this chewed substance into dumplings and place them on the palm of their hand up to the elbow. The young then feed on these dumplings. Traditionally this was how the young were weaned from their mother's milk.*
>
> *Thus, mama is more than food. It is spiritual. For the munching imparts into the food spiritual mana from the agaga or spirit of the muncher. It does so in the same way that the ava chewers in the King's ava impart spiritual mana in to the ava…". "Mama therefore imparts spiritual, emotional , physical, mental and cultural nurturance. Both mama and fagogo bespeak the passing on of physical and cultural life from generation to generation in closeness and alofa. It is an image of intimacy, of sharing , of love , of connection and communication. It imparts mana and shares the feau (ie the message) between generations."*[19]

Understanding cultural practices such as this may help us understand the development of a Samoan relational sense of self for an infant or child in a Samoan family. Perhaps a deeper understanding of one culture's traditions could help inform infant mental health theory and practice with infants and families from other cultures with a more collective rather than individual sense of identity. Conventional Western research methods are unlikely to be adequate for describing the essence of a deep cultural process such as this, as Western researchers commonly come from secular viewpoints from outside the culture which is being researched. This is a dilemma which will not be easy to resolve. However, the Ole Taeao Afua study provides an example of Pacific research in which the sacredness of Samoan concepts and understandings have been conveyed in a way which honoured the essence of the cultural heritage while using a rigorous research methodology[12].

Samoan relational self, spirituality and infant mental health

The Samoan self has been described as a whole being comprising spiritual, mental and physical aspects that cannot be divided[12]. Participants in the Ole Taeao Afua research used the Samoan word Fa'aleagaga which translates as spirituality, to also include mental function. The implications of this holistic idea for infant mental health practice with Samoan people is that if spirituality is not attended to at all levels of infant mental health clinical practice, families may experience clinical contact as unacceptable or irrelevant. From a Samoan point of view, the spiritual wellbeing of the child and their family is fundamental, it can't be left out. Attending to this may be as simple as offering to start a session with a prayer if that is important to that family, or it may involve exploration of traditional understandings of relational breaches of tapu and Sa[12]. For example, in a situation where a mother appears to be rejecting her infant emotionally, and appears depressed, while antidepressant treatment for her postnatal depression may be indicated, there may also be a cultural and spiritual explanation that may shed light on her predicament. An example of this could be that she may have walked over tapu (sacred and forbidden) land during the pregnancy and this may be viewed as a possible source of spiritual unrest. Attending to this via appropriate intervention from a traditional healer trusted by the family, or another trusted spiritual figure such as their church minister, could relieve this predicament and allow resolution of the relational breach that has been affecting her interactions with her baby. An appropriate infant mental health intervention for this mother and baby and their family, would need to include understanding of cultural and spiritual meanings such as these, as well as more conventional infant mental health understandings.

Pacific early intervention programmes in partnership with Infant mental health

It has become widely recognized in the infant mental health field that early intervention home visiting programmes for infants and their families are a natural place to embed infant mental health ideas and practices[20,21]. For Pacific families where infants have been identified to be at increased risk of adverse health or social emotional outcomes, a Pacific home visiting programme such as Taeaomanino Family Start is a natural place to begin to develop infant mental health approaches that might be acceptable to Pacific families.

This raises a question about possible infant mental health interventions that might be relevant for Pacific infants, parents and their families. The acceptability of infant mental health therapeutic methods for Pacific people have not been established. In order to be useful and acceptable for Pacific infants and their families, such interventions would need to be flexible enough to allow them to be carried out in a range of possible settings, such as at home or in a clinic space or in some other community setting. They would need to be able to incorporate metaphors from the family's culture of origin and spiritual practices and understandings as required by the family. They would need to be able to be carried out with a range of participants which may include just mother and baby, but might more likely include extended family members that the parents and family consider integral to the infant's life, such as grandparents and aunties and uncles or other groups such as a mother's or parent group. Therapeutic methods that have a strong emphasis on collaboration are also more likely to be acceptable for Pacific families. Imported interventions would clearly require a strong evidence base that supports their use with infants and families from other cultures. Methods that can be easily adapted to assist early intervention home visitors to use components of a model to educate and assist parents and families with understanding their relationship with their infant and their infants emotional life and wellbeing, are likely to be of practical value to a wide range of Pacific infants and families.

There are several infant mental health therapeutic methods that could be acceptable in these ways. "Watch, Wait and Wonder Intervention" is an evidenced based form of infant-parent therapy that was originally developed in Dunedin, Aotearoa/NZ[22,23]. Interaction Guidance is a parent-infant therapy method that is highly collaborative in style and flexible in the way it can be delivered in terms of venue and therapeutic language and metaphor[24]. The concepts of 'safe haven and secure base', first articulated by John Bowlby, have been further developed with visual illustrations to help parents apply these ideas in their interactions with their infants. The "Circle of Security" is a framework that uses accessible language and

metaphors to help parents understand attachment ideas and guide them in tuning into the cues that their infant's are giving them[25]. Each of these infant mental health interventions may be worth further consideration as strategies that could be of value in a Pacific infant mental health context.

Incorporating any of the above interventions into early intervention home visiting practice will require the development of strong working relationships between such programmes and local infant mental health professionals.

A simple approach we have used to foster this is regular supervision of Pacific home visiting staff by a child psychiatrist with an interest in infant mental health, that allows dialog about both infant mental health concepts and practices as well as reflection on the cultural implications of these concepts and practices. This approach has been popular with staff and has supported individual team members in developing their repertoire of skills in supporting parents and other family members to become more attuned to the emotional cues of their babies.

Personal Perspective

I (PM) work as the manager of Taeaomanino Family Start. This programme is a home visiting intervention that provides support and monitoring of the child's health and development and social wellbeing. Our service is embedded in a Pacific nongovernmental organization, Taeaomanino Trust, which supports us in using Pacific values and cultural practices. Our workers are of Samoan, Tokelau, Cook Island, Niue and Fijian descent and represent Pacific cultures and languages that make up the majority of the Pacific population in Porirua, Aotearoa/NZ.

When I left Samoa in 1961, mothers were almost always at home with their babies. For many babies, their first months and years were full of loving attention from parents, grandparents, siblings, cousins, aunties and uncles. The nu'u or village environment ensured this, with our aiga(family) in the surrounding fale(houses). An open fale makes it easy for a child to run from one house to another. In that environment there are few walls and fences to hide conflict and abuse behind. If my neighbour was in trouble with his/her mother, we would all know about it, and if things got too heated he/she could come over to our fale for a while until things cooled down. The ability to remove oneself from the conflict provides a natural safe space in the context of extended aiga relational arrangements or 'va'.

This gives parents the required space they need to settle their anger or frustration. Moreover, my parents would be aware of what had happened and would provide guidance, without the anger, and in a more settled emotional state. Children in this situation had more opportunities to find relationships with adults and community that were sustaining of them and this enhanced their resilience. In that way, there were many natural protections in the aiga and village environment to guard children against physical abuse.

The environment in Aotearoa/NZ in the 1960's was very different to what I was used to. We were living in a Palagi (NZ European) suburb and my husband was away all day at work. I was at home alone with my babies. I was determined to be at home with them and give them as much love and nurturing as I had had, but I missed the company and guidance of my family, my mother, my grandmother and my aunties who would have been there in Samoa. New Zealand might have been the land of milk and honey but it was also a land of isolation and strange expectations. As a parent, I felt cut off from my aiga and other families by the distance and walls and fences of suburbia.

We do not see ourselves as individuals and so being cut off from our aiga is an unnatural and chronically stressful state.

I think it might be hard for Palagi to appreciate what this environment is like for those who have not grown up with it, in the same way that a Samoan person can find it hard to understand the NZ environment. The Samoan concept of self is a relational self and this has been well described in Ole Taeao Afua[12,13]. We do not see ourselves as individuals and so being cut off from our aiga is an unnatural and chronically stressful state. Parenting, from my Samoan viewpoint, is not supposed to be a solo role. So having to think 'nuclear' in family terms, is poverty of another form to a Samoan parent.

As collective participation is a natural development in the everyday life of Samoan families, often children carry out everyday tasks for the family at an early age. In Samoa it is not unusual to see a five year old carrying a pail of water for his family. An 8 or 9 year old may be left to mind two smaller children or a baby asleep during a parent's absence. While it may seem like the children are "home alone" from a NZ perspective, from a Samoan viewpoint they are not because of the open communal environment and close proximity to other adults in nearby fale.

There are many reasons for child abuse and the stress of poverty can contribute to this. The economic reality in Aotearoa/NZ was quite different from the hopes and dreams of Samoan people prior to their arrival in this country. Our people often took up factory jobs and cleaning jobs. Often parents would have two jobs each working many hours per day in order to meet basic living expenses as well as financial obligations (fa'alavelave) to church, family and village

back in Samoa, as well as saving for their children's education. This often meant that young children had to be left in the care of older siblings if grandparents or other nonworking adult relations were not living nearby. These economic factors and isolation have changed the care of infants, and attachment patterns to parents and siblings. For some infants their primary attachment may have been to inexperienced sibling caregivers.

Following the economic downturn in New Zealand in the 1970's, many factories closed down. Many Samoan parents lost their jobs. Suddenly Pacific workers were considered surplus to requirements in New Zealand. By the late 1970's Samoan and other Pacific people were targeted as over-stayers and this was the era of the infamous "dawn raids" when NZ immigration officials would raid Samoan homes in the early hours of the morning looking to arrest alleged over-stayers. This period resulted in a lot of fear and mistrust of NZ government departments by Samoan people.

During my 14 years as a care and protection worker I frequently saw Samoan families where care and protection issues arose as a result of the stress of financial and cultural pressures and the lack of extended family support that would have protected young people back home in Samoa. I found it distressing to see Samoan children being removed from their aiga, when I knew that this would be hugely disruptive of their relational arrangements and sense of self in years to come. One of my hopes for Taeaomanino Family Start was that we might develop a Pacific service, providing home visiting and early intervention for our Pacific communities, with the cultural knowledge that meant that we could be mindful of the Pacific cultural context and realities of the infants and families we were working with.

Developing a relationship with our local Pacific CAMHS service brought us into contact with CAMHS clinicians with an interest in infant mental health. This led to us hosting two attachment workshops at our service, run by Dr Denise Guy, a child psychiatrist and infant mental health specialist. In the first workshop we were introduced to a history of attachment theory and research, including the ideas of John Bowlby and the work of Mary Ainsworth in Uganda and her later research in Baltimore[26]. Her descriptions of happy babies in Uganda reminded me of happy babies I remember in Samoa when I was growing up. I liked the way attachment ideas helped us to reflect on the infants' key relationships with their caregivers. The idea of the 'secure base' made sense to me. These ideas encouraged us to consider the meaning of moment to moment interactions between mothers and babies, and other family members and their babies. This has always seemed important to me. But infant mental health ideas have given me language to more richly describe and think about these moments.

The second attachment workshop introduced us to ideas from the 'Circle of Security' framework[25]. This model provides a method for educating parents about the meaning of different types of infant attachment and exploration behaviour and helps parents understand how to respond in ways that are sensitive to their infants' cues. Even a brief introduction to these ideas helped our Family Start team to further develop our ways of talking to parents about how to make sense of what their baby is trying to tell them and how to respond in a sensitive and attuned way to their infant's signals.

Around this time my daughter gave birth to her son. This has been a very exciting time and this new learning about attachment has enriched my understanding of the nuances of his emotional and social development. His ability to communicate was obvious to me from his first few days and weeks. He was making connections very early, for example with sounds. He would stop crying differentially to the sound of a familiar voice. He clearly knew his mother's smell and while breastfeeding he would make a "knowing noise", a sound that communicated contentment like a cat purring. My understanding of attachment ideas, helped me in supporting his development by flowing with him, noticing where he was at, following his rhythm rather than forcing an adult rhythm onto him.

I have noticed the different way he relates to his different caregivers. For example recently my daughter went away for a number of days and he stayed with me and his extended family. He is currently 14 months. He has always had a lot of contact with me and his aunties and uncles and other extended family members. He has grown up with frequent contact with his extended family and others, but I see now that there is a hierarchy in his attachment relationships. He was not himself when my daughter was away, he was not quite happy. And on her return he wouldn't let her out of his sight, whereas previously he would. And our knowledge of attachment helped us talk about this and understand it from his infant point of view and know that the answer was to give him plenty of closeness till he has had a chance to know that he really had his Mum again and had regained a sense of his secure base. And his clingy "attachment behaviour" gradually settled down over the days and weeks after that.

Conclusion

"E pele i upu, pele i ai, pele i aga, pele i foliga"
"Fondly in word, fondly in feeding, fondly in gesture, fondly in body language"
Samoan proverb

Infant mental health is increasingly recognized as an established field within mental health which focuses on the quality of early caregiving and emotional relationships between infants and their primary caregivers. The field of infant mental health could be enriched by exposure to Pacific understandings about early nurturing and care, and an example of this is the Samoan relational self which raises questions about a number of Western assumptions about self and identity that are influential in infant mental health research and practice.

Home visiting programmes that target high risk situations for infants and their caregivers are a natural place to integrate infant mental health ideas and practices. We have found that, through collaboration between Taeaomanino Trust Family Start service and clinicians from a Pacific CAMHS service, it has been possible to nurture the development of infant mental health ideas and reflective thinking in the context of this Pacific home visiting early intervention programme. Such collaboration warrants further evaluation and development as a model for addressing the infant mental health needs of Pacific infants and their families, alongside more intensive infant mental health services that may be necessary for some Pacific infants and their families with more complex mental health needs.

Acknowledgements

We acknowledge Taimalieutu Kiwi Tamasese, Gerardine Clifford and Dr Denise Guy for their comments on this paper.

References

1. Merry S, Wouldes T, Elder H, Guy D, Faleafa M, Cargo T. Kua whakawhenua te purapura ka puawai te taonga. Addressing the social and emotional needs of infants in Counties Manukau District Health Board.
2. Zero to Three Policy Centre; cited in Merry S, Wouldes T, Elder H, Guy D, Faleafa M, Cargo T. Kua whakawhenua te purapura ka puawai te taonga. Addressing the social and emotional needs of infants in Counties Manukau District Health Board.
3. Cassidy J. Handbook of Attachment: Theory, Research and Clinical Applications. 1999, Guilford Press, New York.
4. Foliaki S, Kokaua J, Schaaf D, Tukuitonga C. Twelve-month and lifetime prevalences of mental disorders and treatment contact among Pacific people in Te Rau Hinengaro: The New Zealand mental health survey. Australian and New Zealand Journal of Psychiatry. 2006. 40 (10) 924-934.
5. Abbott M, Williams M. Postnatal depressive symptoms among Pacific mothers in Auckland: prevalence and risk factors. Australian and New Zealand Journal of Psychiatry. 2006 40(3) 230-238.
6. NZ Department of Statistics.
7. Mayers HA, Hager-Budny M, Buckner EB. The Chances for Children Teen Parent-infant Project: Results of a pilot intervention for teen mothers and their infants in inner city schools. Infant mental health journal, 2008, 29(4) 320-342.
8. Olds DL, Chamberlin R, Tatelbaum R. Preventing child abuse and neglect: A randomised trial of nurse home visitation. Pediatrics. 1986;78:65-78.
9. Olds DL, Henderson CR, Jr., Cole R, Eckenrode J, Kitzman H, Luckey DW, et al. Long-term effects of nurse home visitation on children's criminal and antisocial behavior: 15-year follow-up of a randomised controlled trial. Journal of the American Medical Association. 1998;14:1238-44.
10. Fergusson DM, Grant H, Horwood LJ, Ridder EM. Randomised trial of the early start program of home visitation. Pediatrics. 2005;116(6):803-9.
11. Tui Atua Tupua Tamasese Taisi Efi. In Search of Meaning and Nuance and Metaphor in Cultural Competencies. A paper presented at the Waitemata District Health Board Pacific Mental Health Competency Training Programme, 23 September 2002.

12. Tamasese K, Peteru C, Waldegrave C. Ole Taeao Afua: a qualitative investigation into Samoan perspectives on mental health and culturally appropriate services. Report for the Health Research Council of New Zealand. Wellington: The Family Centre, 1997.
13. Tamasese K, Peteru C, Waldegrave C, Bush A. Ole Taeao Afua, the new morning: a qualitative investigation into Samoan perspectives on mental health and culturally appropriate services. Australian and New Zealand Journal of Psychiatry 2005, 39:300-309.
14. Bowlby J. Attachment. 1969, Basic Books, New York.
15. Dien DS. Big me and little me: a Chinese perspective on self. Psychiatry 1983;46:281-285.
16. Roland A. Psychoanalysis in civilisational perspective: the self in India, Japan and America. Psychoanalytic Review 1984, 71:569-590.
17. McHale JP. When infants grow up in multiperson relationship systems. Infant Mental Health Journal, 2007;28(4)370-392.
18. Tamminen T. How does culture promote the early development of identity? Infant Mental Health Journal, 2006;27(6)603-605.
19. Tui Atua Tupua Tamasese Efi. More on meaning, nuance and metaphor. Address to Pacific Fono, “Moving ahead together”, Porirua, New Zealand, November 2002.
20. Beeber LS, Chazan-Cohen R, Squireds J, Harden BJ, Boris N, Heller S, Malik N. The early promotion and intervention research consortium (E-PIRC): Five approaches to improving infant/toddler mental health in early head start. Infant Mental Health Journal, 2007;28(2)130-150.
21. Chazan-Cohen R, Stark D, Mann T, Fitzgerald H. Early Head Start and infant mental health. Infant Mental Health Journal, 2007 28(2) 99-105.
22. Muir E, Lojkasek M, Cohen NJ. Watch, Wait, and Wonder: A manual describing an infant-led approach to problems in infancy and early childhood. Toronto:ON 1999.
23. Cohen NJ, Muir E, Lojkasek M, Muir R, Parker CJ, Barwick M, et al. Watch, Wait, and Wonder: Testing the effectiveness of a new approach to mother-infant psychotherapy. Infant Mental Health Journal. 1999;20:429-51.
24. McDonough S. Interaction guidance: an approach for difficult to engage families. In C.H. Zeannah, Jr. (Ed.), Handbook of infant mental health (2nd ed., pp485-493). 2000, New York: Guilford Press.
25. Marvin R, Cooper G, Hoffman K, Powell B. The Circle of Security project: Attachment-based intervention with care-giver pre-school child dyads. Attachment & Human Development. 2002;4(1):107-24.
26. Karen R. Becoming Attached: First relationships and how they shape our capacity to love. 1994, Oxford University Press, New York.

Te Vaka Atafaga: a Tokelau Assessment Model for Supporting Holistic Mental Health Practice with Tokelau People in Aotearoa, New Zealand

Kupa Kupa

Foreword

Ni alofaaga mo koutou na Tamana ma Matua pele kua momoe atu. Pe ko fea lava e tafea ai e mau pea te aganuku i te loto. Salapima Fuli o tei ko la.

Abstract

Despite the emergence of dedicated Pacific mental health services in Aotearoa, New Zealand in the last 10 years, there have been few published Pacific models of mental health assessment to guide clinicians working with Pacific clients and their families.[1] Te Vaka Atafaga is a Tokelau model consisting of 6 core concepts which are considered key aspects of health for Tokelau people. This model was endorsed by Tokelau community representatives and leaders at the Inaugural Tokelau Health National Conference held in Wellington New Zealand in 1992.[2] The author relates the personal and professional journey that he has taken 'aboard' Te Vaka Atafaga over a twenty year period from conceptualisation, development and through to application in clinical practice in a mental health setting in Aotearoa, New Zealand.

Introduction

"He Toeaina ke nofo i te mulivaka"
"An Elder to sit at the canoe's stern"

This Tokelau proverb acknowledges the place of '*toeaina'* (elders) sitting at the stern of the Vaka, to oversee the welfare and safety of the crew, directing and advising them using their vast knowledge, experience and wisdom.

For Pacific families, embarking on a mental health assessment can feel like a journey into uncharted waters. This proverb could be viewed as a reminder to mental health clinicians that part of the art of engaging with and empowering Pacific families in addressing mental health problems, is finding creative ways of harnessing the wisdom inherent in the families' knowledge and lived experiences and their Pacific culture.

Tokelau consists of three atolls in the South Pacific Ocean between 171° and 173° W longitude and 8° and 10° S latitude and lying approximately 500 km north of Samoa. Tokelau has been inhabited for over a thousand years with frequent inter-Island sea journeys on different types of `paopao' (outrigger canoes) between the Tokelau atolls, as well as between Tokelau and other Islands such as Samoa.[3] Olosega is the fourth atoll known by my people however it was taken by the United States of America nearly 100 years ago and, is under their protection. Olosega was populated mainly by people from Fakaofo and Nukunono at that time.

In the last 120 years, European colonisation of Pacific nations led to Tokelau becoming a British Protectorate and in 1926 our nation came under the jurisdiction of New Zealand.[3] As one of three Pacific nations including Niue and the Cook Islands that have citizenship in New Zealand, there is a special relationship between Tokelau and Aotearoa, New Zealand. The population in Tokelau in 2006 was 1,466 between the three atolls of Fakaofo, Nukunonu and Atafu. In comparison, the Tokelau population living in New Zealand in 2006 was recorded as 6,819.[4] While this makes up only 3 percent of the Pacific population in New Zealand, in some urban centres such as Porirua, Tokelau people make up as much as 16% of the Pacific community.[4]

In the early 1960s Aotearoa, New Zealand began to implement a resettlement programme, shifting many Tokelau families to these shores on the pretext of, managing the increasing problem of overcrowding on the small atolls.[3] Also at that time the economy of Aotearoa, New Zealand was expanding and Pacific migrants helped fill labour shortages in factories in urban New Zealand. Tokelau men came to these shores as early as 1958.

My family arrived in New Zealand in 1970 and after leaving school I was drawn to work in the health sector.

In the last 20 years I have worked as a Psychiatric Assistant and then following my nursing training, as a Registered Comprehensive Nurse in forensic mental health and more recently in service development in a primary care organisation in Wellington.

During my training, I was introduced to two cultural frameworks for guiding mental health clinicians in culturally appropriate values and practice. The first of these was Te Whare Tapa Whā, a Māori model now widely used in Māori mental health.[5] The first Pacific model of care I learned was that of the *'Fonofale' model*, which reflects the cultural values[1] of Samoa. While there were aspects of this model that had relevance for Tokelau people, I realised that cultural concepts unique to Tokelau were not captured or, articulated fully. Two examples of such concepts are *'Fatu Paepae'* and '*Inati*'.[3,6,7,8] *'Fatu Paepae'* is a matriarchal title carried only by elder women who are responsible for overseeing the welfare of and care of the entire extended kaiga. This means that the *'Fatu Paepae'* holds a privileged leadership role, and is very influential in key family decisions.

The *'Inati'* is a Tokelau cultural practice that governs the sharing of food and communal resources. When a village engages in communal fishing expeditions, the entire catch is brought back to *`Te Laulau'*, the traditional area of land where everything is shared, and it is then distributed to the whole village. Under this system a woman with young children but no husband or, no descendents to help with the communal fishing will receive an equal share of the catch, to a family with many able bodied men who also took part in the communal fishing. This *`inati'* system ensures ongoing support for each other and helps to sustain the whole community in times of need and hardship. Understanding such social support systems is relevant for mental health assessment and treatment planning for Tokelau people in their communities in Tokelau, in Aotearoa New Zealand or, on the international arena.

The *'Inati'* is a Tokelau cultural practice that governs the sharing of food and communal resources.

Recent research highlighted the importance of Pacific models of practice for working with Pacific peoples with mental health problems.[1] A study by Agnew et al found that the Fonofale model, a metaphoric framework to conceptualise Pacific health, is the best known Pacific health belief model among Pacific mental health providers[1]. A health belief model suggests that there are ethnic specific considerations which contribute to wellbeing. It described three Pacific models that have been used to frame Pacific research practices. These are the *'Tivaevae'* model from Cook Islands[9], the *'Kakala'* model from Tonga and the *'Fa'afaletui'* model[10] which draws upon the traditional Samoa concept of the weaving together communal views and cultural knowledge. It has been suggested by Kingi-'Ulu et al that these frameworks could also be adapted to guide clinical practices with Pacific people in mental health.[11] Agnew et al also makes this distinction between Pacific models of health belief which use culturally derived metaphors to inform clinical practice, and models of service delivery in which Pacific service practices are more explicitly articulated at all levels including cultural, clinical and service management and delivery.[1]

This paper will describe the development of Te Vaka Atafaga as a Tokelau framework, which is a model of health belief that can also be used to shape aspects of service delivery such as mental health assessment and collaborative treatment planning with Tokelau families, and team review processes.

Background: Cultural Identity

One of the most profound memories and experiences I have of Tokelau occurred at the age of about 3 years. At that time, I lived with my maternal grandparents Fuli and Sipaia at Te Paloa on the atoll of Fakaofo. One day I was carried by one of my uncles and placed into a traditional Vaka Atafaga, where we set sail for the outlying Islands taking a passage through the lagoon. I was not concerned with how long the travelling might take because there were many natural wonders that kept me fully occupied along the way, such as the colourful reefs in the lagoon and the many sea birds that flew nearby. It was warm and sunny when we left Te Paloa, yet on arriving at *`Uta'* across the other side of the lagoon, there was a tropical down pour of rain. Once we reached our destination my uncle dragged our *'paopao'* (outrigger canoe) onto the sand, with the back half of the *'paopao'* still in the water. He left me inside the *'paopao'* and instructed me to remain there, then covered me with the *'La'* sail to shelter me from the down pour before leaving to harvest the *'pulaka'* (taro) plantation. Once again I occupied myself by looking over the side of the *'paopao'* watching the many different coloured fish that swam past. At one point I pulled the sail off me and immediately felt the full force of the rain driving hard against my bare skin and it was painful. My atoll environment was unsurpassed as a beautiful natural place of learning, and full of surprises, but as a young child it made me feel vulnerable at times.

My grandfather Fuli Fati left this world 8 years ago; he was a remarkable and wise man who had extensive knowledge and experiences of Tokelau philosophy, history, genealogy and culture. He had a great love for his people and family and was a very well respected member of the Tokelau communities in Aotearoa, New Zealand and abroad. He was also well respected amongst the people of Samoa and Tuvalu in Aotearoa, New Zealand and abroad. He

was a historian, a Tufuga (a Master) and Master Carver of the traditional Tokelau *'paopao'*, and a renowned traditional healer. During the 1970s my grandfather was permitted to practice in Wellington Hospital and he worked alongside hospital doctors to heal people from Tokelau and Samoa. Dr Ian Prior and Dr Antony Hooper were his Palagi (Pākehā) medical and anthropological colleagues and they often visited my Grandfather for advice. Later I was privileged to observe Fuli practicing traditional healing in Aotearoa, New Zealand, and helped him when he needed assistance. He used plants to make oils to treat physical ailments, as well as specific massage techniques. He taught me many things about the Tokelau culture and history, health and genealogy particularly about my Fakaofo culture and history.

My father Lisone Kupa who has also left this world, was renowned for his knowledge of both the Tokelau and Samoa languages. He was an articulate orator and speaker. In his later years, he was a member of a group of *'toeaina'* (elders) that undertook the challenge of translating the bible from the English into Tokelau language.

I share these personal experiences about my *kaiga* (family), *fenua* (land) and *aganuku* (traditions) because they have greatly influenced the development of Te Vaka Atafaga.

The Formulation and Development of Te Vaka Atafaga

During my comprehensive nursing training in 1992, I was asked the question, 'What is your philosophy of health?' In the course of my research and reflection on this question I realised that for me, I was a Tokelau person first and, foremost by birth right and, secondly a nursing student. My Fakaofo (Tokelau) identity was at my core and any metaphor that might encapsulate my philosophy of health had to come from my Tokelau culture. In searching for an image that Tokelau people could easily relate to, to illustrate a Tokelau philosophy of health, Te Vaka Atafaga gradually emerged. Te Vaka Atafaga is a traditional outrigger vessel with a sail. In choosing this image as a metaphor for health for Tokelau people I consulted extensively with my grandfather Fuli Fati. All of these long discussions were in the Tokelau language and in the course of this I translated all of the material from Tokelau to English, with the help of my Father.

An opportunity for cultural validation of this model came firstly with the Porirua Tokelau Health Collective, a group of Tokelau mental health nurses in 1992, and later at the first Tokelau National Health Conference held in November 1992.[2] This conference was attended by 200 participants comprising Tokelau elders, health workers, enrolled and registered nurses, students, and participants from social service agencies and education. There was strong representation from each of the three Tokelau atolls, Fakaofo, Nukunonu and Atafu.

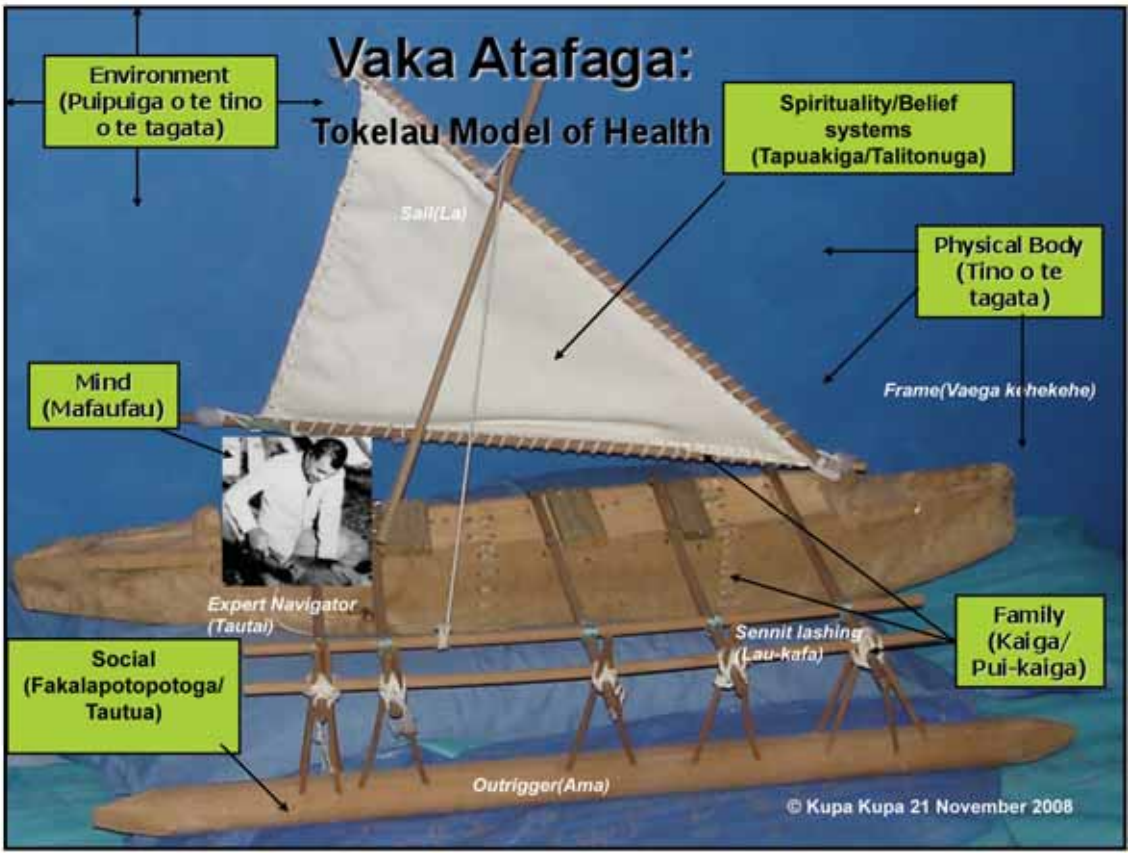
Before the Te Vaka Atafaga was presented to participants, the question was put forward, What are your thoughts on the total well-being/health of a Tokelau person?

Discussion groups were held in both English and Tokelau languages. The major themes that emerged from these group discussions highlighting Tokelau participants' definitions of health which included the following:

- **Fenua** - Natural environment
- **Te Tino o Te Tangata**- Human physique and physical fitness
- **Mafaufau** - Conscientiousness and strength of mind
- **Inati** - the system of sharing for the benefit of the kaiga
- **Tapuakiga / Talitonuga** - Ancient beliefs and Christianity
- **Kaiga** - Families and traditional sacred relationships between members

Following the group discussions I presented the Te Vaka Atafaga model in both the Tokelau and English languages. Tokelau participants endorsed the use of the *'paopao'* as a model of general wellbeing and mental health that reflected values inherent to Tokelau culture. During the discussions a recommendation was made by participants that Te Vaka Atafaga be recognised as representing a nationally agreed perspective on Tokelau health.[2] In addition there were a number of participants from other Pacific nations such as Samoa and Tonga who spoke to me afterwards and said that they found the ideas applicable to their own cultural values and experience.

Te Vaka Atafaga Defined



Te Vaka Atafaga is comprised of six components that are considered integral to the total wellbeing of a Tokelau person within the context of the extended kaiga.

1. Te tino o Te Tagata (Physical body)

The wooden structure of the *'paopao'* represents the physical body, with all the interrelated parts and their complementary function. From a Tokelau perspective while it is impossible to separate mind, body and spirit, it is important to be able to highlight the role of physical body, as without a well body, all the other aspects cannot be well.

2. Mafaufau (Mind)

'Mafaufau' is represented by the Tautai (expert fisherman and navigator) who steers the *'paopao'* and maintains it in good working order. He also controls the direction in which he will travel. The Tautai relies on his memories, strength of mind, wisdom and knowledge to guide the *'paopao'* carefully and safely through the sea at all times. Since the Tautai fully commands the *'paopao'*, his course will depend ultimately on his wellbeing. Similarly, if a person is in a state of mental unwellness then this may place their own wellbeing and that of others close to them in jeopardy or, at extreme risk.

3. Kaiga / Pui- kaiga (Family)

The intertwined threads of *'Lau-kafa'* (sennit or rope made from coconut husk) symbolise the Tokelau family structure with individual family members bound together by complicated dynamics over time to form a strong extended '*kaiga' (*family) system. Each individual has their own role to play in the kaiga.

'Lau-kafa' takes many months to prepare in a traditional manner and is highly prized in Tokelau and embued with deep cultural significance[12]. In the past it was used in the construction of traditional Tokelau *`Fale'* (house) and *`Fale Fono'* (Village Meeting House), as well as *`Uka'* or fishing line. The *`Lau-kafa'* is used to lash large sections of the main frame together, as well as lashing joints together and securing the anchor to the *'paopao'*. It is also used for making fishing nets and other fishing tools.

Woven into the *'Lau-kafa'* are the values, beliefs, language, traditions, experiences, wisdom and history of my Tokelau ancestors. These are taught within the kaiga which promotes positive growth and development.

Like the '*Lau-kafa'* which is extremely strong and flexible, the kaiga gives you strength and support, builds resilience and keeps you grounded in your experience and reality.

4. Tapuakiga / Talitonuga (Spirituality/ Belief systems)

The `*La'* (sail) represents spirituality because it is driven by a 'Pule' (power) or equivalent word Mana (power) that cannot be seen, yet the influence can be felt and can be seen at work in various ways.

Before European contact, Tokelau had its own unique ancient belief systems. This encompassed gods and spirits that the people believed in and worshipped. This is evident in the large stone slab known as the God *'Tui-Tokelau'* that presently stands on the Atoll of Fakaofo in Tokelau and represents our traditional belief systems.

Belief systems were an integral part of life. Some beliefs were that causes for illness were due to evil spirits. In such situations there were expert healers that treated people who became ill in this way. Such practices and healers still exist today. These traditional healers are the preferred first line health practitioners for many Tokelau people. An example of their various methods of *`fofo'* (traditional healing practices) include the use of plants and plant extracts to treat physical conditions, as well as practices that are believed to `chase evil spirits away'.

Following European influence things changed. Christianity was introduced which suppressed but did not obliterate all of the previous beliefs. The stone God Tui-Tokelau was replaced with the Almighty God, yet it still has prestigious significance within the culture because of its symbolic place in Tokelau history.

5. Puipuiga o Te tino o Te Tagata (Environment)

This refers to all things that make up the physical environment that is outside of and surrounds the *'paopao',* which influence a person's wellbeing.
Traditional accounts name four atolls that make up Tokelau; Fakaofo, Nukunonu, Atafu and Olosega.[3, 6,7] Our environment sustains us. It provides food sources including plantations of pulaka (a species of taro), and species of bird as well as different types of fish found only in the lagoon, or in the deep sea beyond the reefs. Plants used for traditional healing are also found in the outer Islands.

The environment clearly has had an impact on Tokelau health both in Tokelau itself and for Tokelau people in Aotearoa, New Zealand, and is presented in the following way:

Tau (weather)

Despite glamorised images of Tokelau as a tropical paradise, our vulnerability to tropical cyclones and storm surges, mean that Tokelau is at the mercy of the weather. Tokelau is no more than five meters above sea level with the total land area of only 12 km^2 and the soil is made up of sand and coral rubble. In the cyclones of 1987, people on the atoll of Fakaofo reported seeing breaking waves that were higher than the palm trees. Violent winds caused major destruction to all three atolls. Many of the fruiting trees such as; banana, pawpaw, breadfruit and coconut palm were levelled by the strong winds. Water sources were contaminated. Live stock such as chickens and pigs were also lost. Immediately after this Tokelau relied heavily on outside assistance especially for food and clean water.

Fenua (land)

The land area is small yet this is where the resources are obtained such as food, shelter, and materials needed to make repairs to the paopao and for making crafts. A more significant cultural-spiritual aspect of Tokelau as `land', is that it is the birth place of many Tokelauan's and therefore one's identity, language, memories, learning and heritage is connected to the land.

Moana (sea) & Namo (lagoon)

There are areas of the deep sea and the lagoon where different varieties of fish and other sea foods are gathered. The lagoon also serves as the means of journeying from one `motu' (islet) to another.

Lagi (sky)

The sky can warn of the coming weather pattern and will determine whether the tautai will go out on deep sea fishing expeditions or travel to the other outlying motu to harvest plantations.

Fetu (stars)

These have served as a compass for direction on journeys, and particular star formations can be identified by name such as *'Na Taki O Mataliki'*.

Mahina (moon)

There are different varieties of fish that are abundant during the moons cycle. This knowledge helps to inform fishermen of what is available at different times and when. The knowledge that has been passed down through the generations lets the fishermen know where they must go to catch their bounty of fish, and the methods of fishing to use. The moon is also used to light up the path during night time fishing expeditions.

Mata Matagi (winds from the different directions)

There are an identified number of directions from where the wind comes and goes in Tokelau as well as the months these are expected, and there are different names given to the winds which have various levels of velocity. These range from the favourable `*Tokelau'* to the much stronger `*Timuatoga'*.

Ea lelei (air)
While air is vital to people's existence, Tokelau people recognise the need to breathe fresh clean air.[3,6,7,8] In New Zealand, the environment also has a major impact on the health and wellbeing of Tokelau people. Following the resettlement of Tokelau families to a number of cities in Aotearoa, New Zealand, families had to withstand extreme climate changes from Tokelau's hot tropical sun to the much colder conditions.

Children born to these families were also exposed to environmental pressures such as media, school and peers which presented conflicting cultural values. Young people bombarded with New Zealand culture frequently had difficulties maintaining Tokelau customs, practices and language. Daily stresses related to settling in to this new land included; learning to speak English, learning to operate seemingly simple yet complicated electrical appliances such as ovens, learning the value and use of money, maintaining contact with extended family members who were settled far away into other areas like Auckland, and settling into new jobs and schools.

6. Fakalapotopotoga / Tautua (Social / Support systems).

The *`ama'* or outrigger represents social structure or organisations. The main body of the *'paopao'* needs the support and stability of the *'ama'* in order to stay afloat. There are deep values in Tokelau culture that promote social and economic equality. The *'inati'* system ensures that a person is well supported.

Clinical Application

This example will illustrate how the *'paopao'* may serve as a framework to guide clinical practice by exploring each of the components described previously.

Tahi was an 18 year old Tokelau man admitted into an acute mental health unit at Porirua Hospital. He had been referred by his general practitioner after his family became overwhelmed and fearful about his disturbed and threatening behaviour. I was asked to meet Tahi and his family to assist the inpatient team with both clinical and cultural assessment in the Tokelau language.

One of the important Tokelau values when communicating with people is the use of words to show respect or *`Fakaaloalo'*.[3,6,7,8] The name Te Vaka Atafaga specifically identifies this type of outrigger canoe, but can simply be referred to as a *`paopao'* which describes and encompasses all the different types of Tokelau canoes. Initially I use the name Te Vaka Atafaga, but throughout this paper I refer to it as *'Paopao'*.[6,7] I also identify *'Fatu Paepae'*, but refer to this same person as simply *`Matua'*,[6,7,8] which is a respectful term meaning *`Mother'*. During this assessment I was careful to apply respectful terms when referring to Tahi and his family.

Before commencing the assessment I made sure that Tahi and his family were comfortable in the assessment room and that there would be no disruptions during the assessment process. I then greeted Tahi and each family member in their language. I enquired about how they wished to begin the process knowing that they might want to start with a *'lotu'* or prayer. During the interview I paced interactions and questions carefully, following cues from Tahi and his family. I knew that the sharing of information would take time and might take more than one session. If Tahi and his family felt they had been cut off while they were talking, they might feel disempowered and less willing to cooperate. During the interview I was mindful of culturally important nonverbal behaviour and kept my voice tone quiet, and avoided eye contact for long periods, pausing from time to time to allow brief rest periods when I thought the family needed that and making sure that refreshments were available. I was careful to explain in detail what the family could expect from the process at the outset and offered them the option of closing the session with a prayer.

1. Mafaufau (Mind)

When I interviewed Tahi on his own he admitted to me that he had been hearing several voices swearing and criticising him for two months. During this time he had begun to feel suspicious of friends and close family members and became fearful that he might be attacked. Although he was not depressed, he was often tense and he was sleeping poorly. He had taken to keeping a softball bat under his bed at night and had confronted an uncle with this.

2. Tapuakiga / Talitonuga (Spirituality/ Belief systems)

Because of his disturbed behaviour his family believed that Tahi was experiencing a state of *'Uluhia'* (spirit possession) and had taken him to see a Tokelau *'Fofo'* or traditional healer. However, when the Fofo had assessed Tahi, he concluded that his symptoms were not consistent with *'Uluhia'*. Tahi told the Fofo that he had been smoking marijuana. The *'Fofo'* told the family to take Tahi to their family doctor as he did not treat drug use, which he believed was a likely cause for Tahi's experiences and bizarre behaviour. After this, Tahi had stopped smoking marijuana for 2 weeks but his auditory hallucinations and persecutory beliefs intensified during this time.

The family were Presbyterian and had strong Christian beliefs alongside their traditional Tokelau beliefs.

3. Kaiga / Pui-kaiga (Family)

Tahi was the second eldest of 6 siblings and the eldest son. He had responsibilities for the welfare of his siblings. I learned that there had been high expectations of him excelling at school and attending university however his father had died three years before in a work accident leaving the family without a provider. At this point Tahi left school and got a labourers job.

I learned that his Mother was the *'Matua'* or *'Fatu Paepae'* in their extended family. This meant that she was a key person for the mental health team to get a strong rapport with, in order to collaborate on building an effective management plan after discharge from hospital. If she was convinced that the plan was sound, then she would very likely be able to persuade other family members to support the agreed treatment for his psychotic illness. I also learnt that Tahi had a cousin on his Father's side who had been treated for a psychotic illness in his early adulthood.

4. Te Tino o Te Tagata (The Physical Body)

Tahi was a fit young man who until 3 months before had been an active rugby player. Physical examination by an admitting doctor had been considered normal. He had a circular burn scar on his left arm from 'fooling around with friends' with a cooking fire in Tokelau at the age of ten.

5. Puipuiga o Te Tino o Te Tagata (Environment)

Tahi was born in Aotearoa, New Zealand but went to Tokelau at the age of 5 and lived with his paternal grandparents there, returning at the age of twelve to his parents and siblings in New Zealand. Having missed his family at age 5, his adjustment back into New Zealand at age 12 was also difficult as he had lost confidence with English and had to work hard to catch up at school. Having been immersed in the strong Tokelau inati values, he was suddenly exposed to the individual values of his peers and the media pressure in New Zealand and at times felt torn between his responsibilities to serve his family and the 'New Zealand lifestyle of following your own wishes, that his peers enjoyed.

6. Fakalapotopotoga / Tautua (Social / Support systems)

Tahi's Mother's *'Fatu Paepae'* status and *'Inati'* values meant that there had been plenty of support from the extended family after the death of his Father. Two of his younger siblings had gone to live with an aunt and uncle nearby. Other relatives would often provide meals and assist with the family's other needs. However Tahi's role as eldest sibling and now a Father figure in the household was a source of considerable stress for him as a teenager. His pay packet was given to his Mother to manage on behalf of the family. He had very little opportunity to relax or go out with friends and he had increasingly felt resentful of this, which had contributed to his recent marijuana use. It was clear to me that assisting the family in attending to this dynamic and freeing him from some of the stress of his difficult role in the family, would be an important consideration in the medium and longer term treatment for his psychosis. At the same time his strong family system would be a great resource in his recovery, once they had come to understand more about the nature of his psychotic illness.

This clinical vignette illustrates how attending to each of the six components of Te Vaka Atafaga can guide a thorough mental health assessment and shed light on important cultural and family information that will determine key aspects of effective treatment for this young Tokelau person.

Other applications of Te Vaka Atafaga

Following assessment Te Vaka Atafaga could be used as an interactive tool for developing a shared understanding or, shared formulation of helping Tahi and his family. By writing key points under the six headings up on a white board organised around a diagram of a Te Vaka Atafaga, the family had a visual representation of a holistic view of the problems Tahi was experiencing within the kaiga context. They added their comments to this situation, clarified points and asked questions about different elements. This process enhanced the family's understanding of a clinical view of the problem and promoted a shared cultural understanding between clinical assistance and the Tokelau cultural context of care and support. This shared formulation guided the development of a shared management plan. Such a process required a collaborative effort and empowered the family to steer their own direction, by sitting in the navigator's seat on Te Vaka Atafaga. This required that everyone involved including the family and clinical workers moved in unison. In this way everyone paddled in the same direction, to the same rhythm, and arrived at the same place together. Using a cultural metaphor can empower families to use their imagination and cultural thinking to help their children explore possibilities and options that are in line with their values and philosophy.

A further practical application of this model is that multidisciplinary mental health team assessment reviews can be presented and discussed using a Te Vaka Atafaga as a framework and a process for working with Tokelau families. The same six headings can be used as a framework for key points to attend to in treatment reviews and treatment planning in both inpatient and outpatient mental health treatment settings.

Conclusions

Te Vaka Atafaga has been developed as a Tokelau metaphor that encompasses key Tokelau concepts that are considered integral to mental health and wellbeing. The development of this model was shaped by revered Tokelau 'toeaina' or elders such as Fuli Fati and Lisone Kupa and other toeina within my extended kaiga. Further cultural validation occurred when this model was endorsed by participants at the first National Tokelau Health Conference in New Zealand in 1992.[2] Recent research showed that this model is known to Tokelau workers in the mental health field in New Zealand.[1]

Te Vaka Atafaga can be used as a framework for mental health assessment with a Tokelau person. It can also be used as a visual model for developing a shared formulation with a Tokelau family about the mental health problems that their family member may be facing, with a view to developing a shared management plan with the family. A further application can shape multidisciplinary team processes to support holistic mental health practice.

Further development of Te Vaka Atafaga will require qualitative research to evaluate the acceptability of this model for clinicians as a tool to guide mental health assessment with Tokelau clients. Research with Tokelau families will be required to evaluate its acceptability as a model for developing shared mental health formulations with Tokelau families.

For Tokelau people, Te Vaka Atafaga reinforces the connection to cultural identity. This model has the potential to support Tokelau people in maintaining ties to their heritage, even amidst the distress and confusion associated with first experience of mental health problems and contact with mental health services.

This is encapsulated in the following Fakaofo proverb:

'Fano koe ki Fakaofo ke matua mai ai'

'You must return to Fakaofo to understand and learn your culture and identity'

Acknowledgements

To Dr Allister Bush for his enthusiasm and support. Fakafetai lahi lele te uho. Acknowledgements are also given to my Maternal Grandfather, Fuli Fati and my Father Lisone Kupa for their guidance and wisdom and finally to my extended kaiga in Porirua for their support and knowledge in further development of Te Vaka Atafaga.

References

1. Agnew, F., Pulotu-Endemann F.K., Robinson, G., Sualii-Sauni T., Warren, H., Wheeler, A., Erick, M., Hingano, T., and Schmidt-Sopoaga, H. (2004) *Pacific Models of Mental Health Service Delivery in New Zealand*. Auckland. Health Research Council of New Zealand.
2. Logologo, S. (1992). *Report of the Inaugural Tokelau Health National Conference, Tokelau Health Collective*. Porirua. Wellington.
3. Huntsman, J., and Hooper, A. (1996). *Tokelau a historical ethnography*. Auckland. Auckland University Press.
4. Statistics New Zealand (2007). *Tokelau People in New Zealand: 2006.* Wellington. Statistics New Zealand Tatauranga Aotearoa.
5. Durie, M. (1994). *Whaiora: Māori Health Development*. Oxford University Press. Auckland.
6. Hooper, A. (1990). *Matagi Tokelau*. Suva: Tokelau Affairs and Institute of Pacific Studies. University of the South Pacific.
7. Fati,F., (1992). Interview at Porirua. Wellington. 15th August. (Unpublished).
8. Kupa, L., (1992). Interview at Porirua. Wellington. 15th August. (Unpublished).
9. Health Research Council of New Zealand. (2004). *HRC Guidelines on Pacific Health Research*. Auckland. Health Research Council of New Zealand.
10. Tamasese, K., Peteru, C., and Waldegrave, C. (1997). *Ole Taeao Afua: a qualitative investigation into Samoan perspectives on mental health and culturally appropriate services. Report for the Health Research Council of New Zealand*. Wellington. Te Family Centre.
11. Kingi-'Ulu'ave, D., Faleafa, M., and Brown, T. (2007). *A Pasifika perspective of psychology in Aotearoa*. In Evans, M., Rucklidge, J. J., and O'Driscoll, M. (Eds.), Professional Practice of Psychology in Aotearoa New Zealand, (pp. 67-84). Wellington, NZ: New Zealand Psychological Society.
12. Kirifi, J., Kupa, K., and Mallon, S. (2003). *Toki Niu Hila: Making Tokelau adzes and identitiy in New Zealand.* Tuhinga:14, (pp. 11-24). Wellington. Te Papa Museum of New Zealand.

The Popao Model: A Pacific Recovery and Strength Concept in Mental Health

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Introduction

The Popao or outrigger canoe has been used as a metaphorical model for mental health service users' and professionals' shared understanding of the treatment process as a 'journey' towards recovery and strength within a Pacific paradigm.

The popao model was developed collaboratively by the 'Popao Group' involving a number of key stakeholders in the Pacific mental health sector including service users, community support workers, Matua, clinicians and service providers, particularly Isa Lei - Pacific Mental Health and Addictions Services (based in West Auckland under the umbrella of the Auckland District Health Board). The popao model began its development in 2005 and was officially launched in August, 2007.

The popao is primarily designed for use within the lagoon, not for open sea. Traditionally, the popao was a means of travel and used for fishing and harvesting of shellfish. In the lagoon there are obstacles that may disrupt a journey. Thus, the need to be well prepared for the journey and being familiar with both the lagoon and the use of the popao will ensure a desired destination is reached. A developed awareness of the lagoon will assist the negotiation through, with and around obstacles that may arise in one's journey. Equally, it is important that one is aware of how each part of the popao is connected and understanding the strengths and weaknesses of the vessel. Ignorance of the popao may result in the popao sinking. Knowing the popao develops a relationship of identification and relatedness.

Consumers utilise parts of the popao as a tool to help them identify support structures in a framework they can understand. Each consumer paddles their own popao towards their desired destination, mapping and personalising their journeys and identifying any obstacles in the lagoon.

Recovery can be both a destination and a journey. As a journey, recovery is the process of facing and living through the challenges that life brings, be it periods of the distress and confusion of mental illness or the ups and downs of the human condition.

The popao group meet weekly to share experiences of mental illness alongside community support workers, clinicians and service providers. It is not exclusive to Tongan consumers of Isa Lei but is also a part of a wider Auckland network (Auckland District Health Board and Counties Manukau District Health Board). Various skills and knowledge that have been lost through mental illness may be re-discovered with the support of the appropriate professionals and support.

The Recovery Concept

Recovery can be both a destination and a journey. As a journey, recovery is the process of facing and living through the challenges that life brings, be it periods of the distress and confusion of mental illness or the ups and downs of the human condition. It is the process of building one's confidence and developing the ability

to move on, and to work through or reclaiming the life one desires.

As a destination, recovery is a life worth living or, as described in the Mental Health Commission Blueprint, "living well in the presence or absence of one's mental illness" (Mental Health Commission 1998:1). The hallmarks of such a life may include a job, a home, good relationships with family/'aiga/fanau and friends, strong links with one's culture, community and a sustaining faith in a higher power. Whatever it may be, a life worth living is different for each individual; it cannot be prescribed. It must be of one's own choosing.

The Strength Concept

Collaborative communication between support networks with regards to: goals, tasks and roles would develop a shared understanding of the treatment process. There is particular and explicit emphasis on consumer strengths (which include family) and the cultural aspects.

The strengths model as Charles Rapp conceptualises it is not simply an "add strengths and stir" attachment to existing pathology- or problem-focused paradigms (Rapp & Goscha, 2006). Rather, it is a paradigm shift to a strengths and resilience focus that "allows for new and creative ways to work with consumers that honor their skills, competencies, and talents as opposed to their deficits." (Rapp & Goscha, 2006:35). Highlighting the positive aspects of consumers would enhance their resilience that result in developing or reclaiming the capacity to have good life – whatever that may be. This capacity can be described as self determination, having governance over one's life or autonomy.

Aim of the Popao Model

The intended outcome of this recovery and strength model is for consumers to ultimately become independent and able to charter their own journey, with the reassurance that professionals can re-embark the Popao if and when the need arises. The objectives of the popao model are:

- To reconnect and strengthen consumers' Tongan cultural heritage and identity by participating in Tongan specific activities and encouraging communication in the vernacular;
- To provide an encouraging environment where consumers may develop confidence, effective communication and acceptance within their identified roles, family unit and their wider Tongan community;
- To provide a safe environment to allow consumers to increase their self esteem and develop or acquire skills when participating with others in the group through a variety of activities; and

It is hoped that the popao model provides a consistent, reproducible approach to assessing the key components of recovery and strength concepts highlighted by the Mental Health Commission (1998) which include:

- improve the partnership between the consumer and support networks
- collaboratively identifies problems and improves targets, interventions and support
- is a motivational process for consumers and their families and leads to sustained positive outcomes
- allows measurement over time and monitors change
- has a predictive ability, i.e. improvements in self-management behaviour as measured by the Popao Collaborative Assessment (PCA) scale and leads to improved outcomes.

Popao Collaborative Assessment (PCA) Scale

- has a predictive ability, i.e. improvements in self-management behaviour as measured by the Popao Cultural and Collaborative Assessment (PCCA) scale and leads to improved outcomes.

Popao Cultural and Collaborative Assessment (PCCA) Scale

The PCCA is a twelve part questionnaire was developed by Manu Fotu and the Popao group. The consumer completes the questionnaire by scoring their response against each question on a nine point scale with zero being the best response and eight being the worst. Table 1 illustrates questions which cover 12 areas:

Table 1: PCCA Scale

Knowledge of condition. ***Mahino'i/ 'Ilo'i hoto tukunga.***
Understanding of your situation (eg. Sickness, loneliness, isolation)

Knowledge of treatment. ***Mahino'i/'Ilo'i 'a e ngaahi tokoni / tauhi 'oku lolotonga fai kia au 'i he 'eku folau ki he Mo'ui Lelei.***
Understanding my "Journey to Wellness" (clinically, culturally, spiritually, socially, personally)

Ability to engage support. ***Malava ke tali e ngaahi tokoni/poupou.***
(e.g. lotolelei ki he gnaahi faito'o, tali e ngaahi 'ofa e kainga - taking medication, accepting family support)

Ability to share in decisions. ***Fofola e Fala ka e fai e Talanga.***
Able to be part of your Journey's decision making.

Ability to arrange and attend appointments. ***Malava ke fakakaukau'i mo fakahoko ngaue***
Able to initiate (decide, organize) and implement (take action).

Understanding of monitoring and recording. ***Mahino'i e founga tokanga'i(monita'i) mo e lekooti'***

Ability to monitor and record. ***Malava ke ke tokanga'i(monita) mo lekooti.***
Able to look after yourself

Understanding of symptom management. ***Mahino'i e founga ke tokanga'i 'aki koe.***
(e.g. ngaahi faka'ilonga 'o e mahaki - How do you look after yourself? eg. What are the symptoms of illness)

Ability to manage symptoms. ***Malava pe 'o tokanga'i koe?***

Ability to manage the physical impact. ***Malava ke matu'uaki 'a e ha'aha'a 'o natula***
(sino, famili, sosaieti, natula - Body, family, environment, society's impact).

Ability to manage the social, spiritual and emotional impact. Malava ke matu'uaki e peau fakasosiale, fakalaumalie, mo e ongo.

Journey towards a healthy lifestyle. ***Fakalakalaka ho'o mo'ui kakato. Fononga ki he Mo'ui Lelei.***

Cue and Response Interview (C&R)

The Cue and Response (C&R) interview is an adjunct to the PCA scale and is based on the Flinders Model. The C&R process is a series of open-ended questions or cues to explore the consumer's responses to the PCA Scale in more depth. It enables the barriers or issues to be examined and helps clarify assumptions that either the clinician/support networks or the consumer may have. The clinician/support networks score their responses and compare this score with the scores of the consumer.

The C&R interview is a motivational process for the consumer and a prompt for behavioural change. It allows the individual the opportunity to look at the impact of their condition on their life, some time to reflect on cause and effect. The cue questions are not prescriptive and serve as examples of the types of questions that may be asked. Some examples of cue questions are to be found in Table 1.

Table 1: Examples of Cue Questions

Knowledge of Treatment
Tell me about the treatment you are having
What can you tell me about your medication?
What do you know about alternative treatment?
Tell me about any other treatment that has helped you
What are the things that stop you having, (or following) your treatment?
Sharing in Decisions
How comfortable are you talking to your doctor or other support professionals?
What are the problems?
How are you included in decisions about your health?
Family Dynamics
What kind of support you receive from your family?
What support do you receive from the extended family?
Spirituality
Do you attend church?
What part does religion play in your life, is it important to you?
Healthy Lifestyle
What are you doing to keep yourself healthy?
What are the things that you are doing that don't help?
What are the things you would like to change?

Scores rated on the higher end of the scale, by either consumer and/or clinicians/support networks expose issues for further discussion. This allows for clarification of issues and a common set of problems to be identified by consumer and support networks. It also allows the clinician/support networks to recognise areas where the consumer is managing well. Collaborative problem identification has been found to be a key indicator in successful self-management programs (Wagner et al, 1996). Identification of issues allows relevant strategies and interventions to be discussed and agreed upon. This information is easily incorporated into a Recovery plan that involves support networks and the consumer.

The PCA scale and C&R assessment tools may be used concurrently or on their own. Both identify issues and help towards forming a recovery plan for the service user and also allows for consistent monitoring and reviewing.

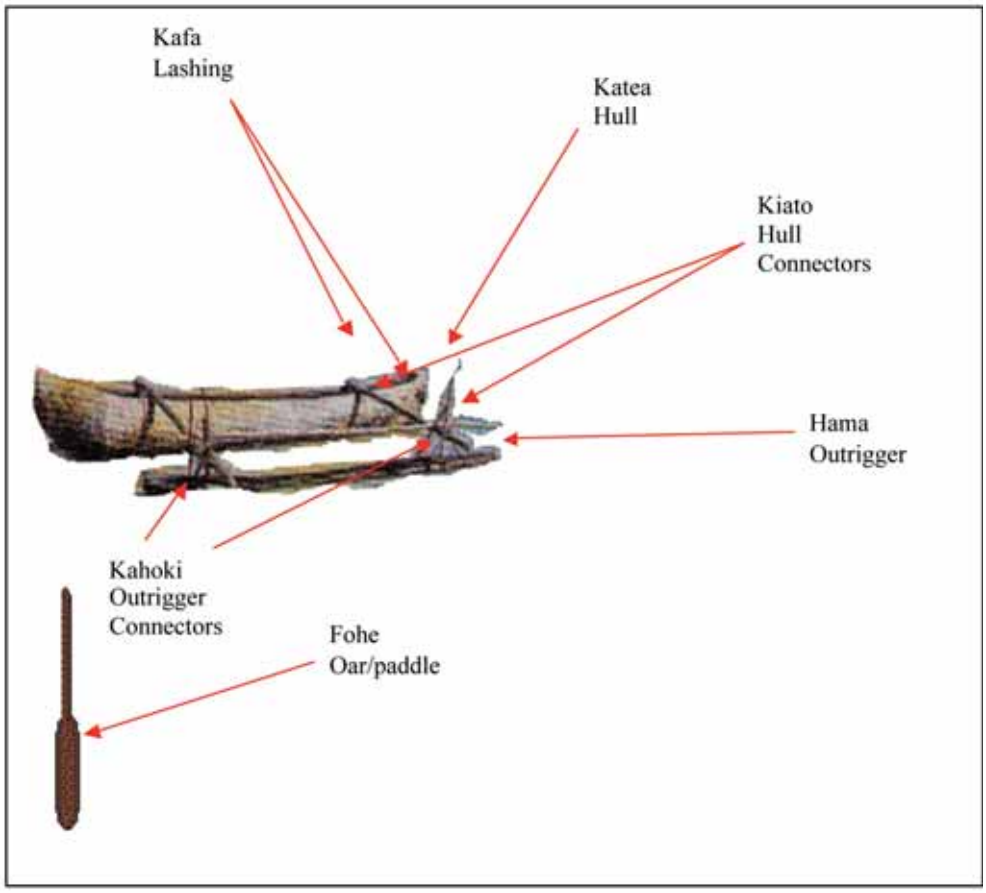
The Popao Model

The Popao or Outrigger Canoe is called by various names throughout the Pacific:

Tonga	Popao
Samoa	Va'a alo
Tuvalu, Tokelau	Paopao
Tahiti	Va'a
Hawaii	Va'a Kaukahi
Maori/Cook Islands	Waka Ama/Waka Noa

Although the name for the canoe differs throughout the Pacific, they all have a similar basic structure as illustrated in Figure 1.

Figure 1: The Popao



Representations:

The Katea (Hull): This is the main body of the Popao where people can sit and where equipment and sustenance for the trip are kept. It is important that the right type of wood is used to make the hull, as it needs to be light but strong. This component represents the Cultural aspects.

The Hama (outrigger): Although this structure appears relatively small in comparison to the hull, it functions to balance the whole structure. This component represents the Clinical aspects.

The Connectors: These are important in linking the outrigger to the hull. There is an 'ideal' distance between the hull and the outrigger that need to be maintained so as to gain maximum effectiveness when the canoe travels through the water. The connectors assist in maintaining this ideal distance, and these connectors need to be strong. This component represents all Service Providers that attempt to bring the Cultural and Clinical aspects into a workable partnership. These Service Providers include: Isa Lei, Lotofale, Faleola, Vaka Tautua, District Health Boards, Non-Government Organisations, Public Health Organisations and any other service providers that would seek to include culturally appropriate services within their structures.

The space between the Hull and the Outrigger is known as "the negotiation space" where issues relevant/critical to cultural and clinical components are continually negotiated. Dialogue and discussions are carried out with the knowledge that the "negotiation space" is a safe and culturally appropriate environment to facilitate these activities.

The Kafa (Lashings): are made from fibres of coconut husks interwoven into strong robust lashings which are then use to bind all the components of the Popao together. The lashings represent communications. If the lashing (communication) is weak then it will lead to the whole structure being weak. It is imperative that communication between the cultural and clinical components is strong.

The Paddle/Oar: The paddles/oars need to be light but strong and functions to row, direct and determine the speed of the canoe. There is only one place on the canoe that one can steer, and that's at the back of the vessel. This can only be occupied by one person. This component represents the Strength of individuals, whatever makes that individual a strong person. It could be: family/aiga/fanau, community, friends, spiritual aspects, and so forth.

The Sea: can be changeable and un-predictable. This component represents the sea of Life.

The Consumer

When consumers board the canoe they bring their paddle/oar, which symbolises their strength. They would occupy the place where they can both row and steer the canoe, and therefore direct the journey. They are in control of their destination.

The professionals

When professionals come on board, they bring their strength (oars) – which would include; knowledge, skills and experiences, so that they can contribute to the journey. To ensure that professionals contribute to the journey they must participate in outcome plans with the consumers. In the past professionals assume a paternalistic mentality when working with consumers. This created high level of dependencies on the services by consumers, which then makes it very difficult to empower them and be autonomous.

The partnership

It is important that professionals work in partnership with consumers to formulate goals and focusing on outcomes. When outcomes are established from the onset of the journey, there is an understanding that once these are achieved, professionals can then disembark the canoe with confidence and knowing that consumers have acquired knowledge, skills and information to continue and navigate their own journey through the challenges that the environment poses.

When professionals disembark the canoe, the weight in the popao is lightened and subsequently making for a quicker journey. This means goals can be achieved quicker and decreases the risk of the popao sinking from an overload.

The environment

The environment consists of the physical nature of a lagoon, which may include:

- Reefs
- Sea weed
- Sand bars
- Fish traps
- Waves
- Wind
- Sun
- Sea current

Popao were purposely built to face the tougher and more challenging environments as if out in the high seas. However, the principle of engaging in a rehabilitation process by navigating around the lagoon is very much relevant to the Popao Model.

Anecdotally, for those working with consumers, it is believed that the popao model has been positive and produced profound results for consumers' individual journeys towards strength and recovery. Results include consumers' re-connection with, celebration of and strengthening of their Tongan identity, an increase in their confidence and a destigmitisation of mental illness within their circles (family, church, community). Consumers identified the importance of using their culture as a term of reference to frame their journeys, facilitating a renaissance with their journey of self discovery, enabling growth, awakening a sense of belonging, coming out from isolation and the solitudes of their homes and venturing out into the 'open sea', the community and further support. The following statements were recorded in a popao group session serving to reinforce the usefulness and effectiveness of this model for consumers, their families and professionals.

The Consumers

> *The model has a holistic view with regards to spirituality, culture, counselling and taking medication. It slowly integrates the family into the process. The supernatural stuff is also taken into account in this model.*
>
> *The popao model educates our families and its Pacific focused. It is reassuring for me as a Pacific*

woman and the professional support around me are familiar 'brown faces'.

New Zealand born and traditional Tongan views link well in this model.

As highlighted in the above views, the popao model is most relevant to Pacific as it adopts a holistic approach encompassing Pacific values, particularly with the inclusion of a spiritual component and is also inclusive of family. It is also reflective of the Tongan population in New Zealand catering to both the traditional and New Zealand born views.

The Families

Families are taught to recognise symptoms and warning signs so we can better support our family members who have a mental illness.

I'm aware of my husband's illness and there is no more denial within our family now that we know what he is going through.

Pertinent to working with Pacific communities is the importance of family involvement as is expressed in these excerpts. The popao model allows family inclusion in the process and is about educating families to help support their family member in his/her journey to recovery.

The Professionals

From a clinical viewpoint historically we work with clients to formulate plans and sometimes consumers don't feel like they're a part of it. The clinical side takes over. With the popao model it is driven by the consumer, they are engaged, they have a feeling of control and this demonstrates true partnership.

The model gives one hope and a destination whether it be employment or finding a companion and so forth. Group sessions are filled with fun, food and laughs, and all clients look forward to coming. We encourage them to believe in themselves, to believe in their journeys and that their illness should not be an excuse to hide their potential. It moves away from the traditional medical model - its Pacific focused.

Again, as demonstrated in these statements the popao model is appropriate for Pacific is consumer driven and enables consumers a sense of ownership in amongst other Pacific processes which are equally important *fun, food and laughs.*

Conclusion

It is believed that this model, a Tongan based framework towards a clients recovery plan, is useful in measuring client progress and most applicable. It is envisaged that the future of the popao model is to implement this amongst other mental health service providers throughout the country and to use it as a founding model for all other Pacific ethnic groups.

Acknowledgments

The authors would like to acknowledge the help and support of:

Waitemata DHB
Takanga 'A Fohe, Pacific Mental Health and Addiction Services, Waitemata
Pacific team Le Va
Vaka Tautua
And the Popao group and families at Isa Lei

References

Mental Health Commission (1998). Blueprint for Mental health Services in New Zealand. How things need to be. Mental Health commission. Wellington.

Rapp. C. & Gosch. R. (2006). The Strength Model. Case Management with people with Psychiatric Disabilities. Second Edition. University of Kansas.

Flinders Human Behaviour & Research Unit (2005). The Flinders Model of chronic condition self management. Information Paper. Flinders Behaviour & Research Unit, Adelaide, Australia [cited 2008]. Available from http://som.flinders.edu.au/FUSA/CCTU/Home.html

James, B. (2008). Understanding the conservation expectations of Aucklanders Department of Conservation, 2001 [cited 2008]. Available from http://www.doc.govt.nz/upload/documents/science-and-technical/sfc172.pdf.

Reflections of a Practitioner: Purely a journey of the heart

Siautu Alefaio

32 years ago a man from the villages of Manunu (Upolu) and Fagamalo (Savai'i) and a woman from the inner-town village of Matautu tai-Apia (Upolu) gave birth to their middle child and only daughter, Siautu Tiomai Alefaio. The man left a prominent position in the police department's CIB in Samoa to become a factory worker in Hellaby Meats of Mt Wellington, New Zealand. The woman, a beautiful dancer in Aggie Grey's dance troupe and also an upcoming photographer at the age of 12, left all her aspirations of education to attain a job in order to make enough money for the prospective dream of 'making it big' in the 'land free-flowing with milk and honey'—Aotearoa New Zealand. For some years Aotearoa was exactly that, with money enough to bring over all their other siblings and eventually their mothers.

My father (now a Parish minister of a Presbyterian church) and mother (an Early-Childhood educator) both self-sacrificially gave up their own hopes and dreams to pursue a bigger one—of prosperity for future generations. As a registered psychologist I have seen many journey stories similar to mine, and it is my own hope and dream that our contribution as people from "Le Vasa Pasefika" (vast ocean of the Pacific region) will inevitably pave the way for future generations to embrace all that they are and become all that they have been called to be.

Changing Tides

Diaspora has been related to the historical movements of the dispersed population of Israel. "The term diaspora carries a sense of displacement; that is, the population described finds itself separated from its national territory; and usually it has a hope, or at least a desire, to return to their homeland at some point, if the "homeland" still exists in any meaningful sense".[1] Pacific diaspora is a way of understanding the movements or scattering of people through the Pacific region. Spickard (2002)[2] explains Pacific diaspora is thousands of years old and people have been moving around the Pacific for a long time.[2] The history of Pacific migration is identified as always being a "diasporic movement". A movement changed by the encounter with European and American and colonialism, which had the effect of channeling migration along the sinews of trade and empire. The effect today being the vast numbers of Pacific people who now live in a place very different to where their ancestors lived. This can be seen most predominantly in Aotearoa New Zealand which has the largest number of Pacific peoples among the industrialized nations.

Traversing the seas of the Pacifc Ocean, diasporic movements have brought waves of change that are felt vividly in the hearts of the generations growing up in places 'far different from where their ancestors lived'. The descriptive journey stories of experiences living in two worlds, the Pacific world and the palagi (European) world, became more significant to me as a young adult finding my way through life in a tertiary institution. These stories prompted me to undertake a Masters thesis exploring Samoan young people's perceptions of their identity in the context of their families and communities and the process of adjustment that occurs when differences between the values and beliefs of the host culture are encountered. The study particularly focused on the impact of family structure and family environment on the ethnic identity of Samoan young people in New Zealand. The experience of walking in different cultural worlds has been investigated in many countries, mostly where the host culture is the dominant western culture, governed by eurocentric ideals and cultural norms.[3,4,5] Certain issues and challenges are commonly experienced by ethnic minority groups in transition within mainstream cultural environments. Tupuola explores these prevailing issues for Samoan youth through positing a positional difference through her paper Pasifika Edgewalkers.[6]

I undertook a thesis study[7] exploring Samoan young peoples' ethnic identity. Most notable in this study was the importance of nurturing the generation of Samoan youth in New Zealand by assisting church and families, as these were the contexts described as most important for strengthening a sense of belonging and identity. The struggle uncovered is about issues of the heart, of identity and belonging. Their identity development is inevitably influenced by the values and beliefs of the host culture, which challenge and compete with their Pacific cultural worldview. As one young person aptly described;

> *"Our story is different…. our story is about family, about church and that's why it's gonna change…."* (Alefaio, 1999, p. 51)[7]

The diasporic journey of Pasefika is therefore born out of an historical migratory past filled with hopes and dreams of a new utopia – a new way of living, a better life with a hope-filled, expectant future. Today however, we encounter, on a daily basis, issues such as abuse, teenage pregnancy, suicide, drug and alcohol use, violence and crime. Pacific peoples are disproportionately represented in these areas of concern. Within these areas of concern the vast majority of Pasefika people will encounter 'helping professions' such as psychology. It is a discipline which has historically been devoted to understanding the human 'psyche' or 'soul'. Most of this body of knowledge however is derived from European contexts. It has been my experience and observation that the encounter with psychological methods, practices and philosophies struggle to make sense in 'our everyday'.

The world-view of Pacific nations which lie within the vast ocean of the South Pacific is yet to be uncovered in the realms of psychology. It is vital that their unique perspectives are sought and their voices heard. The unearthing of this raw material will contribute and enrich our understanding of diversity, and help to unite our region with an identity uniquely our own.

A Practice Journal Snack-bite: O se Fa'ata'ita'iga

A growing frustration emerged for me as a practitioner of psychology from what seemed to me as having to "clean up other peoples mess". Cases specifically of children, youth and families that were of cultural backgrounds from the Pacific nations constantly eluded my mainly 'European and Western import colleagues'. Year after year I bore the brunt of cases that had previously been worked on by other practitioners but had resurfaced due to ongoing concerns. I note here that in no way am I positing that I have all the answers. This is just the beginning of an exploration of concerns that have arisen for me as a result of the practice.

The more cases I picked up the more I realised what I deemed as 'common-sense' in practice was not necessarily 'practiced'. Here began my journey of unpacking what I deemed as common-sense. I realised common-sense was my simplistic languaging of what I did not learn through my training as a psychologist but rather what I inherently learned through the Fa'aSamoa (Samoa way of life), which essentially for me was the nurturing of my heart. My practice of psychology was heavily reliant upon ways of 'knowing, being and doing' that were nurtured through my socio-cultural heritage of Fa'aSamoa. There were relational ways of engaging with people that were the essential key elements of the way I chose to work when engaging clients, regardless of what cultural background they represented. This became the basic tenets of my practice which differentiated what I was 'doing' in practice in comparison to my colleagues. This core component of my work became what I termed cultural engagement. Therefore psychological assessments became culturally-engaged psychological assessments, reflecting the core component of work that was being performed.

The table below outlines a Galuola case study of a Pasefika client. The case highlights an approach which focuses on engagement of the relationship as paramount in any assessment process. It also provides alternative viewpoints in the psychological interpretation of the 'narratives' of those who seek our help. Often times the assessment is based on the 'scientific practitioners' objectified learning mainly from manuals that have not considered indigenous and other nations worldviews of human development.

Case Study: Galuola - A new wave of psychological practices

O le o sulu mai e fia maua se Fesoasoani (Person in need of help):	Samoan female, 45yrs, Mother of 2 children (divorced and in de-facto relationship with new partner). Self-referral.
Fa'afitauli/Presenting concern:	Family issues affecting her, difficulty coping at work (in a distressed state).
Engagement: Fa'afeiloaiga **Tatalo Amata: Opening Prayer & Welcome**	
• Fa'afeiloa'i atu i le faletua ua sulu mai e maua se fesoasoani. Fa'ailoa atu lo'u nei tagata, aiga ma le matafaioi o lo'o aveina nei. • Welcomed and greeted client. Answered clients questions of family village connections in Samoa. Reciprocal conversations regarding clients own family.	*Herein lies the difficulty for Western practitioners recognizing familial connections and giving of one's own family background is an area of contention in the practice of psychology as the 'objectivity' of the 'science of psychology' is likely to be viewed as being compromised.*
Presented myself as simply available to listen and help where I can. Safety issues addressed (Unless harm to self or others is evident, all is held in confidence).	
Initial presentation:	• Always crying at work, had past suicidal feelings (no action taken). • Had typed out feelings: sad, depressed, angry, frustrated, leading to thoughts of wanting to end it all – could see no way out.
Tala'aga o le fa'afitauli: Allowing the client to 'talanoa' – 'just talk'	
• Talanoa/Client story. Moved to Main city for work opportunities (born into a rural community with deeply embedded Fa'aSamoa values). First one in her family to move away. • In the move to the Main city, husband left and formed another relationship. Her family (parents and siblings eventually moved up to Main city and moved in with her – living situation unbearable. Siblings always drinking/fighting – parents away at work, mother defending siblings behaviour, always making excuses for them. Father one day had enough with siblings behaviour and violent exchange ocurred – siblings moved out. • Client moved away into her own house – siblings also found their own place, only parents at the original house. Both parents on different shifts barely seeing each other – client just down the road from them, would always cook and leave food for parents each day. Decided to ask parents to move in with them – as a result siblings were present at family gatherings again, as these evolved around the parents. • Not the 'ideal family picture' she envisaged. Understands her mother and father work hard – can no longer tolerate siblings' behaviour. Has watched Dr Phil shows and quoted how families should relate to one another.	
Galuola: A new way forward (Re-concile one's own identity – lagimalie)	
• Acknowledgement of Cultural Heritage and identity as Samoan. • Acknowledged siblings only come around now for family gatherings or when they come to visit parents which is only on occasion. Most occasions are now civil, and no longer end in confrontation or arguments. • Acknowledged grief over what used to be good family times with siblings – now not the same as all have grown, married and had children. • In a timeline of events identified significant events that reflect changes that have occurred. • **Acknowledge the significance** of the changes that have occurred. • i.e. fathers' confrontation and responsibility towards his sons (the non-violent talks that have occurred). • clients' ability to support another extended family situation helping the family to manage and cope with cousins' attempted suicide. • Acknowledged her commitment for a better way for the next generation. • Affirmed her decisions of choosing to care for her parents. • Shed light on the reality of our family's (parents) journey – this is our journey as children of Pacific nations parents. Our parents will always work to do what they see best (cannot change this). But we can accept this as our 'real identity' this is who we are, we are not the 'waltons' or average western-stylized family we see on television. The reality is our identity is one of 'family, village, church, journey, transition, migration ultimately the reflection of 'new beginnings'. • There are real fears associated with this which are: fear of failure, fear of rejection, humiliation (letting go of positions of esteem in the islands for factory floors or cleaning toilets). • How we cope and manage throughout our journey of transition is 'lagimalie' being in harmony with our environment, family, spirit, nature Holistic harmony is achieved through 'lagimalie'	
Upu e fa'amalosi agaga: Encouragement for the spirit	
• All this points to client as 'trail-blazer' – pioneering a new way forward for her family – which takes strength and courage, but is often a lone, unpopular journey. • Reality: Cannot change family – but can accept family as they are, and acknowledge her input, place and purpose. Which in essence is being 'in harmony – lagimalie' with 'all that is our life'. **Tatalo Fa'ai'u: Closed in prayer**	

The 'ideal family' in the Western world is often perceived as one which thrives on goals for independent living, self-sufficiency and eventually retirement in a retirement village on one's own. This is far removed from the picture or real life illustration of lives lived in the nations of the Pacific. In Samoa for example, village life is the epicenter of the nation. People groups are formed in villages which are governed and ruled by Matai (Titled-Chief) systems. The systemic goals of life are for fostering inter-dependence, living to support whole aiga/family, sufficiency for whole aiga/family, and eventually growing old and being cared for by the aiga/family. The transportation or exporting of this 'way of knowing, being and doing' is prevalent in most Pacific nations people regardless of where they go.

Indigenous worldview

Human development is highly motivated by boundary-setting tasks that protect the 'self'. The whole concept of 'self' though is highly contradictory to the ways of indigenous and non-Westernized cultures. Dr Catherine Love (1999),[8] outlines the dominant influence of Euro-American psychology. Love purports the "challenges to the hegemony of Euro-American psychology by indigenous and minority group people is based on the well-supported proposition that psychological theory and practice are socio-culturally constituted and bound" (p1).

According to Love (1999).[8]

> *"Psychology is predicated on culturally determined conceptions of self. Culturally constituted conceptions of self are so fundamental and taken for granted that they operate beneath the level of conscious awareness most of the time…assumptions about the nature of the self, the other, and the world around are the building blocks for the construction of coherence in cultural narratives. They provide the parameters for discursive frames which, in turn determine what constitutes "commonsense", and coherence or incoherence, in discourses around psychology, mental health and illness, intelligence, and so forth...'Understanding' requires that we 'stand under' a particular and requisite discursive frame."*

Love (1999)[8] highlights, Euro-American psychologies propose an assumption of self that is known as "self-contained individualism" (p3). This is based upon the

> *"virtual separation of mind and body, the inclusion or exclusion of soul and spirit, conceptions of reality and truth, the presumed location and etiologies of "psychological" characteristics and conditions, and a myriad other related, often implicit, assumptions within psychology's dominant discursive frame" (ibid).*

A model of *whanau* (family) well-being using *Te Wheke*/The Octopus as both symbol and framework developed by Rangimarie Rose Pere, is presented by Love (1999)[8] as an illustration of an indigenous (Maori) understanding of well-being, based on an "ensembled individualistic conception of self".

The Te Wheke framework resonates well with this historical statement from the Samoa cultural context ***"Samoa ua uma ona tofi" – "Genealogy defines us"***. Samoa inhabits the 'relational context' meaning who we are is defined by where we come from. Our familial context or genealogy defines our 'being' or 'person-hood'. Samoa's current Head of State Le Afioga i le Ao o le Malo, Tui Atua Tupua Tamasese Efi explicates this further through his address entitled;

> *"Sailiga o le lagimalie…O le fliemu i le mau faalelotu a Samoa a o le'i taunuu le Tala Lelei" (2006)[9]*

The title of this address refers to the "search (or quest) for lagimalie (relationship between you, the environment – trees, plants, sea, weather, people) before the arrival of the Good news". According to Tamasese (2006),[9] "o Tagaloa na usu gafa ona maua ai lea o le tagata. O Tagaloa o le atua usu gafa ae le o se atua fau tagata (Creator)" Tagaloa (god of Samoa before the white man came) is a relational god. Our discovery or understanding of ourselves is through a relational god. Samoa legends define us according to our relationships with one another. It signifies an understanding of self that lies outside the realm of the "self-contained individual".

As a practitioner of Samoan descent finally I am able to draw on literature that resonates and lies in harmony with ways of 'knowing, being and doing' that propound a worldview similar to that of Pacific nations people. It is propelled forward by research being undertaken by peoples of Pacific descent who themselves become proponents for advocacy and change. This is evident in the study "Ole Taeao Afua, the new morning: a qualitative investigation into Samoan perspectives on mental health and culturally appropriate services".[10] "Fa'afaletui" a Samoan concept that describes a method which facilitates the gathering and validation of important knowledge within the culture (p302) becomes the term to describe the collective research methodology brought to the researchers by the participants of the study themselves. In this study, the Samoan self was described as a relational self and mental wellness as a state of relational harmony, where personal elements of spiritual, mental and physical are in balance.

> *"We can view ourselves as whole beings. In other words, the spirit, the body, the will* [loto]*. When I say, you and me, I am talking about the whole person. There is a physical side, mental and spiritual (sides). I include the spiritual because there is no Samoan person who exists outside of a spiritual existence".*[10]

Indigenous and non-Western peoples' literature speaks to the 'HEARTS' of people, they call for the awakening of our 'AGAGA' – SPIRIT. As a practitioner of this 'thing' called psychology I realise that we are afforded too much credit for a way of 'being, knowing and doing' that in some ways is doing more harm than good towards indigenous and non-westernized people groups'. Love (2001),[8] is clear in her predication that:

> *"Euro-American psychology has been an instrument of colonisation, bringing assimilationist and anti-indigenous tools to bear on non-Western peoples….In Aotearoa/New Zealand attempts by Euro-American psychologists to sensitize, increase awareness in, or multiculturalize their practice have met with suspicion from Maori. The suspicion is founded in long experience of colonization, oppression, racism, and the appropriation of valued resources, most recently intellectual property resources".*

We would fare well as non-westernized people groups, indigenous to the nations of the Pacific to listen to the experiences of our indigenous Maori tipuna, for in doing so we will heed their warning to:

> *"not ask whether individual psychologists are culturally sensitive but more importantly about whether psychology is culturally sensitive".*[8,11]

"Fofo e le alamea le alamea"

E fofo lava e le alamea le alamea is a metaphorical expression located within the environment of Samoa in reference to the starfish they refer to as the "alamea". This particular type of starfish (alamea) is poisonous. When alamea poisons something or someone on the alamea can then suck out its own poison, nothing or no-one else can do this.

I use this particular proverbial expression 'e fofo e le alamea le alamea' as a metaphorical expression of the poison – "oppression, repression and suppression" injected through colonial conquests. That can only be 'sucked out' by the colonial conquerers themselves. In the practice of psychology this may look like the ***ACKNOWLEDGEMENT*** and ***RECOGNITION*** that there is 'poison' located within the practice that needs to be 'sucked out'. Poison such as; 'science of psychology' being more highly prized than the wellbeing of the people we are serving, limiting 'science' to an understanding located only within an objectified measuring tool of western knowledge, allowing evidence-based practices to dominate the understanding of safety instead of allowing the people and community the space to heal together".

When the practice of psychology 'sucks out' the poison of dissonance, arrogance and pride, perhaps only then will the si'osi'omaga (environment) – that which lies within our own nations of the Pacific, speak to us. We will remove the poison of Euro-American practices of psychology that cannot wholly treat issues that are of no relevance to their way of 'being, knowing and doing'. There are taulasea (healers) and ways of healing that lie deep within our lands. I suggest there are healing balms that come only from the lands through which we were nurtured, perhaps this will be encountered upon our return diasporic journey.

References

1. Diaspora. (2008, November 7). In *Wikipedia, The Free Encyclopedia*. Retrieved 20 June, 2008, from http://en.wikipedia.org/w/index.php?title=Diaspora&oldid=250291621
2. Spickard, P. Rondilla, J.L. & Hippolite Wright, D. Eds (2002). *PACIFIC DIASPORA: Island Peoples in the United States and Across the Pacific*, University of Hawai'i Press, Honolulu.
3. Anae, M. (1997). Towards a New Zealand-born Samoan identity: Some reflections on "labels". *Pacific Health Dialog, 4*(2), 128-137.
4. Crosbie, S. (1993). Americanisation: American popular culture's influence on Maori and Pacific Island identity. *Midwest, 3,* 22-29.
5. Rodriquez, R. (2003). "Blaxicans" and other reinvented Americans. *Chronicle of Higher Education*, *50*(3), p. B10.
6. Tupuola, A. (2004). Pasifika Edgewalkers: complicating the achieved identity status in youth research. *Journal of Intercultural Studies, 25,* No. 1, 87-100.
7. Alefaio, S. (1999). Impact of family structure and family environment on the ethnic identity of Samoan young people in New Zealand. Unpublished masters thesis, University of Auckland.
8. Love, C. (1999). *Maori voices in the construction of indigenous models of counselling theory and practice*. PhD dissertation; Palmerston North, New Zealand: Massey University.
9. Tamasese, Tui Atua Tupua (2006), "Sailiga ole lagimalie. O le filemu I le mau fa'alelotu a Samoa a o le'i taunu'u le Tala Lele" Ta'isi mo le mafutaga PIPC, Aotearoa. Waitakere 19 – 22 Aperila. Keynote Address Mafutaga PIPC Aotearoa, Waitakere 19-22 April.
10. Tamasese, K., Peteru, C., Waldegrave, C., and Bush, A. (2005). Ole Taeao Afua, the new morning: a qualitative investigation into Samoan perspectives on mental health and culturally appropriate services. *Australian and New Zealand Journal of Psychiatry, 39,* 300–309.
11. Smith, L. (1989). "On being culturally sensitive: The art of gathering and eating kina without pricking yourself on the finger" Keynote address: New Zealand Psychological Conference, Auckland University, Auckland 1989.

Mental Health in the Pacific: the role of the Pacific Island Mental Health Network

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Abstract
This article summarises the work being undertaken by the World Health Organisation Pacific Islands Mental Health Network (PIMHnet) since its inception in 2006. The article also outlines the mental health issues that present particular challenges in the Pacific region, and the innovative approaches that have been taken to address those issues, with the goal of improving mental health throughout the Pacific.
PIMHnet is co-ordinated by Dr Michelle Funk (Coordinator Mental Health Policy and Service Development Department of Mental Health and Substance Abuse WHO); Dr Xiangdong Wang (Regional Mental Health Advisor, WHO Regional Office for the Western Pacific); Dr Frances Hughes (Facilitator, PIMHnet and Stephanie Calder (Senior Analyst, PIMHnet).

Introduction

This article is a summary of the work being undertaken by the WHO Pacific Islands Mental Health Network (PIMHnet) since its inception in 2006. The article also presents a strong argument for an increased focus on mental health issues in the Pacific, and greater involvement from countries that have a close relationship with developing Pacific nations.

Background

The Pacific is a fast-developing region, rich in cultures and history. While medicine in the Pacific region has developed considerably over recent years, there is a need to ensure that development keeps pace with emerging issues. This is particularly evident in the area of mental health, where services have not developed at the same pace as other health services in the Pacific. Mental health needs include not only disorders such as depression, psychosis and others but also drug and alcohol abuse. There is considerable evidence that the latter are increasing in the Pacific, and that suicide among young people is increasing.

Funding for health services (inclusive of mental health) is low among many Pacific Island countries, with a strong emphasis on curative services. Health promotion initiatives tend to be poorly supported in terms of funding and expertise, and delivery of health services is hindered by a lack of reliable equipment, access to modern medicines and lack of trained health workers. These issues, and in particular the problems presented by migration of skilled workers from the Pacific, were the subject of a report to the WHO in November 2006.[1]

Mental health needs in the Pacific

In January 2005, WHO undertook a situational analysis of mental health needs and resources in Pacific Island countries ('the Mental Health Needs report'), to examine mental health needs in the Pacific and the resources available to meet those needs.[1] Although the report noted the strong primary health basis in most Pacific countries, it also emphasised that this does not include the delivery of mental health services. Furthermore, the report found that primary health training and education for mental health is based on scarce resources and there is a need to invest more time and resources in building human resource capacity.

[1] Hughes F, Finlayson M, Firkin MP, Funk M, Drew N, Barrett T, Wang X, Fristch F. Situational Analysis of Mental Health Needs and Resources in Pacific Island Countries, Centre for Mental Health Research, Policy and Service Development, World Health Organisation, January 2005

There are few secondary services or specialty mental health services in the Pacific and even where these exist, access is often limited as a result of geography and transport. This means that in terms of day-to-day service delivery, people in many islands or regions are reliant on primary health care workers for mental health needs. Mental health is integrated into primary care only in some countries, with communities, churches and families being important elements of care arrangements. Inpatient facilities are available in Fiji, Kiribati, Papua New Guinea, Tonga, and Vanuatu. Fiji and Papua New Guinea have large institutional style inpatient facilities, while Kiribati has a large facility attached to a general hospital. Although a ward was built for this purpose in the general hospital in Vanuatu, this has since been used for other purposes due to lack of staff. Cook Islands, Samoa, Niue, and Micronesia do not have inpatient facilities. This has led to the use of a jail in some areas for safe care.

Mental health promotion and service delivery are not seen as priorities for the governments of Pacific Island countries, with health issues such as tuberculosis or HIV/AIDS taking precedence. The needs analysis also discovered a lack of support for mental health services at government level, and little apparent interest from health professionals (particularly doctors) in tackling mental health issues. Where mental health legislation exists, it is often outdated, with little or no focus on the rights of people with mental illness.

What is PIMHnet?

PIMHnet (the Pacific Islands Mental Health Network) is a joint initiative of the WHO Regional Office for the Western Pacific and the WHO Headquarters in Geneva, launched in March 2007. Its purpose is:

> *"to facilitate and support cooperative and coordinated activities among member countries, to contribute to better health outcomes for people with mental illness.'*

PIHMnet is working on advocacy, policy, legislation, planning and service development, human resources and training, research and information and access to psychotropic medications to help in the development of mental health services in Pacific countries. Those countries that have joined PIMHnet currently include American Samoa, Australia, Cook Islands, the Federated States of Micronesia, Fiji, Kiribati, Marshall Islands, Nauru, New Zealand, Niue, Northern Mariana Islands, Palau, Papua New Guinea, Tokelau, Tonga, Samoa, Solomon Islands and Vanuatu.

The facilitator for WHO PIMHnet is the author of this article, and is based in Wellington, New Zealand. The role of facilitator is to undertake a range of ongoing activities and support functions.. Among other activities, this has included making presentations to the following organizations to raise the profile of PIMHnet and provide information about its role and function:

- College of Mental Health Nurses, Hamilton, New Zealand (July)
- SAMHSA (August)
- World Federation of Mental Health, Hong Kong (August)
- National Council of Mental Health Colleges, Australia (August)
- WHO – Health Promoting Schools (October)

PIMHnet's activities for 2008 include:

- Carrying out a detailed assessment of the current mental health workforce situation and needs in each country and across all health system levels;
- Providing clinicians with best-practice guidelines for improving the mental health of their patients;
- Engaging strategic partners who can provide expertise, resources and support to ensure the sustainability of mental health services in the region;
- Organising a training workshop on mental health policy and planning with all PIMHnet member countries;
- Holding a workshop with Pacific Island non-governmental organisations in the area of mental health.

Progress to date

Because PIMHnet is a collaborative network, we have been able to make considerable progress in raising the profile of mental health issues in Pacific countries. This has largely been due to the work undertaken within individual countries, by the dedicated and enthusiastic national focal contacts – senior representatives who are responsible for working with a wide range of stakeholders in their own countries. The work undertaken by PIMHnet to date includes:

Assessing service and workforce needs:

This has taken place in two stages, involving:

- An initial rapid assessment to enable work planning to begin
- A more detailed human resource plan developed by each country.

The process of gathering information provided a critical insight into the state of mental health services in the Pacific, as many countries were unable to provide basic data about their health workforce, competencies and training. Work on gathering this information has continued, but it has rapidly become evident that some PIMHnet countries have:

- no mental health professionals
- no information about the prevalence of mental illnesses in their country or region, and
- no mechanism to collect information about the general health workforce in their country.

Furthermore, most countries have only been able to provide a little information about their mental health workforce requirements or training needs as they have no data on which to base this information. The development of workforce plans are therefore a 'work in progress' and will take some time to fully complete.

Developing a communications strategy:

One of the most important aspects of PIMHnet is its role on ensuring that its members are well-informed and supported. Communications take place in a number of ways:

- A one page newsletter every 3 to 6 months provide information and updates on PIMHnet activities.
- Encouraging and facilitating the establishment of PIMHnet committees in countries. Member countries have been provided with information on establishing committees, and progress updates are provided at regular teleconferences.
- Determining and developing appropriate mechanisms for ongoing communication both with the current PIMHnet countries and between the countries. For the most part, email communication is relatively reliable, however, for three countries (Tonga, American Samoa and the Federated States of Micronesia) postal contact is preferred. In some cases, both email and post are used.
- Teleconferences are held with member countries every six months. These provide opportunities are given for countries to request assistance or provide updates and feedback is given to participants on the PIMHnet work programme.

Policy development and strategic planning:

The development of policy and strategic planning is a key priority of PIMHnet. Many countries are actively drafting policies and plans. Progress is varied however once policies and plans have been developed they will serve as the main tool/mechanism for implementing comprehensive national reform for mental health. Member countries are encouraged to share their policies and plans with other countries.

Engaging strategic (collaborative) partners:

Mental health in the region is dependent on many psychosocial factors and its improvement will require the involvement of many different partners. Because of this PIMHnet is actively seeking to engage other collaborative partners who could contribute to its work. A total of 135 potential partners have now been identified, including NGOs, academic organizations, donor agencies, professional organizations, church and spiritual organizations, and others. All potential partners have been contacted either by formal letter posted or by email to establish their interest in becoming involved in the work of PIMHnet and to clarify their organisation's role and function. Responses are currently being awaited, and will be actively followed up.

Developing a comprehensive mental health information package:

In early 2007, best practice guideline materials in mental health were identified, with the assistance and advice of PIMHnet countries. Member countries then indicated that two levels of information would be useful:

- Information for general health workers about mental illness
- Information for social services.

The information package has been drafted and divided into four parts. Part 1 contains information about mental illness for mental health professionals; Part 2 is a simplified version for social services which may be the first contact for people with mental illness. Part 3 contains templates and forms which countries may wish to adapt for use in their own country and Part 4 provides country-specific information such as mental health services and NGO contact information.

The information package has been distributed to PIMHnet members as a working tool.

Conclusion – the need for change

As outlined in this article, there are few mental health services in the Pacific and a history of little interest at government level. There are indications that this is changing, but it is unlikely to do so without the support of countries from outside the region. Many of the difficulties that face the Pacific are basic and are shared by other developing nations. They include a lack of health professionals, conflict and political instability, environmental crises, poor access to pharmaceuticals and increased use of drugs and alcohol.

Help for the Pacific from its wealthy neighbours has tended to be sporadic, poorly co-ordinated and unsustainable. It is often most apparent at times of environmental crisis, or is based on responding to outbreaks of communicable diseases. Mental health is an area that struggles for funding – it lacks the 'feel good' appeal of public health campaigns (e.g. drinking water) and requires long-term investment, with the majority of benefit being felt at country

level. Changing economic times also impact on international aid; ironically, at the very times when it may be needed the most.

The need for mental health problems in the Pacific to be addressed on a more cohesive basis has recently been signalled by AusAID, in its consultation paper on the development of a Disability Strategy for Australia's Aid Programme. PIMHnet has made a submission in response to the consultation paper, seeking an increased emphasis on mental health issues in the strategy, and offering our support in the strategy's implementation.

PIMHnet offers a unique opportunity to improve mental health in the Pacific, and our best chance to do so, is through the support of the countries and organisations already involved in health and social services in the Pacific. If your organisation is interested in our work, please contact the author.

Acknowledgements

PIMHnet is a WHO WPRO/HQ initiative to improve mental health in Pacific island countries. There are 18 member countries, including Tonga, Fiji, American Samoa, Papua New Guinea, Vanuatu, Tokelau, Kiribati, Niue, the Federated States of Micronesia, the Cook Islands, Samoa, Palau, the Marshall Islands, Nauru, New Zealand, Australia, the Commonwealth of the Northern Mariana Islands, and the Solomon Islands. Each country is represented by a national focal contact; Dr Mapa Puloka and Mele Lupe Fohe (Tonga); Dr Odille Chang (Fiji); Mr Utoofili Aso Maga and Ms Elizabeth Ponausuia (American Samoa); Dr. Umadevi Ambihaiphar (Papua New Guinea); Mr. Jerry Iaruel and Len Tarivonda (Vanuatu); Dr Iosefa Tekie (Tokelau); Mr Koorio Tetabea and Dr Burentau Teriboriki (Kiribati); Ms Keti Fereti and Dr Kara Gafa (Nuie); Dr Imaculada Gonzaga-Optaia (Federated States of Micronesia); Dr Rangiau Fariu (Cook Islands); Ms. Palanitina Tupuimatagi Toelupe, Ms Frances Brebner and Ms Sina Faaiuga (Samoa); Dr Sylvia Wally (Palau); Mr Russell Edwards (Marshall Islands); Dr Si Thu Win Tin and Sunia Soaka (Nauru); Dr David Chaplow, (New Zealand); Ms Colleen Krestensen, (Australia); Josephine T Sablan, (Commonwealth of the Northern Mariana Islands); Mr William Same and Dr Paul Orotaloa, (Solomon Islands).

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ISSN 1015-7867
Volume 15. Number 1. February 2009