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Relationships between health and culture in Polynesia – A review

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ABSTRACT

This review of journal articles and book chapters discusses the health beliefs characteristic of Polynesia and reveals several themes. These are: commonality in health conceptualisations across the cultures of the region which differ from the conceptualisations of biomedicine; the role of the relational self, traditional living and communalism in understanding health; the place of spirituality and religion in health and illness causation; and pluralism and pragmatism in health-seeking behaviour. Suggestions are made as to how awareness of key ideas might contribute to effective planning of health promotion and intervention activities.

Introduction

This paper reviews cultural aspects of health in the region of Polynesia, placing these, where appropriate, within the wider context of concepts which have been applied to the Pacific region.

The region of Polynesia is highly geographically distributed, and is usually represented as those island groups lying within the roughly triangular shape traced out by Aotearoa/New Zealand to the South, Hawaii to the north and Rapa Nui/Easter Island to the east. Polynesia incorporates about 1000 islands, grouped into several countries including Samoa, Tonga, Niue, Tuvalu and Rarotonga/Cook Islands. Fiji is on the border between Polynesia and Melanesia (to the west).

Despite their geographical distribution, the Pacific Islands and the region are described as "having long had much in common, joined, rather than divided, by the world's largest ocean" (Hau'ofa, 1993). Dever and Finau (1995) similarly refer to a range of common features shared by Pacific nations that impact on health, including their geographic isolation, history and culture, vulnerable economies and environmental degradation. Pacific-wide governmental approaches to facing health challenges in a regional way have been embodied in strategic plans such as the Yanuca declaration, a key aim of which is to establish the concept of "healthy islands" across the Pacific (Dever & Finau, 1995; WHO, 1995) through a wide range of measures, for example training health professionals, improving sanitation, community development and controlling mosquito breeding (Galea, Powis, & Tamplin, 2000; Phoon, 1997). The Yanuca declaration and its successor, the Rarotonga agreement (WHO, 1997) specifically endorse the intention to pursue a holistic, ecological approach to health that recognises the commonalities in history and culture of Pacific nations. Galea et al. (2000), whilst lauding the positive impetus provided by these policies, also argue that for their future implementation to be effective they should be more receptive to learning from communities and should connect the concept of health to social and cultural issues. With reference to public health policy in New Zealand, Ma'ia'i (1994) and Tamasese, Peteru, Waldegrave, and Bush (2005) have argued for a recognition of the importance of culture in Pacific health beliefs.

Life expectancy at birth in Polynesian countries (excluding New Zealand) is 60–72 years for males, and 63–75 for females. Infant mortality rates per 1000 live births range from 16 to 31 (WHO, 2008).

There are argued to be multiple health transitions playing out in the region, with mortality rates improving in many places, but 'diseases of modernisation' (cardiovascular and metabolic) on the rise (Lewis & Rapaport, 1995) due in part to urbanisation and changes in diet (Schoeffel, 1984; Thaman, 2003).

While infectious diseases continue to be important, chronic illness, including diabetes, is a major problem in Polynesia, with adult diabetes incidence at 13% or higher in Tonga, Tuvalu and French Polynesia (International Diabetes Federation, 2006). Furthermore, pre-diabetes or impaired glucose tolerance in Pacific Island populations is worryingly high: the WHO reports incidences of 47.3% (American Samoa), 33.4% (Tokelau), 23.7% (Cook Islands),

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and 21.5% (Samoa), and suggests these figures represent a "diabetes pandemic" (WHO, 2007).

Foundering economies, compounded by issues such as ecological disruption, are leading in many places to *declining* living standards (UN, 2006) with some authors arguing that deteriorations in health and social conditions can be directly attributed to development without proper socio-cultural consideration, and that "Pacificans need not transit to the mortality and fertility patterns of 'modern societies', in order to be healthy and happy" (Finau & Wainiqolo, 2004).

Purpose of this review

The review has grown out of the authors' interest in the cultural context of health and responses to illness, and particularly research on Samoan peoples' understanding and use of antibiotics.

More broadly, studies have shown that an awareness of and sensitivity to cultural factors are fundamental for the success of health interventions in the Pacific (Agnew et al., 2004; Davidson-Rada, 1999; Fong, Braun, & Tsark, 2003; Groth-Marnat, Leslie, & Renneker, 1996; Puaiana, Aga, Pouesi, & Hubbell, 2008; Ropiha, 1993) particularly where non-Pacific Islands personnel are working to implement health promotion programmes (Mitikulena & Rada, 1997).

Although the role of Pacific culture in health beliefs and behaviour has been considered by a number of authors (e.g., Laing & Mitaera, 1994; Lewis, 1995; McGrath, 1999a; McPherson & McPherson, 1990), it is timely to provide a brief review of the literature that over-arches some of the diversity of Pacific concepts and cultures in general, thematic terms. This is currently lacking in the literature. We focus on the region of Polynesia, which is often described as sharing many of the broader Pacific commonalities but with its own internal particularities.

Some of the most impressive insights into Pacific, and more specifically Polynesian, health beliefs are contained in book chapters and journals that may not be easily accessible, or in journal articles spanning disparate disciplines; it is therefore our aim to bring these to the attention of readers.

We collated studies found via searches on scholarly databases intended to direct us towards material of medical and anthropological relevance, specifically PubMed, MedLine, Academic Search Complete (via Ebsco), and the Social Sciences Citation Index, using relevant terms and combinations of terms. These related to countries and the region: e.g., 'Pacific', 'Polynesia', 'Tonga'; to cultural aspects: e.g., 'culture', 'health beliefs'; and to health aspects: e.g., 'health' and 'illness'. In addition, we searched important authors' work, followed experts' suggestions, examined particularly relevant journals (such as Pacific Health Dialog) and retrieved papers and books cited in reference lists of relevant papers. We consider our approach therefore to have been part systematic, part organic.

Analysis of the literature for the review entailed inspection for themes which were (i) prominent and found to occur repeatedly, (ii) detectable across a range of literature, countries and cultures, (iii) persistent, i.e. with historical precedence and contemporary aspects, (iv) specific to or characteristic of the region. Emergent themes were cross-checked between researchers. The review intends to reflect contemporarily relevant findings; as such a 25 year period 1982–2007 was applied for literature utilised, with the majority of this published within the past 10 years. Older references are included only where providing historical context.

Culture, biomedicine and Pacific health

From a Western/European perspective, health is still largely conceived, measured and interventions implemented according to a biomedical model (Balint, Buchanan, & Dequeker, 2006), described as being individualistic, reductionist, physical, and secular – wherein "a disease can be viewed independently of the person suffering it" (McWhinney, 1988). In contrast, Pacific authors have argued that "for us, health and well-being are about the presence of culture" as opposed to the "absurd", "cold and sterile…absence of maladies" characteristic of a largely Western interpretation of health (Butt, 2002). It has been argued for example that for Samoans, it is inaccurate to conceptualise health as absence of illness and illness as absence of health – instead illness is seen as an inevitable though potent disruption to life and social systems (Drummond & Va'ai-Wells, 2004; Kinloch, 1985). Other authors have pointed out that there are no words in Polynesian languages equivalent to the biomedical constructs of 'health' and 'disease' (Toafa, Losa, & Guthrie, 2001) and that Pacific ideas of health are instead linked closely to cultural identity (McMullin, 2005). Furthermore, in the Pacific, health may be more overtly considered as a societal resource in itself (Nutbeam, 1996) that gives meaning to an individual's place and actions within a community context (Ewalt & Mokuau, 1995).

Influences on Pacific health are commonly discussed in the literature in terms of socio-economic factors and related issues (e.g., Blakely, Fawcett, Hunt, & Wilson, 2006; HURA, 2006; Tobias & Yeh, 2006), obesity (e.g., Gill, 2001, 2006; Pollock, 1995) and related to this, problems such as diabetes (e.g., Robinson et al., 2006; Tomlin, Tilyard, Dawson, & Dovey, 2006), as well as the role of policy, politics and (colonial) history in health (Anderson et al., 2006).

With some notable exceptions, Pacific cultural beliefs and their interactions with health are not typically considered in the medical literature, except where specific practices may be seen to influence outcomes, such as in infant care (Abel, Park, Tipene-Leach, Finau, & Lennan, 2001). However, culture has the potential to significantly affect perceptions of health and health-related behaviour (Sobralske, 2006; Stone, 1992; Torsch & Ma, 2000), and biomedicine may in some cases abjectly fail where it inadequately takes into account cultural and social issues (Groth-Marnat et al., 1996; Stone, 1992).

Although Western medicine has in many important ways shifted away from orthodox biomedical interpretations (Wade & Halligan, 2004; Wilson, 2000), when formal health services are set up in non-Western settings, this generally occurs in the context of biomedical principles, with very variable consideration of the community's culture (Schoeffel, 1984; Stone, 1992). In the Pacific there have, for example, been shifts in levels of acceptance by healthcare authorities of traditional health practices. These were discouraged for most of the period since European contact though in recent years they have increasingly been seen as valid alternatives (Finau, 1994).

One pertinent illustration of biomedical tenets coming into conflict with cultural norms in the Pacific is in the case of food and eating. Across Polynesia, having a large body has been seen as a sign of beauty and status (Brewis, McGarvey, Jones, & Swinburn, 1998; Pollock, 1995), and yet Western health initiatives and research may be directed at the pejorative idea of 'obesity' and its correlates such as urbanisation, diet and physical activity (Gill, 2001). Instructions by health professionals to eat less (e.g., where there is a concern for cardiovascular problems) in such a context may therefore prove counter-productive (Pollock & Finau, 1999), especially where food choices are further complicated by economic factors.

The relational self, traditional living and communalism

It is commonly suggested that Pacific people's concepts of self go beyond the Western notion of the bounded, autonomous individual

to incorporate other people and the environment, especially in terms of kinship (Ewalt & Mokuau, 1995; Lindstrom, 1999). Conceptions of health, too, are described in terms of a relational self, holism, and spiritual components. In attempting to conceptualise a Pacific-wide paradigm of health, Finau (1996) draws attention to cultural perceptions of well-being that encompass values and obligations centred around the extended family and communalism.

Pacific definitions of health often include a notion of maintaining social order and harmony. It has been argued that the concept of 'health' in Tonga, for example, is far more variable than (Western) health professionals commonly appreciate, and that the neologism that serves as a linguistic equivalent – *mo-ui lelei* – has more to do with proper behaviour in society than any limited medical application (Leslie, 2002). For Samoan and Cook Island people, health too is said to be "firmly embedded in the experience of being alive among kin" with sickness a "disruption of the social order which is kin based" (Laing & Mitaera, 1994). Examples of illness causation in terms of the relational self include (mental) ill-health being understood to arise from breaches of sacred (*tabu*) relationships, such as improper treatment of a relative (Ito, 1982; Parsons, 1984; Tamasese et al., 2005), and infant ill-health, even death, being attributed to cultural infractions such as parental infidelity (Ito, 1999). Ito (1999) for example recounts the case of a child's death from a traffic accident being interpreted by the community as a direct result of the father's wrong doings (*hala*) and breaches of traditional morality. Ito (1982) suggests that in Hawaiian society illness may be thought to be a result of 'retribution' for past anti-social activities, inter-individual or inter-family conflict, and that an innocent third party (such as a child) may often be the recipient of such misfortune. Ito argues that this "Hawaiian system of retributive comeback expresses a cultural theme of the importance of keeping social relationships in a positive…mode".

These ideas and examples together imply an expansive Pacific notion of health incorporating the linkages between the well-being of community and society and those within it. Health in these terms is conceived of as being in harmony with the environment and with the family (Sobralske, 2006), and as going "far beyond the physical to include the social, spiritual and more" (Butt, 2002). Cultural constructions of health in Tonga are associated with relationships within the family, with society and with God, and as such are described as being far more than just absence of disease (McGrath, 1999a). In Fiji, health and illness of the individual is perceived as being "closely related to the overall sense of interpersonal harmony in the community" (Groth-Marnat et al., 1996). Samoans are portrayed as emphasising the cultural belief that people are "whole beings" comprising physical, mental and spiritual aspects (Tamasese et al., 2005), and thus "issues of health and well-being without regard for a Samoan view of the self, have little meaning" (Tamasese et al., 2005).

Illness in the Pacific may be perceived as coming about through conflicts with family members, or because of otherwise unbalanced or unsettled social relations (Lindstrom, 1999; McMullin, 2005; McPherson & McPherson, 1990). Treatment and prevention of illness may involve both medical aspects and the remedying of disharmony within the community (Groth-Marnat et al., 1996). Migrants, for example to New Zealand, have been described as seeking to cope with illness perceived to arise from migration, by maintaining good family relations with their homeland over a long distance (Laing & Mitaera, 1994).

The relational self can also be relevant where illness is thought to arise through the violation of a community's traditional and natural lifestyle, or by transgression of social, moral or religious rules. One telling example of how cultural factors can impact on views of health is the distinction between a biomedical, epidemiological explanation of illness in terms of sedentary work, lack of exercise, changed diet etc. and a contrasting Samoan explanation that may well acknowledge these factors, but ultimately attributes the illness to the pursuit of money, and the neglect of religious and kin obligations (McPherson & McPherson, 1990). Traditional healers' remarks on the causes of deteriorations in health in Samoa indeed relate to the rejection of traditional and natural lifestyles, and the replacement of these with European manners, housing, clothing, food etc.:

> The lifestyle which ensures general well-being is achieved and maintained by accepting a Samoan view of the world and by living by those customs, *o le aganu'u samoa*, which support it. Conversely, the rejection of the world view, and the customs which underpin it, can lead to the imbalance which results in illness (McPherson & McPherson, 1990).

Samoan interviewees have elsewhere claimed that failure to follow *fa'aSamoa* (Samoan traditional way of life) can cause cancer (particularly in relation to consumption of imported foodstuffs) and that conversely pursuance of *fa'aSamoa* can prevent it (Hubbell, Luce, & McMullin, 2005). A similar status is accorded in Tonga to *angafakatonga*, which emphasises good social relations and features in health promotion (Leslie, 2002). Broadly speaking, Pacific people's cultural constructions of health may also be politicised, ultimately inseparable from attitudes and beliefs relating to a range of historical and social issues, such as dispossession and the destructive influences of European contact, land ownership, and access to land and sea (McMullin, 2005).

Because illness is thought to arise from problems in social relationships, social remediation (Ito, 1982) may be used as a pragmatic therapy. Ito (1999) describes how in Hawaii the traditional means of conflict resolution (*ho'oponopono*) is used both informally, and incorporated in more structured family therapy sessions, to 'unravel' conflict through forgiveness and apology, so forming part of an expansive healing process. Parsons (1984) also describes an account from Tonga in which amends were required to be made between a father and mother, following the father's mistreatment of her, as a condition of their child recovering from a serious illness. Traditional healing in the Pacific is a part of people's culture and goes beyond physiological matters to relate to health-maintaining behaviour and illness treatment in the context of societal systems (Finau, 1994). Furthermore, in contrast with the formalism and bureaucracy of Western medicine, traditional healing may be understood as a power acquired by an individual or family from the divine, which is administered for the community for love rather than money (Toafa et al., 2001).

In practical decision-making too, health, illness and healing are a "family affair", where healthcare decisions about what traditional and Western medicine to use are made within the kinship group (Chambers & Chambers, 1985; Laing & Mitaera, 1994). It has been argued that family members should be involved in healthcare planning as much as possible (Sobralske, 2006). Understanding the concept of the family unit and its relation to health may therefore help contribute to effective health development and prevention activities (Finau, 1982).

Spirituality and religion in health and illness causation

Studies report varying levels of acceptance of a spiritual component in attribution of illness and resort to treatment. Samoan and Cook Island people have been described in the literature as viewing sickness and the physical symptoms of a sick body as a sign not of physiological failure, but of a sickness of spirit, the appropriate treatment for which involves reestablishment of spiritual wholeness of both the individual and the family. Attitudes are

however suggested to be moving progressively towards more Western viewpoints (Laing & Mitaera, 1994).

In contemporary Tonga, a traditional but also modernising society, there is reported to be firm belief in the existence and potency of spirits (as disembodied entities) that are able to intentionally or indirectly affect health (McGrath, 1999a, 2003). Parsons (1984) argues that "the traditional etiological explanation which remains in the minds of most Tongans is that sickness is ultimately caused by deceased kinfolk whose spirits can afflict the living". The strikingly un-Western ritual of disinterring the bones of an ancestor (and subsequently reburying them) as a last resort in treating serious illness (Parsons, 1984) may be on the rise in Tonga today (McGrath, 2003). The validity of spirit-caused illness is evidently accepted in official health policy also, as evidenced by the public education campaign mentioned by McGrath (2003) in which traditional healers are assisted in making a differential diagnosis between spiritual possession and schizophrenia. Belief also endures that illness may arise from breaking a *tabu*, with treatment involving the supernatural (McGrath, 1999a, 1999b). Mental illness in particular may be interpreted in terms of the influence of spirits (Ellis & Collings, 1997, chap. 4).

The extent to which Pacific people believe in the involvement of spirits in health may depend on multiple factors. Such beliefs are reported to be held by elders resident in the US (Torsch & Ma, 2000); while in other instances educated Pacific Island-residents and expatriates are reported to frown upon or discourage traditional medicine (Finau, 1994). Discussions with American Samoans, for example, indicate that very few attribute cancer to *aitu* (spirits), with such explanations in many cases being vigorously put down by participants (Hubbell et al., 2005). Other writers report that it is not unusual for Pacific people to attribute ill-health to the involvement of *aitu*, often in conjunction with breaches of family obligations or *tabu* (Bathgate & Pulotu-Endemann, 1997; Tamasese et al., 2005). Samoan and Cook Island migrants to New Zealand have been reported to be struck down with spirit-caused sicknesses which come about because of a desire of ancestral spirits for the person to return to deal with kinship issues (Laing & Mitaera, 1994). Generational differences are likely to influence the degree of belief in the potency of spirits in causing illness (Ellis & Collings, 1997, chap. 4; Tamasese et al., 2005).

Other studies have revealed a distinction between 'ordinary' and spirit-caused illness, the first category being illnesses which have either no particular, or only mundane explanations ('just sickness'), the second being of a kind where breach of *tabu*, the involvement of spirits, or other supernatural explanations are invoked (McGrath, 1999b; McPherson & McPherson, 1990). As Lewis (1995) points out, illness may be accepted simply as a natural fact, but is often interpreted further in religious or moral terms.

As for the influence of Christianity on life, culture and belief in the Pacific, this introduced but widespread religion has itself come to be reinterpreted, with links to Western culture weakened and to Pacific culture strengthened (Forman, 2005). Thus links between health and spirituality may be related in general terms to the Pacifican conflation of traditional custom and Christianity, although there is such diversity in religious belief across Oceania that generalisation is problematic (Barker, 1999). Recourse to Christian faith and the church for health purposes has however come to be portrayed as "a new element in the traditional pharmacopoeia" (Finau, 1994). It should be noted also that despite the general presumption of biomedicine as being secular, in the Pacific its introduction has been very much connected with the introduction of Christianity; indeed it was asserted by missionaries that the new medicines and healing powers they brought with them were divine in origin (Shineberg, 1978) – an illuminating historical illustration is that of the espousal by early missionaries of holy water as a medicine to treat lunacy (Hamilton, 1998). The association of Church and biomedicine certainly endures in contemporary Pacific society, for example in the dual role Catholic nuns may occupy as health professionals (McGrath, 1999a), and so it is reasonable to think that supposedly secular biomedicine in many quarters may be understood as maintaining an association with the spiritual.

Pluralism and pragmatism in health-seeking behaviour

There appears to be a common belief in parts of the Pacific that there was far less illness prior to European contact (McPherson & McPherson, 1990), that the life of pre-contact ancestors was a far purer, healthier one (McMullin, 2005) and that much illness that exists today is Western in origin. As such, in conceptualising health problems, a distinction is often drawn between indigenous and Western illnesses. In Tonga, for example, there is a fundamental difference between European-introduced conditions, *mahaki faka Palagi*, and Tongan ones, *mahaki faka Tonga* and the two systems of medicine – Tongan and Western – appropriate to treat these (Toafa et al., 2001). According to Parsons (1984) also, Tongans have two major categories of sickness, Tongan sicknesses and Western sicknesses; she states furthermore that "all Polynesians seem to categorise sickness in this way", though emphasises individual differences in dominance of respective categories. Similarly in Samoa a distinction has been drawn by authors between people's categorisation of sickness into European illnesses, *ma'i papalagi* and Samoan illness, *ma'i Samoa* (Ellis & Collings, 1997, chap. 4; McPherson & McPherson, 1990).

Health status in the Pacific pre-contact, and the reason for continued changes in health status are a matter of controversy (Finau & Wainiqolo, 2004; Thaman, 2003). European contact has had certain undoubtedly devastating effects, such as the decimation of Fiji's population by 40% by the introduction of measles (Morens, 1998), and by the introduction of other illnesses such as influenza and tuberculosis, so it is hardly surprising that a conception of 'European illness' has considerable currency. A further influence of Western society on Pacific health, as conceived by Pacific people (McMullin, 2005; McPherson & McPherson, 1990) and in the research literature (Thaman, 2003) is that of the deleterious effects of consumption of imported foodstuffs on health. This probably explains why certain illnesses such as high blood pressure, diabetes and even cancer are also categorised as being European illnesses (Hubbell et al., 2005; McPherson & McPherson, 1990). Diseases such as diabetes, hypertension and AIDS are perceived in Tonga to have come about as a result of too much contact with the West (McGrath, 2003). In contrast, Latukefu suggests that some missionaries brought effective treatments for traditional diseases suffered by Tongans (Latukefu, 1974). Around 40% of a large sample of American Samoans were reported to agree that some illnesses 'only affect Samoans'; a further 43% agreed that medical doctors cannot treat exclusively Samoan illnesses (Mishra, Hess, & Luce, 2003).

A consequence of the distinction between an illness being indigenous or introduced, is what constitutes an appropriate treatment. Thus for 'European' illness European medicine may be considered most appropriate, whereas traditional healing may be more relevant for 'traditional' (or minor) complaints (Mishra et al., 2003; Tamasese et al., 2005; Toafa et al., 2001). The process of finding cures for illness may in practice, however, be approached very pragmatically, with various traditional and biomedical treatments tried until one works (McGrath, 1999a). Use of Western treatment does not necessarily require acceptance of biomedical norms; participation in the Western medical system may occur even where illness is conceived of in traditional ways. In some instances, assistance may be sought from medical providers, but

before treatments have taken effect, the intervention of traditional healers may also be sought (Mishra et al., 2003). In other cases, medical staff may be consulted in parallel with traditional healers, with the use of one not necessarily precluding use of the other (Young, 2001).

Contemporary pluralism (i.e., the use of a range of treatment options) may be seen as a continuation of traditional practice, with Western treatments constituting additional treatment options (McGrath, 1999a), and where health-seeking behaviour can be said to reflect an accommodation to two systems of health beliefs and healthcare (Forbes & Wegner, 1987).

Pluralism may involve a multiplicity of explanations of illness as well as utilisation of different medical systems. A result of years of health promotion and information campaigns in Tonga is reported to be an "efflorescence of ideas" about health, involving people's re-conceptualisation and merging of Western concepts into a more traditionally Tongan perspective (Leslie, 2002). In this way, health beliefs come to be neither traditional nor modern/Western, but instead a convergence of the two. Cultural beliefs about illness may ultimately be "multi-layered", thus ill-health is not necessarily considered to have *either* a medical cause *or* a spiritual cause, but may be simultaneously explained in traditional terms such as the violation of *tabu* or problems in interpersonal relations, as well as attributed to physiological abnormalities (Groth-Marnat et al., 1996).

One of the first conceptual models of Pacific health which attempts to frame cultural beliefs in a modern context is the Samoan *fonofale* model which incorporates Samoan culture and its holistic view of health (Drummond & Va'ai-Wells, 2004; MoH, 1997). This model is named after the traditional Samoan meeting house: the roof of the *fonofale* represents cultural values and beliefs that constitute shelter for life; the floor or foundation represents the extended family which is the base for social organisation; the four pillars of the *fonofale* represent physical/biological well-being, spiritual well-being, mental well-being, and 'other' which includes gender, status and sexual orientation.

Similarly, van Meijl (1993) describes the formalisation of a four-dimensional, traditional Maori perspective on health in which are incorporated *te taha wairua*, the spiritual dimension; *te taha hinengaro*, the mental dimension; *te taha whaanau*, the family dimension; and *te taha tinana*, the physical dimension.

It is not clear how much validity these models may have for indigenous people – van Meijl (1993) in particular expresses strong scepticism, arguing that Maori health models have arisen and been 'reified' as much as a result of political expediency as having been derived from any truly traditional conceptualisations – however such re-thinking of health beliefs may go some way towards the recommended translation of Western concepts into the "vernacular worldview and languages" of the Pacific (Finau, 2000).

Limitations of this review

This review aims to draw out some of the general themes in the literature about the links between Pacific health and culture. The result therefore depends on the accuracy of our interpretation as well as the content and focus of the articles included.

Whilst awareness of culture and cultural differences is important in health research and practice (Napoles-Springer, Santoyo, Houston, Perez-Stable, & Stewart, 2005) the potential for their problematic interpretation or application is high. It has been argued that the misuse of culture in medicine arises primarily from stereotyping and over-simplification, where in reality culture is complex, mutable, problematic and frequently contested – with the result that individuals' lives "will not fit in a predetermined cultural box" (Gregg & Saha, 2006). Thus the ideas collated in this review are necessarily generalisations presented for the purpose of sketching commonalities within the Pacific. Health beliefs will vary according to country and culture, traditionalism or modernity of modes of living, generational differences, level of education, religious beliefs, particular context etc.

The studies reported may also suffer from the problem of selective observation. For example, in her reflections on the persistence of pluralism in health beliefs and behaviour in Tonga, McGrath (1999a) points out that analyses of theories of illness in traditional societies have tended to focus on the supernatural. She argues that for researchers the "draw of the exotic" risks presenting an erroneous impression that these societies do not use secular explanations for illness and only develop these with the advent of biomedicine. Instead she suggests that explanatory systems are likely to be complex and flexible in their accommodation of contrasting paradigms. Certainly, in many of the articles cited in this text, there is reference to beliefs and ideas less contradictory to Western norms. As McMullin (2005) says in her study of Hawaiian attitudes:

> participants were very familiar with the meanings and practices of health predominant in the US…however…alternative versions of health, concepts and descriptions of Hawaiian health were readily available

Studies seldom report explicitly on the prevalence and extent of traditional beliefs, and so some caution should be exercised about how much these should be assumed to apply. One study looking at New Zealand resident Tongan people's health and illness beliefs that did break down respondents' perspectives proportionally (Bassett & Holt, 2002) suggested that the prevalence of holistic beliefs was linked to a pervasiveness of Pacific models of health and illness beliefs, finding that around half of Tongan people surveyed related health to interpersonal aspects (though with a survey size of 20 individuals with mixed education and country of origin it is hard to extrapolate from these results). It is also interesting and telling to note that this study equated respondents' belief in a functional model of health to beliefs held by, among others, British people. This suggests that the contrast assumed between views of health and illness amongst lay people in the West, and those of Pacific people can sometimes be over-stated.

Recommendations for health intervention and education

A study describing an intervention to reduce smoking in Fiji (Groth-Marnat et al., 1996) makes clear that when there is an appropriate coherence of cultural and biomedical factors, dramatic improvements in health-related behaviour can occur. The virtual elimination of smoking in a village relied on culturally-related factors. The imposition of a *tabu* on smoking (and perceived consequences of breaking this); community cohesiveness, decision-making and solidarity in abstinence; and ceremonies that reinforced the community's intentions (including kava drinking) all played their part. The involvement of an outside, Western medical team further reinforced the community's intentions. It is suggested by the study's authors that health workers in similar contexts take account of the extent to which health promotion is congruent with cultural values, consider the role of ritual and involvement of high status individuals (including healers), and be prepared to relinquish certain aspects of Western techniques and agendas in deference to indigenous methods.

In contrast, health promotion that relays direct translations of biomedical information, via state sources, to instruct people to change their behaviour has been criticised as being insufficient and ineffective (Leslie, 2002). The idea of a non-interpretive reception of such messaging is said to be deficient; people are likely to reinterpret, selectively attend to or ignore it as they see fit (Leslie,

2002). Traditional biomedical health campaigns in New Zealand have had less influence on Maori and Pacific people than on other groups; this may relate to factors such as language and cultural barriers, and the appropriateness of the methods and media used (Davidson-Rada, 1999). It has been further argued that experiences in heath promotion in the Pacific have demonstrated the efficacy of non-jargonistic messages which challenge "the primacy of scientific explanations over the need to minimise health risks and increase of community control" (Finau, 2000).

Communicator prestige is also mentioned as a crucial issue in disseminating health information among Pacific people in New Zealand (Davidson-Rada, 1999; Mitikulena & Rada, 1997) and is said to be context-specific. Because "it is more or less a cultural norm in many Pacific countries that the doctor is the only one the community will accept educating on health from" (Davidson-Rada, 1999), if health information is to be communicated, it might best be done by a doctor. The most culturally appropriate methods for health messages to be promoted are suggested to be via communal gatherings or meetings (*fono*), such as may be organised along village, family, or church lines (Mitikulena & Rada, 1997). In their consideration of health interventions for Samoans and Pacific Islanders in New Zealand, specifically in relation to diabetes/obesity, Drummond and Va'ai-Wells (2004) assert the importance of generating interventions in partnership with Pacific communities if they are to be effective, and draw attention to an integrated approach that encompasses patient empowerment, and development of grass-roots care services.

Cultural appropriateness in health intervention and education has been shown to significantly increase rates of breast and cervical cancer screening activities in Hawaii (Gotay et al., 2000). These authors attributed the success of the intervention to its incorporation of "social networks central to Native Hawaiian culture" such as the notion of *kokua* (help given without needing to be requested) and the spearheading of the intervention by the community members. Later work affiliated with *Imi Hale* – Native Hawaiian Cancer Network (Santos et al., 2001) has consolidated such approaches to community-based cancer screening, emphasising cultural appropriateness in media of communication and family event days in reaching underserved sections of the community (Braun, Fong, Kaanoi, Kamaka, & Gotay, 2005; Gellert, Braun, Morris, & Starkey, 2006).

Health interventions in the Pacific and among emigrant communities have included those focused on weight reduction (e.g., Bell, Swinburn, Amosa, & Scragg, 2001), diabetes risk (Simmons et al., 1998), AIDS (Toelupe, 1993) and family planning issues (Winn & Lucas, 1993). Some features of these and similar programmes are the use of community empowerment models, the involvement of sports personalities as prestige individuals, work through churches and church groups, clinic-based education, and the use of educational videos and teaching.

In summary, for health interventions to be culturally appropriate, we suggest, on the basis of our review, that they should be sensitive to the following:

- Concepts pertaining to the communal, relational aspects of health
- Everyday approaches to health and treatment which are plural and pragmatic
- Situation of health within conceptions of traditional ways of living, e.g., *fa'aSamoa*
- Possible conceptual differentiation between Western and Indigenous illnesses, and between Western and Indigenous treatments
- The applicability of mundane and/or Western health explanations in a given situation
- Relevance to local factors, such as level of education, traditions and other "localised cultural idioms" (Leslie, 2002)
- Communicator prestige; alignment with community systems of health promotion and education, e.g., church meetings
- Emphasis on oral or visual, as opposed to written material
- Prioritising for minimising health risks and enhancing healthful behaviour over technical, scientific explanations

Conclusion

This review has found that there are common themes in the diverse literature on Polynesian cultural beliefs about health and illness, and stressed the importance of considering and incorporating cultural beliefs into attempts to provide health services or health promotion. Future research could explore the prevalence and strength of traditional beliefs in Polynesian countries and in successive generations of Polynesians living in Western countries, and the ways in which Polynesian people draw on traditional and Western beliefs in preventing and treating illness, in order to design more appropriate health promotion programmes and treatment services.

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