

Va'o mai i te Akao: Beyond the reef

Transnational health promotion among Cook Islands people

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Abstract

Introduction

Transnationalism describes the social spaces and ties migrant communities maintain with their country of origin. These spaces are used for multiple purposes including health promotion, and social support. Cook Islanders have a long history of migration to New Zealand and there is evidence which suggest strong social networks and ties exist between Cook Islanders in New Zealand and the Cook Islands. The transnational ties Cook Islanders maintain are potential sites for health promotion activities. This research has investigated transnational health promotion activities with Cook Islanders using health promotion activities to reduce the prevalence of obesity as a lens.

Methods

Participant observations and interviews were conducted in Rarotonga, Cook Islands and Auckland, New Zealand. Observations were recorded in field notes and a thematic analysis was conducted.

Findings

Health promotion in the Cook Islands takes a multi-level approach consistent with a socio-ecological approach to health promotion. Food, culture and physical activity are interrelated among Cook Islanders and the cultural implications of health promotional activities should be accounted for during programme development. Cook Islanders maintain reciprocal social networks and share resources for health gain. Among the interviewees a desire and need for collaboration to share skills and resources for health promotion was expressed.

Conclusion

There is potential for health promotion activities in the Cook Islands to operate transnationally utilising transnational social spaces as a site for community capacity building.

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Dedication

To my nana No'oroa Newport.

I am here because of your unwavering support, hard work and love.

I am blessed to be your granddaughter.

To my family, my parents in Rarotonga who are my support across the sea; my husband and most of all my children TeMaia, Raniera & Ana.

I love you all.

Terms

Body Mass Index (BMI) Estimated health-related weight based on height and weight. The World Health Organisation (WHO) identifies the cut-off points for BMI as being:

$<18.5 \text{ kgm}^2$ = underweight

$25 - 29.9 \text{ kgm}^2$ = overweight

$\leq 30 \text{ kgm}^2$ = obese

Maori Refers to the native language of the Cook Islands. It bears some similarity to the indigenous language of New Zealand but is a separate and distinct language.

Non Communicable Disease A group of diseases which are not contagious. NCD's are identified as the leading cause of mortality worldwide and includes cancers, heart diseases and diabetes.

Pacific people (s) The term Pacific people¹ is based upon the Statistics New Zealand category of Pacific people which includes many different ethnic groups who have populations living in New Zealand. This definition encompasses: Cook Islanders, Fijians (except indo-Fijians, Niueans, Samoans, Tokelauans and Tongans as well as from smaller populations such as Kiribati, Vanuatu, Solomon Islands and Tuvalu. (Statistics New Zealand, 2001)

Western Pacific Refers to the 37 countries in the Western Pacific region of the World Health Organisation. This includes American Samoa, Australia, Cook Islands, Fiji, French Polynesia, Kiribati, Micronesia, New Caledonia, Niue, Palau, Samoa, Tokelau, Tonga, Tuvalu, and Vanuatu.

¹ The introduction section provides further discussion on the usage of this term in this dissertation.

Chapter 1: Introduction

The purpose of this dissertation is to view transnational health promotion from a Cook Islands perspective through the lens of obesity prevention. The goal is to observe individual practices within the broader social influences on weight, focusing on how activity and nutrition behaviours fit within Cooks Islands' social structures and the implications this has for promoting health transnationally among Cook Islanders.

Transnationalism refers to the ways in which migrant communities create and maintain social networks, identities and ways of life across borders (Glick Schiller, Basch, & Blanc-Szanton, 1992). These networks open up social fields which enable migrant communities to support each other despite distances, allowing them to connect with multiple societies simultaneously (Glick Schiller, et al., 1992). A transnational perspective on migration elaborates on the migration experience through exploring the on-going relationships that exist between the location of residence and that of origin. It contends that for some, culture, practices and ways of being are not spatially bound in a particular location, but are transportable across the borders of Nation states. Further, Vertovec (2004) contends that the ways in which trans-migrant communities engage with each other can be transformative. Through interactions with their country of origin, trans-migrants can effect social, political or technological change. For example the sending of remittances may enable the receiving family to establish a small business thus creating financial and social rewards. Transnationalism offers an opportunity to explore how such relationships may be used to support health in multiple settings. This dissertation will explore how such relationships can be used to reduce the prevalence of a health risk factor which also transcends the borders of nation states.

The prevalence and impact of Non Communicable Disease (NCD) has become a global problem (Joint WHO/FAO Expert Consultation, 2002). A major cause of this phenomenon is an increase in body mass to overweight or obese levels prompted by changing dietary patterns and physical activity levels (World Health Organisation, 2002). The WHO defines Obesity as having a BMI of 30kgm^2 or greater (World Health Organisation, 2002). Whilst globally there are still regions of under-nutrition,

diets have increasingly shifted to incorporate higher levels of fat and sugar and lower overall nutritional value (Popkin, 2011).

This has been accompanied by a decrease in overall physical activity levels and weight has increased as a result (Popkin, 2011).

Theoretical perspective: Social ecology of health

Social ecological theory emphasises the relationship between the social environment, physical environment and human behaviour and how that impacts on wellbeing (Stokols, 1992). The theory views health as a product of multidimensional relationships between the environment, geography, architecture, culture and politics as well as the behaviour of the person interacting with it. Stokols (1996) argues that to improve the health of a person or population requires multilevel intervention. This requires an analysis of the links between behaviour, physical environment and social environment.

Obesity has been looked at in terms of individual factors such as car use, urban environment and eating habits, all of which have a role to play in increasing (or decreasing) body mass. Yet this singular view inhibits the ability to site obesity within the complex interactions that exist between these factors. According to socio-ecological theory it is the interwoven nature of these influences which make establishing interventions for obesity difficult. Food for example has cultural meaning and resonates symbolically and historically in all societies (Anderson, 2005). Interventions focusing on weight, diet and exercise can therefore take on very specific cultural meanings and value that must be explored from within the specific social field. Among transnational communities this exploration may be particularly pertinent for not only do trans-migrants maintain their relationships and culture across borders, they do so whilst simultaneously immersed and engaged in the social reality of their country of residence. Trans-migrants maintain a bifocality of experience where their lives are evaluated in terms of 'here' and 'there', which combine into a singular lived experience (Vertovec, 2004) thus creating complex social fields.

To address obesity through tightly focused interventions such as encouraging physical activity without considering the broader social context may be of limited effectiveness. Individual lifestyles may be at the crux of the obesity 'epidemic' in so

much as choices about the foods consumed and the physical activity undertaken are made by individuals. Crossley (2004) contends that 'lifestyle' behaviours fits within the broader social patterns in modern societies in which there are high levels of interdependency between the social structures that influence obesity for. For example, forces like globalisation, environmental structures, political and policy frameworks, food systems, the way people interact with these forces and how people engage with each other within the social sphere. Nutritional and physical activity behaviours which affect body this is not to say that individual agency has no role to play. As Crossley (2004) puts it [social] "*patterns shift because agents respond purposively to events and changes around them*" p. 241. Therefore if we fail to position people culturally and socially within the obesity discourse "*we lack the crucial link that allows us to see why changes in social structure are associated with changes in the obesity rate*" (Crossley, 2004, p. 241). This is an important issue for this dissertation.

Terminology

Throughout this dissertation the terms health promotion and Pacific people are used and require further elaboration.

Health promotion.

The WHO defines health promotion as

“...the process of enabling people to increase control over, and to improve, their health. To reach a state of complete physical, mental and social well-being, an individual or group must be able to identify and to realize aspirations, to satisfy needs, and to change or cope with the environment”
(World Health Organisation, 1986, p. 1).

To achieve wellbeing people must live in a health supportive environment as well as have the capacity to improve their wellbeing (Stokols, Grzywacz, McMahan, & Phillips, 2003). The Ottawa charter sets out five action strands that can be used to promote wellbeing.

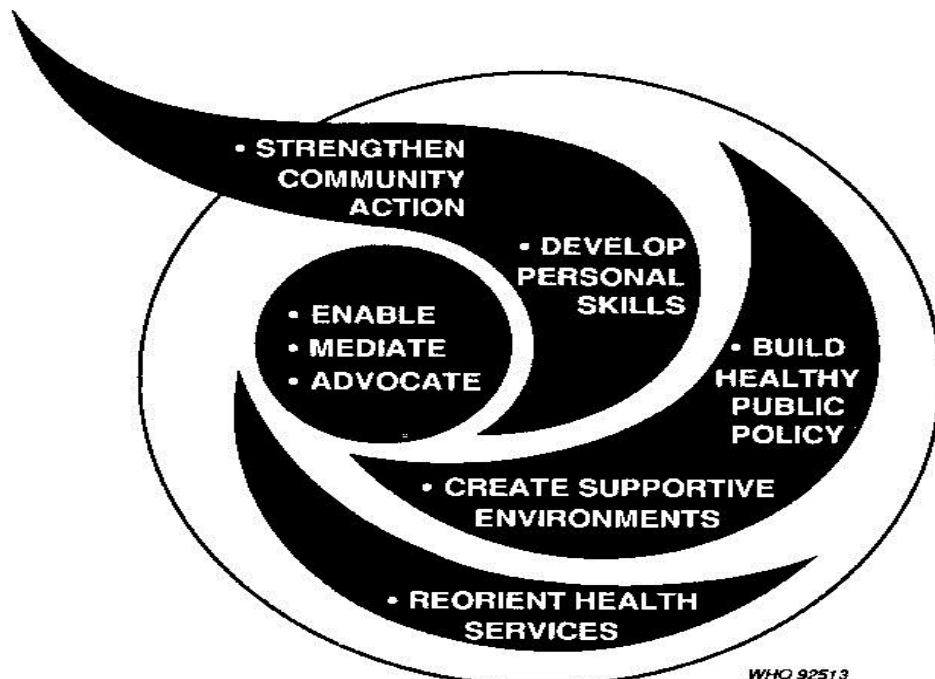


Figure 1 Adapted from the Ottawa charter. World Health Organisation (1986)

This model of health promotion encapsulates a multi-level approach to improve wellbeing.

Pacific people

The use of the term Pacific Islanders in New Zealand has a controversial history. The term has been rejected among some Pacific populations as it implies homogeneity which masks the unique nature of each Island group it attempts to encapsulate (Macpherson, 2004). Most of the New Zealand based literature identified during the literature review employed “Pacific” as an ethnic category. As a result this dissertation uses the term Pacific people as reference to people of the Pacific. It is not intended to imply homogeneity and care is taken to ensure that specific Island populations are referred to where possible.

Chapter 2: Literature review

This literature review is presented in three parts. Each section addresses the three key themes of this dissertation: transnationalism, obesity and health promotion as they relate to Cook Islanders. Review one outlines migration demographics for Cook Islanders in the Cook Islands and New Zealand before exploring transnationalism. Review two focuses on obesity prevalence among Cook Islands communities and South Pacific People more generally before identifying potential risk factors for this prevalence. Review three explores the attributes of successful health promotion practice among Cook Islanders and Pacific People. Literature specific to Cook Island people will be highlighted throughout each review. The review will summarise the three themes and propose recommendations for future research.

Transnational ties across the Pacific

Google scholar, Medline and Scopus were used to identify literature for inclusion. The following search terms were used “transnation*²” and “Pacific” or “Cook Island*” or “Pacific” or “Pasifika” or “Pacific Island*”.

Selection criteria

- Literature published in English.
- Published since 1999.
- Literature that was relevant to Pacific people who reside in either New Zealand or the Pacific.

Demographics

Cook Islanders have been migrating to New Zealand since the 1950's to meet a need for unskilled workers in New Zealand based industry (Laing & Mitaera, 1994). The number of Cook Islanders residing in New Zealand has been steadily increasing over time. The latest New Zealand Census data states there are 58008 Cook Islanders residing in New Zealand the majority of whom are New Zealand born (Statistics New Zealand, 2006) .

In contrast the resident Cook Islands population is just over 15,000, 72% of whom live on the large Island of Rarotonga (Statistics Department Cook Islands, 2006).

² “ * ” denotes a Boolean search was used.

The Cook Islands population has been experiencing out-migration since the 1970's and despite a large decline in infant mortality over time, population growth has been slight in recent decades (Statistics Department Cook Islands, 2006). Depopulation due to migration to New Zealand (and other countries) continues to be the predominant cause of the population plateau within the Cook Islands (Statistics Department Cook Islands, 2006).

The movement of Cook Islands people from their homeland to their current place of residence offers unique fields of inquiry in the arena of transnationalism, particularly in health. Migration is often thought of as a unidirectional flow of people from one place to another. Transnationalism however illustrates how migrating communities forge and maintain on-going links with their country of origin (Spoonley & Macpherson, 2004; Vertovec, 2004). Pacific communities maintain strong reciprocal relationships with their home island. The natures of the ties are diverse but illustrate communal support networks which transcend borders.

Reciprocity not remittances: Exchange and identity across the Pacific

Exploring transnationalism from a Pacific perspective is an emergent field (Lee, 2009). Migration discourse often investigated the scale and direction of financial remittances made by Pacific migrants to their families and villages in the homeland (Barcham, Scheyvens, & Overton, 2009; Lee, 2009; Marsters, Lewis, & Friesen, 2006; Spoonley, 2001; Spoonley & Macpherson, 2004). The emergent literature on Pacific transnationalism presents a more nuanced view of remittances.

Remittances in a Pacific context are more than flows of capital. Barcham et al. (2009) asserts that the flow of money is integrally linked to the movement of goods, services and culture between dispersed Pacific populations. An aspect of broad social networks linking geographically dispersed communities.

Remittances in Pacific populations are not unidirectional flows from rich to poor but are inherently reciprocal. Literature establishing this reciprocity is emerging but it is an area of study that is under development. In Tonga, cash remittances during ceremonial or family gatherings have become an accepted form of cultural exchange that is reciprocated in kind. However monetary value is not comparable to the social value placed upon traditional gifts like fine mats (Addo, 2009). In the Cook Islands, a similar, value is placed upon goods received from the islands and the financial

remittances sent to the Islands. For example, Alexeyeff (2004) describes the process and value placed upon traditional Cook Islands foods given to family in New Zealand. Staples such as taro, *maniota* (arrowroot), mangoes and *rimu* (a type of seaweed found only on the island of Aitutaki) are prepared in advance to take as gifts. In exchange the “giver” will be given cash and other goods that are expensive to obtain in the islands. The exchange however is not simply the reciprocation of a gift, but is an expression of love and respect between family members and way of maintaining important kinship relations (Alexeyeff, 2004).

Pollock (2009) contends food is a transportable cultural good that embodies cultural values. The associations that are made about food and role of food in Pacific social settings illustrate its role and value. In social settings, foods which have strong ties to the “homeland” are often contributed by families to be shared and are a way of recreating and maintaining cultural practices when residing overseas (Pollock, 2009). Food plays an important role in establishing and recreating unique Pacific identities despite a lived distance from the source.

Reciprocity and the maintenance of kinship ties across borders play a significant role in Pacific transnationalism. Lilomaiava-Doktor (2009) uses the idea of knowing kin and being kin to illustrate how and why Samoan people maintain their kinship ties. Being kin necessitates a lived reality of participation, reciprocity and obligation whether you live in your village or away from it (Lilomaiava-Doktor, 2009). Participation may involve sending remittances, but it also involves other forms of interactions which locate people within their kinship groups. In a Cook Islands context sending money, food and attending ceremonial events such as hair cutting ceremonies “*consolidates kin ties*” ensuring future reciprocity (Laing & Mitaera, 1994, p. 206)

Maintaining a physical presence for Pacific communities often involves international travel. For Cook Islanders the higher relative cost of Travel from NZ to Cook Is makes travel a purposeful activity (Alexeyeff, 2009). Travel is usually undertaken for a specific reason such as a family or village event. Cook Islanders will often travel for a reason such as a family or village event, not just a holiday. Tourists are sometimes called “*utu panu*” which refers to the seed of the utu tree and implies aimless wandering (Alexeyeff, 2009, p. 94). Historically Cook Islanders travelled in

Tere Pati (travelling group). The modern interpretation of *Tere Pati* involves travelling for a common purpose such as fundraising for village projects or attending social events. Usually *Tere Pati* will bring food and gifts for their hosts (Alexeyeff, 2009). For some Pacific Nations, physical presence can be difficult due to isolation and transport cost. In Niue for example flights are only once a week and expensive (Nosa, 2009). However the use of technology such as the phone and more recently the internet, have enabled relationships to be maintained (Nosa, 2009; Spoonley & Macpherson, 2004). Schubert (2009) describes the discussions held between Fijians living in Australia about the benefits of different international calling cards and their use to connect with family in Fiji and the United States. For example a call was made to organise for family in Fiji to drop a child at the airport so the child could fly to Australia. A second call was made to arrange for the child to be met at Sydney airport and taken to meet the connecting flight to Griffith. This example highlights both how technology is used to maintain connections and also how transnational relationships can be used to achieve a goal. Without having access to a supportive network that spanned two countries, the child may have had to negotiate the flight changeovers alone or the parent in Australia may have had to fly to Fiji to collect them. Through using existing relationship these scenarios were avoided.

Even within Island nations there can be differences in the way transnational relationships are maintained. A comparison of transnational movement of Tongans in three different villages illustrates this diversity. Francis (2009) describes how access to education and money through employment or the sale of good increased the likelihood of international movement. In each of the villages there were different levels of access to resources. The village of Hofoa was close to the capital of Tonga, children had easy access to college and people were more likely to be Government employees. Lotofoa which is in another neighbouring island relied on subsistence farming and job opportunities were limited. People living in the village of Hofoa were more likely than those in Lotofoa to have travelled internationally. In Lotofoa most of the cash in the village was from remittances sent by family.

Bi-focality of lived experience

Vertovec (2004) describes transnational communities as living simultaneously in two worlds, their homeland and their country of residence. Communities actively participate in both countries and can utilise the resources in each for personal or collective gain. In the Pacific the same bifocality is experienced. Pacific people often undergo what is called chain migration where those who migrated first will prepare the way for their family who follow (Spoonley & Macpherson, 2004). The resident³ Fijians living in Griffith, Australia are expected to provide financially and social assistance to their kin who migrate over later (Schubert, 2009). Often ties with farmers in Griffith and their kin for mutual benefit and to meet their duty of care. When kin arrive into Griffith jobs are arranged with local farmers. The farmers then gain access to a workforce and Fijian migrants are able to earn some income irrespective of their immigration status (Schubert, 2009). The resident Fijian community in Griffiths are able to use their connections to provide employment opportunities for their newly arrived kin demonstrating the connection between residence and homeland.

Discussion

The transnational perspective highlights the relationships Cook Islanders forge with their families and their homeland. Among Cook Islands people, food carries social significance. It becomes a remittance that is socially laden carrying with it associations of love, connection and obligation. Physical connections are also maintained through *Tere Pati* which enable Cook Islanders to sustain their kinship ties. Rather than being isolated by the distance, Cook Islands and Pacific migrants maintain a dual sense of identity which situates them simultaneously here and there. However given that transnationalism is a relatively new field of enquiry, there remains a need for further inquiry into the various ways Pacific people maintain relationships.

Internationally trans-migrant populations establish relationships which transform lives across the borders of Nation states (Vertovec, 2004). Remittances are used to offset the cost of living of the receiver, or to establish on-going income through business development. In the Pacific the sending and receiving of cash and goods represent

³ In this instance resident refers to people who have permanent residence or citizenship

the maintenance of reciprocal ties. However given the emergent nature of the transnational discourse among Pacific people there are areas of future investigation which are relevant from a health context. International evidence suggests several ways where health and transnationalism intersect. A study exploring the subjectivities of migrant women in Canada found that the participants often act as “emotional caregivers” for their family abroad (Gastaldo, Gooden, & Massaquoi, 2005). Brazilian migrants to the United States of America also identified travelling often to Brazil to make use of health care services and obtain medicines or bringing medications with them to the United States. (Hilfinger Messias, 2002). Among African migrants, transnational relationships were used to obtain traditional medicines which were often used alongside Western treatments (Thomas, 2010). In each of the aforementioned studies resources for health were shared between homeland and country of residence.

At present there is little information on how Cook Islanders might approach health from a transnational perspective. For example are the transnational relationships Cook Islanders established used to share resources for promoting health? The concept of sharing health resources is not new among Cook Islanders. Laing & Mitaera (1994) describe the concept of “*kimi ravenga*”, a process which involves the family going in search of a *Ta’unga* (healer) to treat a family member when they are unwell. The *Ta’unga* may be within the family or someone who is known to them. The health resources, in this case the skill of the *Ta’unga* and knowledge of healing methods in the family are shared.

Obesity

Obesity is a “global epidemic” (World Health Organisation, 2011). As a risk factor for Non-Communicable Diseases (NCD) such as diabetes and cardiovascular disease, obesity is a contributor to the leading causes of mortality and morbidity within low to middle income countries (Joint WHO/FAO Expert Consultation, 2002; Rigby, Kumanyika, & James, 2004). Although obesity and NCD’s were once thought of as a disease of affluence, the burden is now disproportionately borne by poorer populations (Rigby, et al., 2004). In the Western Pacific, NCD’s are attributable to 78% of all mortality (World Health Organisation, 2005b).

Three key action areas have been identified by the WHO as crucial to reducing the prevalence of NCD’s: increasing physical activity, improving diet and being tobacco free (Joint WHO/FAO Expert Consultation, 2002). Some Western Pacific Nations face unique challenges to the implementation of these strategies to reduce the prevalence of NCD’s. Isolation, depopulation, acute economic vulnerability to global financial crisis as well as vulnerability to natural disasters all create barriers to public health in small island nations (Binns, Hokama, & Low, 2010).

This review will explore the impact of obesity on Cook Islanders in New Zealand and in the Cook Islands. The focus will be on scoping obesity in terms of prevalence, physical activity levels and nutrition. Where there were gaps in the literature on Cook Islanders, data from other Pacific peoples was incorporated. This information will be synthesised in terms of potential spaces for Cook-Islands centric health promotion intervention.

A database search was conducted using Medline and Scopus using the terms “Cook Island*” or “polynes*” or “pacific*” and “obesity”. This was then combined with “physical activity” or “exercise” or “diet” or “nutrition” or “eating habits” or “food”. This produced 155 results. Documents were included based on the following criteria:

- Written in English.
- Published in the last 20 years
- Reported findings which were specific to Pacific people
- Articles which combined Asian and Pacific into one ethnic category were excluded.

Prevalence of obesity

Cook Islands

In 2008 74% of all mortality in the Cook Islands was attributable to (World Health Organisation, 2011). The observed rates of obesity in the Cook Islands varied within the literature. The WHO (2011) estimated that in 2008 91% of Cook Islands men and 89.9% of Cook Islands women were overweight. Obesity prevalence for Cook Islands men was 59.7% and rising to 67.9% among Cook Islands women. The total population burden of being overweight or obese was 90.5% and 63.7% respectively. In 2004 a National survey indicated that 88.5% of the Cook Islands population were overweight and 61.4% were obese (Te Marae Ora, 2009). This indicates a 2.3% increase in the burden of obesity between 2004 and 2008. However as the data from Te Marae Ora was based upon National survey data and the WHO provided an estimate only, further research would be required to identify the exact rate of increase.

Cook Islanders in New Zealand

Identifying the prevalence of obesity among Cook Islanders in New Zealand was problematic. The New Zealand Ministry of Health publishes a number of reports based on National surveys which identify the prevalence of Obesity among Pacific people in New Zealand; however it does not specify the prevalence for each Island group. Other published literature had few findings specific to the prevalence of obesity among Cook Islanders in New Zealand. Pacific people in New Zealand are 2.5 times more likely to be obese than other ethnic groups (Ministry of Health, 2008). In the 2006/2007 National health survey the prevalence of obesity among Pacific people in New Zealand was 63.7%. The unadjusted obesity rate among Pacific men was 63.3% and 64.2 % for Pacific women (Ministry of Health, 2008). The unadjusted prevalence of being overweight among Pacific people was identified as 26.9% for men and 22.8% for women (Ministry of Health, 2008). A study conducted in Auckland, New Zealand identified that 23 % of the Cook Islands men who participated were obese and 70% were overweight. Among the Cook Islands women in the study 69% were obese and 31% were overweight (Sundborn et al., 2010). Due to different research methodologies it is not possible to compare the data from the New Zealand Health Survey and the Auckland based study. However it does suggest that the use of a collective "Pacific" ethnic category may mask

differences in prevalence among the different Pacific communities. Cook Islands men were reported in the Auckland study as having a markedly lower prevalence of obesity or being overweight than the prevalence found in the Pacific population of the National Health Survey. For Cook Islands women however the National survey under-represents the potential burden of obesity and being overweight. It must also be noted that the Auckland study had a relatively small sample of Cook Islanders and only sampled from Auckland and is not be representative of all Cook Islanders in New Zealand.

The literature suggests that between 20% and 30% of Pacific children are obese. The prevalence of obesity among Pacific children in 2006-2007 was 31.4%, the proportion of Pacific children who were overweight in the same period was 23.3% (Ministry of Health, 2009). In 2002 the National Children's Nutrition Survey found that the prevalence for obesity and overweight was 28.6% and 33.4% respectively (Utter, Scragg, Schaaf, Fitzgerald, & Wilson, 2007) A sample of Pacific 6 year olds found a similar prevalence at 32% obesity and 27% overweight (Oliver, Schluter, Rush, Schofield, & Paterson, 2011)

Physical activity

Cook Islanders in the Cook Islands

Literature on levels of physical activity among Cook Islanders in the Cook Islands was limited. The WHO estimates that in 2008 71.6% of Cook Islands men and 73% of Cook Islands women were physically inactive. Te Marae Ora found that in 2004 73% of Cook Islanders were physically inactive (Te Marae Ora, 2009) Other studies in the Cook Islands found secular trends in activity level by gender and age, however the sample sizes were small, only taken from Rarotonga and not representative of the Cook Islands population (Ulijaszek, 2001)

Cook Islanders in New Zealand

A study undertaken in 2002 identified that Cook Islands men in New Zealand aged 35 – 74 years spent a mean of 33 minutes per week on exercise. Cook Islands women in the same age group spent 17 minutes (Sundborn et al., 2008). However this was based on a small sample of Cook Islanders living in Auckland, New Zealand and may not be representative of the New Zealand based Cook Islands population. A more recent National survey identified the age standardised prevalence of physical

activity as 51.1% of Pacific men and 44.1% of Pacific women who met the physical activity guidelines of at least 30 minutes per day on five or more days (Ministry of Health, 2008). Both studies suggest Pacific men are more likely to be physically active than Pacific women.

For children participation in sports or using active transport (walking, biking or skateboarding/scooter) to and from school are two ways to measure levels of physical activity. Among School aged Pacific children 53.8% used active transport to school (Ministry of Health, 2009). The prevalence of using active transport also increased with age with 10 to 14 year olds more likely to walk/bike/skate to and from school than 5 – 9 year olds (Ministry of Health, 2009). In another study 6 year old Pacific children were asked to wear actual accelerometers⁴ to measure their levels of physical activity. The study found that on average 76% of the time spent wearing the accelerometers the children were engaged in low or sedentary activities (Oliver, et al., 2011).

Among Pacific secondary school students approximately 60% of boys and 45% of girls participate in sports (Palaone, Teevale, & Utter, 2011). Further participation in sports differed by socio-economic status with students living in poorer areas less likely to participate in sports (Palaone, et al., 2011).

Barriers to being active for Cook Islanders in New Zealand:

Only one study which discussed barriers to being active was being specific to Cook Islanders living in New Zealand. A convenience sample of 7 Cook Islands women living in Wellington New Zealand found that time was a barrier to being physically active (Moore, Owens, & Finau, 2003).

Pacific parents identified distance to school as the major barrier to their children using active transport, the second most often cited barrier was the perception it was too dangerous (Ministry of Health, 2009). For Pacific secondary school students the reasons for non-participation in sports fell into three categories: factors outside of their control such as having other responsibilities, Social factors such as not having friends who play sports and a lack of interest (Palaone, et al., 2011). Pacific students also identified a lack of skill to be selected in school teams, cost, access to

⁴ Designed to objectively measure physical activity levels of the wearer.

transport to and from games as well as lack of time were also identified as barriers to being physically active (Teevale, Thomas, Scragg, Faeamani, & Nosa, 2010).

Nutrition

Nutrition in the Pacific

The literature search obtained no articles relating to diet and nutrition among Cook Islanders living in the Cook Islands. As a result the findings in this section are based upon the pan-Pacific literature obtained. Where possible the findings from specific countries are highlighted.

The literature consistently highlights changing nutritional intakes as one of the key drivers of obesity in the Pacific (Cassels, 2006; Evans, Sinclair, Fusimalohi, & Liava'a, 2002; Friel & Baker, 2009; Hughes & Lawrence, 2005; Popkin, 2011). In the Pacific dietary intake has changed to incorporate more sugar and fats. In Tonga the consumption of mutton flaps which are high in fat doubled between 1976 and 1996 to 2 940 822 kgs per year (Evans, et al., 2002) In the Federated States of Micronesia foods such as rice, wheat flour, sugar and corned beef are now commonly eaten (Cassels, 2006)

In the Pacific this is thought to have been as a result of globalisation (Cassels, 2006; World Health Organisation, 2003). Central to the impact of globalisation on diet in the Pacific is the loss of control over food supply (Hughes & Lawrence, 2005). This is in part due to an increasing reliance on imported food (Evans, Sinclair, Fusimalohi, & Liava'a, 2001; Evans, et al., 2002) which was brought about by international agreements and trade policies which have increased the availability of the foods associated with the nutritional transition⁵ (Thow, Heywood, et al., 2011) In Micronesia a free trade agreement signed with the United States saw a rise in the quantity of “turkey tails” and other poor quality foods being imported from the United States (Cassels, 2006). Hughes & Lawrence (2005) quote the Prime Minister of Tonga as saying

“We should not be under any illusion that they do this for our own good, we remind ourselves that Aid does not solely benefit us as a country, but Aid benefits the donor as well. One example would be that they give us Aid and

⁵ The increased consumption of high sugar, high fat foods of low nutritional quality.

they dump mutton flaps on the Tongan market; mutton flaps that are hardly edible by the health standards of New Zealand” (p. 300)

International agreements bind small Pacific Nations into awareness of the health harms caused by the importation of poor quality food but face significant resistance from global organisations to prevent future importation. For example applying tariffs to certain imported commodities requires justification to the World Trade Organisation as tariffs impede free market agreements (Thow, Queded, et al., 2011).

Another impact of the importation of cheap, poor quality foods is that they are often regularly consumed due to their relatively cheaper cost which has resulted in a decline in demand for local produce in local markets (Hughes & Lawrence, 2005). The decline in local food markets may indicate a preference for imported food products which Hughes & Lawrence (2005) suggests was to some extent the case. However among Tongan adults, traditional foods such as pork, and taro were preferred, but were not always consumed due to cost and availability (Evans, et al., 2002). Therefore the “demand” for local produce does exist, what does constrain local markets is individuals’ ability to engage with the market and buy the local produce. In Tonga there was a difference in the consumption of lower quality, cheaper foods by socio-economic status. Participants with lower incomes were more likely to consume the poorer quality foods (Evans, et al., 2002). As Pacific people become increasingly dependent on imported foods due to cost, markets for local produce may become increasingly depressed, further limiting availability.

Nutrition among Cook Islanders in New Zealand

The cost of food was also a consideration for Cook Islanders in New Zealand. Cook Islands women in Wellington identified they were concerned about the diet of their children but the cost of food made it difficult to improve the family diet (Moore, et al., 2003). Among Pacific people despite an awareness of healthful food options, families often make food decisions which are constrained by cost and time (Rush, Puniani, Snowling, & Paterson, 2007; Teevale, et al., 2010) It is worth noting however that Pacific children have a higher intake of fresh fruit and vegetables than the general population (Ministry of Health & Affairs, 2004). Further, Pacific youth who are trying to lose weight will also incorporate more fruit and vegetables into their

diet (Utter, et al., 2007). These findings indicate that health education interventions focusing on improving nutrition may not be as appropriate for Pacific communities as those which alter the social and economic contexts. Rather, interventions which act at the macro level of society, reducing the cost of fruit and vegetables and increasing minimum wages may provide greater improvements in obesity prevalence.

Discussion

The literature illustrates a high prevalence of obesity among Cook Islanders in the Cook Islanders and Pacific people in New Zealand. However there are significant gaps in the existing knowledge for Cook Islanders. Identifying the prevalence of Obesity or levels of physical activity and nutritional practices among Cook Islanders in New Zealand is problematic due to the paucity of available literature. In New Zealand the use of “Pacific” as an ethnic category may mask differences between Pacific populations. The use of “Pacific” may be justified in that it ensures there are sufficient participants in National survey for statistical power. Yet for researchers or health promoters working with specific Pacific communities there may still be a need for ethnic specific data i.e. information on Cook Islanders, Samoans, Niueans.

Another area in the literature that requires further research for Cook Islanders are the socio-cultural barriers to being physically active or eating healthfully. Pan pacific literature has identified factors such as cost and time which was reflected in the findings of a small study on Cook Islanders. For example taking a socio –ecological approach what are the social structures which make time and cost a barrier to health?

In the Pacific the literature identified nutrition as being affected by global trade policies and international agreements. Some Pacific Nations (Fiji, Samoa, Nauru and French Polynesia) have taken steps to mitigate the harms of imported foods through the implementation of excise taxes and tariffs on imported sugar sweetened carbonated beverage. However In what is described as a policy paradox, steps to reduce levels of sugar in the diet are confounded by global subsidies which decrease the manufacturing cost of high fat, high sugar foods (Rigby, et al., 2004). There were no documents identified which explored the impact of trade policies and international agreements on Cook Islanders. This would be an area of investigation which may provide health gains for Cook Islanders. Examples here are research

which looked at whether or not nutrition in the Cook Islands is impacted by trade policies, at which policies are most detrimental and analysis of steps being or could be taken in the Cook Islands to address these issues.

Health promotion in the Pacific

Health promotion is “*the process of enabling people to increase control over their health and its determinants, and thereby improve their health*” (World Health Organisation, 2009) Modern health promotion is influenced by two key charter: Ottawa charter in 1986 and the Bangkok charter in 2005 (World Health Organisation, 1986, 2005a). The Ottawa charter presents five strategies for health promotion with a strong focus on empowerment and addressing the determinants of health. Therefore health promotion focuses on the underlying causes of poor health and addresses concerns using the action strands as a guide for action. This section constitutes a review of health promotion by and for Pacific people. The focus is on the attributes of effective Cook Islands and Pacific health promotion programmes and health promotion practice. Special attention is also paid to programmes and interventions which target obesity, nutrition and or physical activity.

Google scholar, Medline and Scopus were used to identify literature for inclusion. A search of the terms “health promotion” and “Cook Islands” or “Pacific” or “Pacific Island*” or “Pasifika” obtained 149 results. Selection criteria were then applied which reduced the number of articles to 12.

Selection criteria

- Literature published in English.
- Published since 1999.
- Literature which described or recommended factors for effective health promotion practice with Pacific communities.
- The programmes or interventions used were consistent with the five action strands of the Ottawa charter and/or had a parallel tracking approach.

Articles were excluded if they did not meet the above criteria or were:

- Programmes or intervention that is top down in design⁶.
- Stand-alone health education interventions.

⁶ A critique of top down approaches can be found in Laverack & Labonte (2000)

This review of health promotion with Pacific people takes a pan-pacific approach incorporating evidence from the many different Islands due to an absence of Cook Islands specific literature. A strengths based approach was also employed, identifying the factors contributing to successful health promotion programmes. The factors identified are grouped into three themes; design, implementation and sustainability. The review concludes with discussing literature related to obesity and areas for future development.

Programme design

Central to the design of a health promotion programme⁷ with Pacific people is an understanding of the culture and society of the community of interest. Although there are shared values and experiences among different Pacific communities, the unique social and cultural nature of each Island and people should be acknowledged within a programme design (Galea, Powis, & Tamplin, 2000). This has been achieved in several ways but each way privileges the paradigms and epistemology of the community of interest. In New Zealand, it is recommended that Pacific models of health or health belief are integrated with the Ottawa charter to develop appropriate programmes (Lima, 2009). These models conceptualise the holistic nature of a Pacific world view and incorporate values such as family and culture (Pulotu-Endemann, 2009). The Ministry of Education in the Cook Islands have developed a Cook Islands model of health using the Ottawa charter as a guide (Futter, 2009). Using a vaka as the framework the model highlights six features of well-being from a Cook Islands perspective.

⁷ A health promotion program is a suite of interventions to address an issue i.e. an obesity related program may consist of diet, activity, empowerment and other interventions.

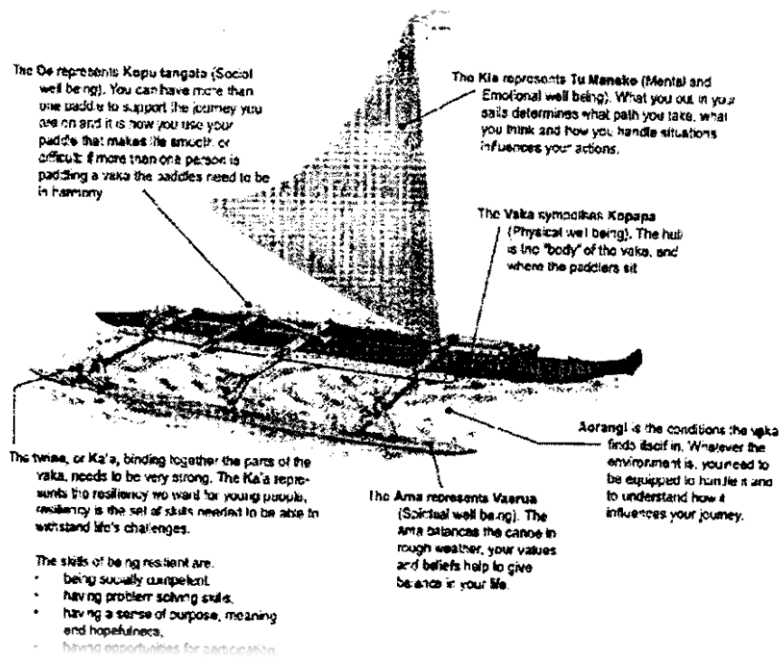


Figure 2 Vaka: Cook Islands dimensions of health Futter (2009) p390

This model could be used to support or develop health promotion within Cook Islands communities.

Family and community are integral to a Pacific construction of health where being healthy is associated with communal rather than individual wellbeing (Capstick, Norris, Sopoaga, & Tobata, 2009). Programmes and interventions should target communities rather than individuals (J.-A. M. Atkinson et al., 2010). Engaging with communities can also ensure that programmes are relevant and appropriate to the community. In Vanuatu a participatory approach which engaged community leaders in the design process helped ensure a culturally sound approach (Harris, Ritchie, Tabi, Abel, & Lower, 2007). Approval for a health promotion programme to be run in the community was sought from Village and community leaders before the programme was implemented. When community events were later offered village leaders were again approached to share in the design process of the event. This allowed the programme to gain community level support. Community leaders are now approaching the programme coordinator to run events consistent with the traditional structure of Vanuatu communities (Harris, et al., 2007).

A partnership approach can be particularly useful when developing programme materials. Health issues are often associated with biomedical concepts and terminology that have no relevance or reference point within Pacific cultures or languages. Words may have to be created or concepts immersed into the local setting. Food or eating plans to address obesity exemplify the importance of the local setting. Encouraging people to eat certain foods may be counterproductive if the foods are expensive, or difficult to source consistently. Eating plans should therefore be tailored through consideration of the local context. This allows messages to be relevant to the community (Capstick, et al., 2009).

Community and traditional leaders should also be supported with training and other techniques to develop their own strategies for intervention (Braun et al., 2003; Harris, et al., 2007). This process immerses programmes culturally and empowers communities to assert control over their own wellbeing. Ensuring cultural congruence is not to say that western methods, agenda and techniques for promoting health should be entirely disregarded. However to be successful, indigenous methods should be deferred to (Capstick, et al., 2009).

Implementation and sustainability

When implementing programmes, community networks and their leaders are also influential. The success of health promotion programmes is reliant on engaging people. Even the most well designed programme will be ineffective if it is unable to reach people. Among Pacific communities, leaders or people who are respected in the community encourage participation in and support of a programme. In Vanuatu, the support of traditional leaders (chiefs and religious leaders) for a programme provided legitimacy which encouraged community participation (J.-A. M. Atkinson, et al., 2010; Harris, et al., 2007). In Fiji traditional leaders were also approached to provide permission for meetings to be held in their village. This allowed the programme to meet with community members regularly without having to gain approval ahead of each meeting (Laverack & Labonte, 2000).

Health promotion programmes with an empowerment focus necessarily employ long term strategies. Sustainability of the programme is vital. In Pacific programmes sustainability is highly influenced by resourcing and community engagement. Community engagement encourages ownership of a programme. This ownership

provides impetus for communities to continue the programme without the on-going support from the outside health promoter (J.-A. M. Atkinson, et al., 2010). Yet a sense of ownership over a programme is not sufficient for a programme to be maintained without additional resource support. The scope of the resources required will differ between contexts, communities and programmes.

Access to funding can often limit the sustainability of a programme (Braun, et al., 2003). Programmes are often funded through external agencies (Braun, et al., 2003; Harris, et al., 2007). This presents potential challenges when the funding has finished. Braun (2003) argues that access to on-going funding will be vital for the long-term future for programmes. This is an issue that was not well addressed in the literature, but is worth considering when implementing an intervention. As well as the financial support required sustainable programmes also require on-going technical support (Braun, et al., 2003). Technical support can include access to other health promoters to share ideas, knowledge and skill. This on-going support has been accounted for within the Healthy Island strategy which incorporates health promotion into a place based strategy (Galea, et al., 2000). The Healthy Island strategy was affirmed in the Rarotonga Agreement (1997) signed by Government Ministers from Pacific Island Nations which set out a regional health development strategy. Part of the strategy was inter-Pacific Nation collaboration to support health development as well as targeting health through a socio-ecological approach. The strategy draws together community level health promotion, policy and legislative change to develop healthy settings such as villages, work places and schools.

Regular inter-nation collaboration has been undertaken. A local intervention in the Federated States of Micronesia (FSM) which promoted the consumption of locally grown food also established a large support network. Initially an email list was established to send news and share ideas to members within FSM. This has now grown to a support network which includes members from other Islands in the Pacific such as? (Englberger, Lorens, Pretrick, Spegal, & Falcam, 2010). The widening of the “go local” network illustrates how Pacific communities establish cross border support networks and highlights the potential of electronic communication to facilitate information sharing.

Sustainability is improved when communities take ownership of the programme (McNamara & Rayasidamu, 2007). This may require training or support being provided to community members to adapt and deliver the programme according to local needs and values (J.-A. M. Atkinson, et al., 2010).

Health promotion and obesity

Three of the documents reviewed were related to obesity. Two concentrated on healthy public policy development and one described a local led intervention to promote healthy food. Despite efforts to address NCD's in the Pacific, there are very few which encourage changes to the food chain through policy intervention (Snowdon, Lawrence, Schultz, Vivili, & Swinburn, 2010). However using a participatory approach, potential policy interventions can be identified (Snowdon, et al., 2010). One such policy which has been successfully implemented in Fiji and Samoa is a tax on sugar sweetened carbonated beverages (Thow, Quested, et al., 2011). Both countries had experienced negative changes in nutrition partially attributed to trade liberalisation policies (Thow, Heywood, et al., 2011). However changes to trade policies such as the application of import levies on unhealthy foods, and the removal of taxes on healthier options have been recommended as ways to address the issue (Snowdon, et al., 2010; Thow, Heywood, et al., 2011; Thow, Quested, et al., 2011). However policy interventions require local input and evaluation of policies to ensure that any policies implemented are appropriate, cost-effective and do not impact on other areas of health (Snowdon, et al., 2010). Another prospective policy intervention is to encourage the development of the local food markets (Snowdon, et al., 2010). This approach was introduced at the community level with the introduction of a "go local" food network (Englberger, et al., 2010).

Putting health on the policy agenda requires inter-sectoral action between government departments as well as community support. In Pacific countries such as Fiji and Samoa that have introduced health supportive trade policies, promotion of the approach by the Minister of Health encouraged implementation of the approach (Thow, Quested, et al., 2011). This suggests that health promoters who are working

to develop healthy public policies should work with Government leaders as well as the community to generate support for the proposed policy.

Discussion

The literature search undertaken identified no literature that was specific to Cook Islands communities. Articles published on other Pacific nations identify areas which may be relevant for developing health promotional programmes with and for Cook Islanders.

A part of successful health promotion activities in Pacific communities is the integration of the cultural contexts of the community into the programme design. In New Zealand the use of Island specific models of health are used to guide health promotion practice (Lima, 2009). For Cook Islanders the model described by Futter (2009) could be used to guide programme development.

The literature also highlighted that programmes should be community or family driven consistent with a Pacific view of communality. This suggests that behavioural change approaches alone will be less effective as they are inconsistent with views of well-being that are based around an understanding of collective rather than individual health. Cook Islanders also construct a view of health that places collective wellbeing at the centre. Family in Maori is *kopu tangata* which translates to people of the same womb a meaning which includes extended family both living and dead (Laing & Mitaera, 1994). Members of the *kopu tangata* are there by birthright and “...they know the resources they have collectively and how and when to use them, and this includes decision-making related to health, illness and healing”(Laing & Mitaera, 1994, p. 206) From this perspective protecting health is a collective concern which shares communally held resources.

The factors identified in the literature relating to sustainability may also be relevant to health promotion with Cook Islanders. Braun et.al. (2003) describe the need for communities to have on going access to resources which includes economic resources and skills for the sustainability of a health promotion programme. The issues identified are consistent with a community development approach to health promotion. Three interrelated features for community development are mobilising existing resources, build upon existing resources and empower community members

to sustain health promotion initiatives (Stokols, et al., 2003) Cook Islands *kopu tangata* use resources communally to support health. Implementing a community development strategy which utilises existing resources in Cook Islands communities as well as building upon those resources may provide a culturally appropriate direction for health promotion.

There is a noticeable absence of Cook Islands specific literature available in each of the three literature review conducted. In the health promotion literature, there were no peer reviewed articles which discussed health promotion programmes or initiatives with Cook Islanders. The absence of literature means there is little information available to shape health promotion practice among those working with or in Cook Islands communities. Further the absence of evidence on obesity prevalence or trends means there is limited data to track trends over time.

The literature on transnationalism highlighted the reciprocal nature of the ties between Cook Islanders in their homeland and those living abroad. The social spaces between spatially distant Cook Islands communities could provide a future avenue for health promotion practice. Within Cook Islands culture there is already an understood practice of sharing resources and working together for communal benefit. Potentially, through accessing and developing the transnational spaces and existing communal resources, health promotion programmes among Cook Islanders could be designed to operate across borders. Thus there is potential for building health gains among Cook Islanders across several locations.

The research presented in this dissertation explored the potential for transnational health promotion among Cook Islanders

Chapter 3: Methodology

The purpose of this study was to identify how health promotion activities between Cook Islanders could occur transnationally. To do this initiatives which support healthy nutrition and physical activity among Cook Islands people were explored.

In July 2011 a group of Cook Islanders living in New Zealand travelled to Rarotonga, Cook Islands. This was developed from an initiative to promote health and physical activity among Cook Islands people. The group planned to walk around the island of Rarotonga, and run health promotion workshops. This presented a unique opportunity to observe how Cook Islands people promote health to each other and do so across borders.

This dissertation draws upon a socio-ecological theory of health promotion which identifies health as being a result of environmental and socio-cultural interactions (Sallis, Owen, & Fisher, 2008; Stokols, 1992). Particularly it focuses on the social, institutional and cultural contexts of people-environment relations and how these relations can shape health (Stokols, 1992).

Research Aims

1. To identify key features of Cook Islands-centric health promotion activities which aim to reduce the prevalence of obesity.
2. To describe how health promotion occurs transnationally between Cook Islands people.

Research objectives

The objectives of the research linked to the respective aims of the study are as follows:

Aim 1: Cook Islands health promotion

1. Discuss the aspects of the NZ-based Enea Ola project which are beneficial for promoting health to Cook Islands communities in NZ?
2. Observe how the New Zealand based Cook Islands group promote health to Cook Islanders in Rarotonga.

Aim 2: Transnational health promotion

1. Participate in the planned transnational health promotional activities

2. Observe the interaction between members of the New Zealand based Cook Islands group and Rarotongan based Cook Islanders
3. Analyse any issues of transnationalism that arise from observations, and informal interviews?
4. Identify area for transnational health promotion activities.

Data collection methods

Settings

Data was collected both in NZ and in the Cooks Islands. An interview with two Cook Islands community leaders took place in Auckland, New Zealand, However as this was participatory research; data was predominantly collected in Rarotonga, Cook Islands.

The Cook Islands is made up of fifteen islands and atolls in an economic zone of over 2 million kilometres square. However land mass only makes up 23000 hectares of this zone. Located in the western Pacific the Cook Islands are geographically situated between Samoa to the west and French Polynesia to the East. New Zealand is approximately 2900 kilometres to the southwest. The fifteen islands are geographically separated into a Northern group which consists of Pukapuka, Nassau, Palmerston, Suvarrow, Manihiki, Rakahanga and Penrhyn. The southern group consists of Rarotonga, Mangaia, Aitutaki, Mitiaro, Mauke, Takutea, Manuae and Atiu. The majority of the resident Cook Islands population live on the largest Island of Rarotonga which is the administrative centre and site of the majority of the tourism industry.

The resident population of the Cook Islands 15 324 which is relatively evenly split between males and females at 7 822 and 7 502 respectively (Statistics Department Cook Islands, 2006). The average life expectancy for Cook Islands males is 69.5 years and 76.2 years for females (Statistics Department Cook Islands, 2006) The population is young with 47% under the age of 24. The population of the largest island, Rarotonga has been steadily increasing as the outer islands⁸ face a population decline (Statistics Department Cook Islands, 2006). Between the 2001

⁸ Outer island is commonly used in Rarotonga to refer to the other 14 Islands which make up the Cook islands group.

and 2006 census there was a decline in the Cook Islands population aged between the ages of 25 to 39 years with a large contraction in population between the ages of 20 to 29 years. This is likely to be attributed to migration for education or economic purposes (Statistics Department Cook Islands, 2006)..

Social & Economic characteristics

The Cook Islands has an unemployment rate of less than 9% and an average income of \$15,723NZD per annum. Less than 5% of Cook Islanders have an income of \$40 000NZD per annum or higher (Statistics Department Cook Islands, 2006). In Rarotonga the number of households who are involved in agriculture and fishing have been decreasing over time to just under 40% of total households (Statistics Department Cook Islands, 2006).

Religion plays a significant role in the Cook Islands, with the most common religious affiliation being the Cook Islands Congregational Church. However there are other religious denominations including Seven Day Adventist, Church of the Latter Day Saints and Catholic (Statistics Department Cook Islands, 2006).

The group from New Zealand

The New Zealand based Cook Islands group that travelled to Rarotonga were members of the Enea Ola project from West Auckland. Funded through the Waitemata District Health Board, and Ministry of Health the Enea Ola group is a collection of different Pacific communities who are trained to offer physical activity and nutrition programmes within their respective communities. The trip to Rarotonga was an event planned by members of the Enea Ola project, but was outside of scope of the District Health Board's activities, which meant the trip was funded privately by the group members. There were approximately 30 Cook Islanders in the group, most of whom were women (4 men attended). . All except one of the group were Cook Islands born. Members ranged in age from 8 to over 70 years, the majority were over 50 years. There were a variety of religious denominations and one of the group leaders was also a Reverend.

Method

Data was collected through personal experiences, participant observation, interview and a literature review. The primary data was collected in Rarotonga between the 18th of July 2011 and 6th August 2011. I participated in group activities such as meetings, church, formal dinners and the walk around Rarotonga. I also observed and participated in other activities held on the island. These included:

1. Observing and participating in different forms of physical activities offered such as Rugby, Boxing, Zumba and Oe vaka (outrigger paddling).
2. Community events: Te Maeva Nui dancing competitions, Te Maeva Nui float parade

Three interviews were conducted in Rarotonga with a health promoter, a 50 year old Cook Islands woman who was still participating in sport to an international level, and a couple who had recently returned after more than 20 years living in New Zealand that maintain traditional agricultural practices

Observations were recorded in extensive field notes recording events, informal interviews, conversations and the researcher's perception of and reaction to events observed.

Negotiating participation

Participant observation is usually when the researcher is a member of the community of interest (P. Atkinson & Hammersley, 1994). I am a NZ-based Cook Islander through my papaanga (genealogy) and identify as a Cook Islands woman. However I was not a member of the group of Cook Islanders who were travelling to Rarotonga. As such I needed to negotiate participation with this group.

Pacific research is a relational encounter and relationships are the fundamental point of initiation for a Pacific research project (Newport, 2003). In order to participate in the group activities, I approached the group's leaders to establish a relationship. A meeting was held with the group organisers. As is customary, genealogical ties were discussed and established. This process identified my place within the Cook Islands world and explored potential kinship ties with the group. Genealogy identifies who we are and how we relate to each other (Newport, 2003) and initiates the process of establishing research relationships. Once these links were

established, we discussed the details of the project including our joint expectations and the nature of my involvement. The group agreed that I could participate and observe the groups planned activities in Rarotonga and have this written as part of my Dissertation.

On arrival in Rarotonga, I met the group at the airport and travelled with them to their accommodation. At the accommodation, a formal welcome was conducted by the hosting village. At the conclusion of this welcome, I was introduced to the group and the reason for me being there was explained. I observed no objections to my presence and was warmly welcomed into the group.

The ethics of observational research within the community

This research project was funded through a larger project investigating Transnational Pacific Health. Human ethical approval was obtained from the Multi-region ethics committee on 18/09/2008 for a period of 6 years (ref: MEC/08/07/076. This approval also covered the research conducted for this dissertation. However when working with Pacific communities there are specific ethical considerations which must be integrated into the research design.

As a Cook Islands woman I am also culturally bound to ensure that this project is conducted in a way that is consistent with a Pacific centric research methodology. Pacific research guidelines developed by the Health Research Council were used to identify the values required for safe practice (Health Research Council of New Zealand, 2004).

Before the interviews the purpose of my research was explained to the interviewees. The interviewees were asked if I could interview them as a part of the research. Verbal consent was given before the interview commenced. After the interview participants were informed they could withdraw. The researchers contact details for New Zealand and Rarotonga were made available

Responding to changes in the field:

Changes to the group's programme were made while in-country. These were beyond my control as a researcher and limited the opportunities to collect data related to each of the predetermined aims and objectives of the study. This resulted in the following changes to the original plan.

When the New Zealand based group arrived in Rarotonga it was identified that the trip was not a funded part of the Enea ola project. Due to this a decision was made to move the focus of the research away from aspects of the Enea ola project as planned in aim 1, objective 1. The group from New Zealand also planned to hold workshops on different health topics. Due to scheduling conflicts these workshops were unable to be held. These workshops were expected to provide data relating to research aim 1. Instead the researcher's personal networks were utilised to gather information in the absence of these workshops. These networks were used to identify people working within the health promotion field in Rarotonga and to arrange meetings for informal interview to discuss features of Cook Islands-centric health promotion.

Representation.

Participant observation documents how people engage with the environment and each other in their everyday lives from the perspective of the participant. The writing of this dissertation is based upon the authors perception and understanding of these events and is a representation of what the observer constructs and not an objective "truth". Different researchers may observe the same event and derive different meanings from them (Emerson, Fretz, & Shaw, 1995). Further, indigenous knowledge is often multivalent, interpretation of which is context specific (Smith, Burke, & Ward, 2000). Therefore representation in this dissertation follows the paradigm suggested by Thaman (2003) as not being representative of all Cook Islanders, but as an

"individual, (culturally) contextualised view of the world" p 164. Due to this highly personal, subjective approach to research, personal pronouns have been employed to identify the narrator's engagement with people and events.

Personal limitations and reflection:

The first limitation to this research is my limited knowledge of Cook Islands Maori⁹. The majority of the participants in this research preferred to speak Maori. When with the group I noticed that when I was to be included in the conversation the members

⁹ In the Cook Islands the native language is Maori. Although sharing similarities with New Zealand Maori, it is a distinct language. Throughout this dissertation the term Maori will refer to Cook Islands Maori.

would converse in English. However there were conversations which I was unable to participate in as they were conducted in Maori. Out of respect for people's autonomy and mindful of the value of Maori within a Cook Islands paradigm, translations of these conversations were not always asked for. It was my responsibility to seek translations to these conversations and on occasion I understood enough to know that the conversation was not for my "consumption". The use of Maori was sometimes a privacy measure which I felt was necessary to respect. This potentially limited my ability to fully observe the ways that people interact in their everyday lives. Observation and access to the way people live is essential for participant observation (P. Atkinson & Hammersley, 1994). Yet there were language barriers that inhibited my ability to do so. However developing competence in Maori language is an area that I will need to develop further for future research with Cook Islands people.

The second limitation to this research is that I was born, raised and educated in New Zealand. It is difficult to distinguish if my western education colours my perception of the everyday events I observed and how I interpret them. Conversely it is equally difficult to identify how my culture influences my engagement with formal education. It is likely that my limited Maori skill also affected my interpretation of events and language holds cultural knowledge and without it there will be an effect. Kincheloe (1997) expresses the constructionist view that nothing exists until consciousness moulds it into something perceptible. This supports the earlier discussion on representation. Not only is this dissertation based upon an individual, culturally constructed view of the world, it is one which is built upon a lived experience of indigeneity in a western world. To further add to this complex position, my *papaanga* (genealogy) connects me to a Cook Islands Maori and New Zealand Maori heritage. Therefore my understandings of the world are not sited in one particular world view, but are developed from experiences of being immersed in three.

Analysing data

A thematic analysis on the field notes taken during the research period and the interview transcripts. was conducted. These themes were then analysed against themes that emerged from the literature.

Dissemination of findings

Findings from this project will be presented to stakeholders from the New Zealand based group. A brief report will be written and a meeting to present these findings will be arranged. A copy of the dissertation will also be given to the Te Marae Ora (Cook Island Ministry of Health).

Chapter 4 Findings

These findings are based upon my personal observations, conversations and documents obtained in Rarotonga between the 19th of July and 6th of August. Findings are presented in themes relating to the research aims and objectives of this dissertation. As a participant observer my insider knowledge and experiences are inextricably woven into the fabric of the narrative that follows. To this end the data collected is described alongside personal reflections.

The period of data collection is a busy time of year in Rarotonga. July/August is part of the peak tourist season and visitor numbers are generally high. It is also the period when *Te Maeva Nui* festival is held. This festival marks Cook Islands attaining self-governance from New Zealand. The weeklong celebration usually consists of a Cook Islands dance and singing competition and a float parade based around a theme. The 2011 theme was “*Te au Akairo o toku matakeinanga – signs of my homeland*” which encouraged participating groups to pay homage to culturally significant aspects of where they are from. Events took place within the context of this vibrant cultural display.

Health promotion in New Zealand

In an interview with Cook Islands church Minister and a community leader based in Auckland aspects of Cook Islands centric health promotion emerged. Both had worked extensively with Cook Islands communities and based on their experiences identified aspects of health promotion practice that are effective for working with Cook Islanders in New Zealand

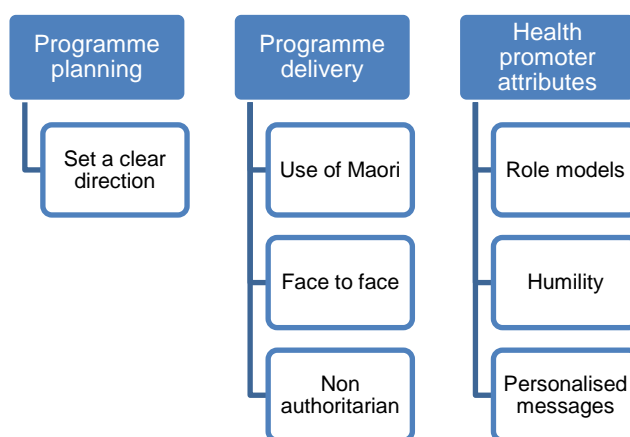


Figure 3 Features of Cook Island health promotion in New Zealand

Programme planning requires a clear focus or outcome. This aids the development of strategies to address the targeted issues. The way the programme is delivered also requires a more personal approach with face to face engagement and the use of Maori in materials or discussions. It should also be delivered in a way that explains the issue in a meaningful way but does not force solutions upon people. The health promoter or person delivering the programme to the community should also be a role model or leader who can personalise the message through experience or action.

Health promotion in the Cook Islands

The health promotion unit within Te Marae Ora consists of eight staff who work in seven key areas including nutrition and NCD prevention. The unit works closely with other departments within Te Marae Ora and often promote other issues such as influenza or malaria as they arise. Figure 4 outlines some of the activities undertaken by the health promotion unit.

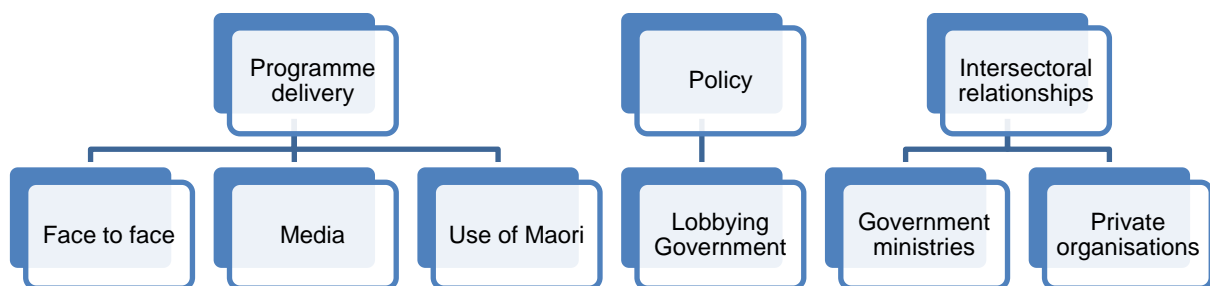


Figure 4 Health promotion activities in the Cook Islands

Health promotion programmes in the Cook Islands involve face to face, community meetings to share health messages. The print and television media are extensively used to disseminate health information to the community. During the data collection period the unit was raising awareness of Chlamydia and encouraging people to access free treatment being offered during a specific time period. The Chlamydia campaign used print and television coverage as a part of its approach. When the unit conducts its community meetings or presentations about health issues

information is often presented in English but discussions about the information being provided is conducted in Maori.

The health promotion unit often works with external agencies to develop health strategies for healthy nutrition and activity. A Memorandum of Understanding (MOU) signed with the Ministry of Education established a cross-sector agreement to work collaboratively towards promoting health in schools (Futter, 2009). One of the policies that emerged from this collaboration was to promote healthy food in schools. As a part of this school children are asked to bring food from home or local food for their lunches. Private organisations such as the local fitness centre are also collaborated with to run events such as the Vaevae challenge. The Vaevae challenge is a six week competition which encourages groups of people to become more physically active together. The teams compete for prizes that are provided by Te Marae Ora and sponsorship from local business.

At a macro level the Government has been lobbied for funding towards installing footpaths around the Island. Financial constraints have prevented this development from proceeding. Another policy the unit is considering is a “fat tax” where high fat or unhealthy foods are attract a higher tax rate or an import levy.

From a personal interview with Vaine¹⁰ – Te Marae Ora

Challenges to promoting health in the Cook Islands

During the interview with Vaine some challenges the health promotion unit faced were identified. Community level collaboration, limited evaluation capability and difficulty in gaining the support of community leaders were particularly noted.

There was an expressed need for community level collaboration, particularly health promoters to share information and draw support. Currently there is a MOU between Te Marae Ora and Middlemore hospital in South Auckland, New Zealand, to provide specialist services. What is also needed is the establishment of relationships at the grassroots level. For example creating a network where health promoters in New Zealand and the Cook Islands can collaborate and share their ideas and skills.

¹⁰ Names have been changed.

The unit also has limited ability to evaluate their programmes. This is mainly due to financial constraints but it means they have to operate with little evidence on programme effectiveness. In 2004 the country conducted a STEPS¹¹ survey of NCD risk factors. There are plans to continue undertaking smaller surveys in the future which will provide on-going evidence.

It was also identified that support from community leaders such as church Ministers was beneficial for health promotion programmes. However for reasons not specified it was often difficult to ensure this support.

Promoting health transnationally.

As a part of the New Zealand based group's trip, a 32 kilometre walk around Rarotonga was planned. One of the aims was to use the walk to promote healthy activity among Cook Islanders through leading by example. Some of the group were able to complete the challenge and all group members achieved a personal best distance. After the walk I was approached by local Cook Islanders who had seen me participating or had heard about the event. People were interested in the event and its rationale. After I explained what had happened, some indicated they would have been interested in participating if they had known about the event. This raised the issue of building transnational relationships for developing health promoting events.

In the days leading up to the event I noticed that there was no media coverage of the groups' arrival or of the event. I knew from past experience that events such as this would have received some media attention in Rarotonga. During the walk I had stopped with some of the walkers and was speaking to my mother who had decided to join the walk part at the halfway point. A member of the Cook Island press had seen the walkers and wanted to know what was happening. He approached my mother whom he knew and asked about the event. The press member was given contact details for group members and an article was published in the newspaper about the walk the following day.

I also had concerns about the planning of the event and the safety of the walkers. The event started before sunrise, walking clockwise around the Island. During the

¹¹ STEPS is a WHO developed, standardised procedure for collecting, analysing and disseminating data on NCD risk factors. Further information can be found at <http://www.who.int/chp/steps/en/>

first few hours of the walk it was dark and I was concerned there was limited street lighting. One section the group would walk through had no street lights. In Rarotonga there is limited ambient light and in the early morning it is very dark. This issue was not considered until the evening before the walk, so there was not enough time to source safety equipment such as torches or high visibility clothing. There are also few sections of footpaths; the berm is undeveloped offering an uneven surface to walk on. As a result many of the walkers walked on the road. This was a concern from a safety perspective as the walkers were not easily visible to road traffic.

A local woman who had experience in participating and organising similar events asked me if a risk evaluation and management plan had been done for the groups walk. I was not aware if one had been done or not but her comment suggested that there is expertise in staging events like the walk in Rarotonga. Collaboration with a local group could have utilised this expertise and established relationships of mutual support. For example the Hash House Harriers in Rarotonga hold walk/run events frequently on the island and Te Marae Ora also run the Vaevae challenge. Working in partnership with these groups could have supported the event planning process as well as raising the profile of the event among locals. This would have assisted with the groups' aim of promoting activity among Cook Islanders.

Culture, food and physical activity

Food as a cultural good

Arriving into Rarotonga I was met at the airport by my parents, brother and a nephew who was over from Australia. During the flight over I felt guilty for arriving empty handed. Usually when I travel to the Island or when family come from the island to stay with me, gifts of food and other items that had been requested (clothing etc.) are given. These items are not explicitly expected unless a needed item had been requested. I was not chastised for bringing nothing, but I internalised my error through an awareness of failing to meet my implicit obligations. I understood that it was not the absence of food that was important; it was my failure to share the resources available to me in New Zealand which are less available in Rarotonga. The meat, cheese and chocolate for my younger brother I should have brought represented generosity, reciprocity and the love I have for my family. That is not to say that I do not feel these things, but I did not bring the food as tangible evidence of the fact. I did purchase food for my family from CITC (a supermarket in Rarotonga) though I still felt embarrassed at having to do so. Purchasing the food before I arrived was important to me as it would have shown that my family were present in my everyday life in spite of the lived distance between us. This experience begins to suggest how culturally significant food is for Cook Island people.

On Friday 29th of July I attended the float parade for Te Maeva Nui festival. The parade travelled down the street in the township of Avarua, each float stopping to perform in front of the Prime Minister and other dignitaries. Participants in this year's parade ranged from Government ministries, businesses, outer island groups and schools. Each float was a symbolic representation of the theme signs from my homeland. The outer Island groups had floats which highlighted ties to the land and the sea interwoven with food imagery were culturally significant. The Island of Aitutaki had a float representing fishing for bonefish. Girls dressed in *pareu* (sarongs) were the Bonefish dancing around in a group as young men tried to catch them with a drag fishing net. Another island, Manihiki showed how they catch *Maroro* (flying fish) using fishing nets on long poles. The representatives of the island of Mangaia were dressed as farmers representing their role as food producers. These floats symbolised how food and the practices used to gather it are a part of Cook Islanders perceptions of cultural and island identity.

Food as a part of social interactions

During my stay I had the opportunity to observe and participate in social occasions in which food played a role. When the group from New Zealand had all arrived, a welcoming *kaikai* (meal) was provided by their hosting village. The meal would normally have been held the day the group arrived, but parts of the group travelled on separate flights so the meal was delayed until all had arrived. The group was ushered into the village church hall. Tables were set at one end of the hall for us (the visiting group) with food tables in the centre and chairs for the hosts on the opposite side of the hall. When we arrived there was food on the table already and as the welcoming speeches commenced people from the village would slip in to bring their contribution. Some would stay for the proceedings, and some would leave. The amount of food provided by the hosting village was significant, and the shared meal was symbolic of both being welcomed by the village and their generosity. We were invited to eat first. On the table there was a mix of “local” foods such as *taro*, *maniota*, mayonnaise (a Cook Islands version of potato salad), banana, pawpaw as well as store brought fried chicken, coleslaw and French fries. There was also a large dish of home-made sushi. I was surprised that there were several plates of fried chicken making it the predominant protein dish available. This may have been due to a store in the village which sold fried and cooked chicken relatively cheaply. The event was held after work on a Friday and I surmised that people may not have had time to prepare food to share.

In contrast I was also invited by a local¹² family to join them in a Sunday meal after church. Although members of the family were employed, the family still supplemented their diet through fishing, keeping pigs and a taro patch. At this meal an *umu* (food cooked in an earth oven) had been prepared. The food was predominantly traditional and self-prepared. A pig had been slaughtered for the *umu*, *rukau* (taro leaf cooked in coconut cream) had been made using *taro* their own *taro* patch and the coconut cream grated and squeezed by hand. There was also *ika mata* (fish marinated in lemon) and pawpaw *poke*, a gelatinous dish made from

¹² The term “local” has many interpretations in Rarotonga. Depending on context it refers to Cook Island born living in the Cook Islands, Cook Islanders in general, elsewhere born Cook Islanders residing in the Cook Islands or anyone who lives in the Cook Islands. Essentially it denotes belonging to Rarotonga or the Cook Islands. Local for the purpose of this dissertation local refers to Cook Islanders who reside in Rarotonga.

pawpaw, *maniota* and coconut cream. For the drinks *nu* (fresh drinking coconuts) had been husked and chilled on ice.

Eating was largely informal, after grace the family sat together, ate, talked and joked over the course of an hour. One of the dishes was a delicacy called *rimu* which is a type of seaweed from the Island of Aitutaki. One of the daughters asked her mother where she sourced the *rimu* as it difficult to obtain in Rarotonga. To which she jokingly replied “*From my boyfriend in Aitutaki*”. This started a running joke about the likelihood of the mother having a boyfriend.

At both occasions I was encouraged to eat heartily. Part of the generosity embedded in the sharing of food is ensuring that the guests have enough (sometimes more than enough) to eat. I observed some people at both occasions eating large quantities of food which was then joked about. An older lady who was quite large laughingly said to me, “*eat, eat. After we [can] walk up and down the hill to keep our figure*” as she rubbed her tummy suggestively. In her statement the women expressed an awareness of exercise and portion control for weight management yet did not put this into practice in this occasion.

In an interview with a middle aged woman who participated in sport at a National level in the Cook Islands the issue of eating at large functions also came up. The woman had been overweight previously and had lost a lot of weight during a Te Marae Ora led weight loss challenge which ran over the course of the year. During the interview she identified that there is an expectation to eat a lot at social gatherings which can be a challenge for maintaining a healthy weight. For her the key was a lifestyle change, which involved coming up with strategies to use during these events. The strategies that she said she employed was to eat before going to prevent feeling hungry there and potentially overeating, choosing only the healthy food or to take one plate of food and eat it slowly as it gives the impression you have eaten more.

Culture and physical activity

Cook Islanders in Rarotonga are physically active. During my stay I observed activities ranging from rugby and boxing to Zumba and *oe vaka* (an adaptation of traditional outrigger canoeing). Zumba is a form of aerobic exercise which uses different dance styles like hip hop and salsa. As a form of exercise Zumba was

popular in Rarotonga and with the group from New Zealand. The day before the group were to walk around the Island a warm up session was held involving a thirty minute walk and an aerobics session. One of the group leaders expressed his disappointment at not bringing his Zumba tapes with him so a Zumba session could be held. When I asked a group member about Zumba she was enthusiastic in her response.

“I love it cos it’s fun, we can make it ours”.

This referred to the Zumba ethos which encourages adapting or developing routines to suit the audience. Cook Island dance and music are then easily incorporated into Zumba routines. Similar sentiments were expressed in conversations with local women too.

“Eh you should see the old mama’s shaking it. They love it!”

Zumba was enjoyed because it made exercise fun and was culturally relevant through the incorporation of Cook Island styles of dance and music.

Chapter 5 Discussion

Transnational social spaces, networks and relationships create a potential space for health promotion activity that as yet has not been explored from a Cook Islands perspective. The following chapter looks at the social and environmental aspects of obesity identified in the data and discusses what implications this may have for health promotion by or with Cook Islanders. It will then discuss how health promotion programmes could use the transnational social spaces between Cook Islands communities to promote health. Finally a model of transnational health promotion from a Cook Islands perspective will be proposed.

Health promotion to reduce the prevalence of obesity in the Cook Islands takes a multi-level approach that is consistent with a socio-ecological theory. The health promotion unit provides face to face, community level action through organised events such as the Vaevae challenge, provides health information as well as lobbying for legislative change. These approaches are reflective of linking behavioural change strategies with efforts to develop health conducive social and physical environments (Stokols, 1996). A part of this process is understanding the multivariate links between health behaviour and the environments (Stokols, 1996). It was noted during the interview with Vaine that efforts to obtain funding through Government to improve the physical environment through the installation of footpaths had been unsuccessful. However policy approaches had been successfully implemented in Fiji, Samoa and Nauru suggesting that with the right support policy changes can be successfully introduced.

The literature on obesity in the Pacific highlights the relationship between global forces and nutrition in Pacific nations, suggesting policy levers as an intervention mechanism (Thow, Heywood, et al., 2011; Thow, Quested, et al., 2011). Snowdon et al. (2010) utilised a three step process with stakeholders in Tonga and Fiji to establish potential policy levers to promote healthy food in each nation. The process involved identifying problems in the policy environment, identifying policy solutions then evaluating the policy ideas to determine which is most promising according to the contexts of each country. In following this process it was surmised that appropriate solutions would be easier to implement as the evaluation process detailed the feasibility of each policy. A similar assessment in the Cook Islands may

be effective for guiding decision making with the health promotion unit in the Cook Islands about future policy changes to pursue.

In both the New Zealand and Cook Island contexts the use of Maori was identified as a key aspect of health promotion practice. Evidence from New Zealand suggests that most Cook Islanders residing there are New Zealand born (Statistics New Zealand & Ministry of Pacific Island Affairs, 2010). In 2001 only 17% of Cook Islanders living in New Zealand reported being able to speak Maori, this dropped to only 5% of the New Zealand born population (Statistics New Zealand, 2004) However as the use of Maori was so strongly supported it would be desirable to include the language in some manner , even for groups where the language may not be well known.

Food, culture and physical activity are interconnected among the Cook Islanders observed in this study. The parade floats from Aitutaki, Mangaia and Manihiki all had food as representative of their constructed view of their culture and homeland. Food also has cultural meaning as an expression of love, generosity, reciprocity and is embedded into social occasions.

From a health promotion perspective the cultural meanings attached to food in the Cook Islands has implications for initiatives which target changes to dietary behaviours. In Africa an initiative to encourage healthful eating encountered challenges to increase the quantity of milk consumed from a cultural norm that prohibited the drinking of milk from another families cows (Cassel, 1957). To address the issue, a new approach was undertaken which enabled community members to meet their cultural obligations and increase their milk consumption. For health promoters working with Cook Islanders to address diet and nutrition, the cultural values and implications of any proposed behaviour change should be investigated first. For example one approach to reducing weight is to encourage portion control. In the Cook Islands the approach may not be culturally congruent with obligations to accept the generosity through consuming large meals during social occasions. One Cook Island women had developed strategies which enabled her to participate in social events and still maintain healthful eating practices.

The relationship between food and culture shows how culture, which is embedded in our social environments, can inform health promotion practice. Cassel (1957)

highlights two principles health promotion programmes should consider to acknowledge the relationship between culture and health. First health promoters should have extensive knowledge of beliefs and attitudes within the community. Second the deeper meanings and contexts of these beliefs and attitudes should be evaluated. This ensures that proposed programmes do not conflict with other beliefs which may inhibit programme effectiveness. Culture ultimately becomes a guide, directing health promotion activities. Among other Pacific communities, leaders have been used as cultural 'experts' providing access to communities and guiding programme development through towards culturally congruent practices (Harris, et al., 2007). In the Cook Islands when a cultural form of physical activity was incorporated into an introduced exercise routine (Zumba), the attractiveness of that routine increased.

Without the workshops being held by the group from New Zealand it was difficult to identify through observations how Cook Islanders promote health transnationally. However it did encourage the exploration of potential spaces for transnational engagement and how these spaces might be used for health promotion programmes. The evidence from the observations suggests there is a need for, and a desire to, work collaboratively to promote health. Vaine expressed a need for collaboration with people working at the community level to develop strategies for health promotion. The group from New Zealand aimed to promote health to other Cook Islanders through workshops and the walk around the Island. Thus sharing the skills and knowledge they had gained from New Zealand.

Cook Islanders have a history of maintaining familial ties and sharing resources to support well-being. Laing and Mitiaera (1994) describe Cook Island migrants in New Zealand as seeking to "*ameliorate the ill-health which is a consequence of migration by attempting to maintain good family relationships over a long distance*" p208. Further the practice of *kimi ravenga* where *kopu tangata* know what resources are available to them and how to deploy them for wellbeing exemplifies the pooling of skills and knowledge for collective use and gain. Internationally, other transnational communities have used their social ties to access traditional health remedies from the homeland (Thomas, 2010) or provide social support and promote health (Gastaldo, et al., 2005). In essence transnational networks allow spatially distant communities to create social spaces of mutual support.

One aspect of health promotion practice is to build the capacity within communities to be healthy and address their health concerns. According to Stokols, Grywacz, McMahan & Phillips (2003) developing community capacity requires three inter-related processes.

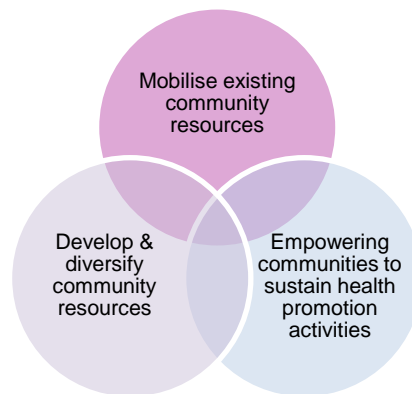


Figure 5 Processes for community capacity building. Adapted from Stokols, et al., (2003)

Through these three processes health promoters can mobilise communities to identify health issues, create strategies to address them and sustain these strategies overtime. As community capacity increases three forms of assets are developed: economic capital, human capital and social capital (Stokols, et al., 2003). While economic and human capital are important outcomes of capacity building, social capital, the networks and social trust between people and groups are integral to transnational discourse. Using a community development strategy with Cook Islanders would be consistent with existing practices of resources sharing.

Community development

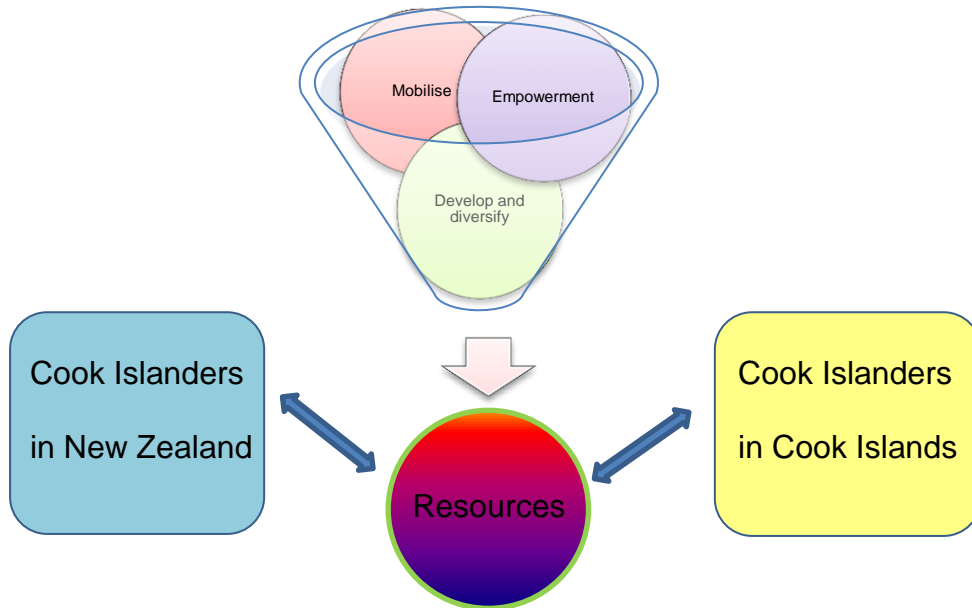


Figure 6 Transnational community capacity building

Through viewing Cook Islanders through the social spaces they create for mutual support health promotion programmes could work to mobilise and develop the resources that are shared between spatially distant communities.

A part of this approach is the understanding that among Cook Islanders values of generosity and reciprocity are integral to maintaining social relationships.

Va'o mai i te akao: Beyond the reef

The following model presents a conceptualisation of transnational health promotion from a Cook Islands perspective. Based upon the findings from this dissertation, it draws together themes from the literature as well as the observations. The *Vaka* model of Cook Islands dimensions of health¹³ is also incorporated to reflect the goal of health gain and to illustrate the many dimensions of health this entails. The title of the model "**Va'o mai i te akao: beyond the reef**" arose from the understanding that transnational social ties connect places and people. From either side of the reef looking across, what lies beyond are the people and places you are connected to. In this way the title privileges neither perspective, both are reflective of each other.

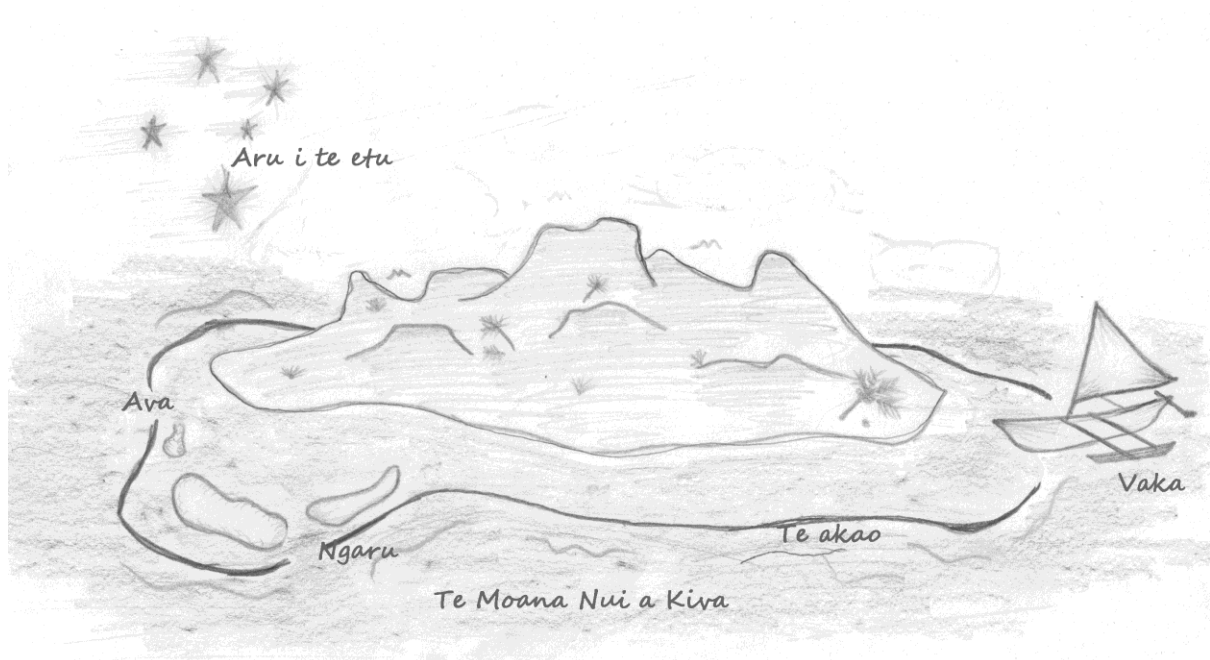


Figure 7 Va'o mai i te akao

Te Moana nui a Kiva represents Cook Islanders being simultaneously here and there; in their country of residence and their homeland. The ocean that touches the shores of Rarotonga, also runs along the New Zealand coast line.

The **Vaka** which signifies the dimensions of *oroanga* (health) among Cook Islanders also implies movement. The purpose of a *vaka* is to move people or goods from one place to another. The *vaka* not only symbolises health, it also carries with it the resources needed to promote health. This includes the human resources, skills,

¹³ See: Futter (2009) Cook Islands: The Strengthening Project,)

attributes, time; as well as material resources such as money and technologies. These resources can be carried from place to place and shared to benefit all.

Ava are the passages through the reef. These represent the transnational social spaces as well as the ties and networks that constitute them. The *ava* is also the way through the reef for *vaka*. This reflects the idea that transnational relationships between Cook Islanders could be used to promote health and wellbeing. For example the collaboration between community level health promoters in New Zealand and the Cook Islands is a social space that could be developed.

The reciprocal nature of Cook Island transnational ties are represented by **Ngaru, the tides**. Tidal flows move through and across the reef continually. The constant tidal movement keeps the lagoon and beach healthy through replenishing the lagoon and preventing stagnation. Reciprocal exchanges also flow back and forth and are used for health among Cook Islanders. Support is offered to maintain kinship ties in the understanding that the same ties will offer support when it is required.

Traditional travel in the Pacific utilised a cultural knowledge of the environment to guide the way. One technique was to navigate by the stars. **Aru i te etu** means to follow the stars and represents culture. The cultural practices, values, beliefs and knowledge used to inform and direct health promotion practice. Incorporating culture into health promotion programmes and initiatives improves their effectiveness. The issues identified earlier regarding the relationship between food and culture also illustrate how knowledge of cultural norms and practice could be used to develop health promotion strategies.

The purpose of this model is to locate transnational health promotion within a Cook Island epistemology. However it is only a beginning, designed to capture the essence of a small piece of research in an emerging field. With time, experience and a greater understanding of health promotion and transnationalism from a Cook Islands perspective it is hoped this model may be refined, improved or supplanted.

Chapter 6: Final thoughts

This dissertation sought to explore transnational health promotion among Cook Islanders. An ethnographic methodology was employed, including participant observation and unstructured interviews conducted in Rarotonga, Cook Islands and Auckland, New Zealand. Three literature reviews were also conducted focusing on transnationalism, obesity and health promotion. The social-ecological model positions health as a result of complex interactions between peoples' behaviour, their social environment and their social environment. Part of this theory posits that health promotion activities should act across levels, addressing the interdependencies between the person and their environment (Stokols, 1996). Based upon this theory, observations and the later analyses were performed by positioning the nutrition and physical activity behaviours within the social and physical environments where they were observed.

The findings of this research suggest that social environmental factors such as culture are important contextual issues for obesity and for health promotion programmes which hope to reduce the prevalence of obesity within the population. Interventions which fail to account for the impact of broader, social influences on behaviour may be limited in their effectiveness.

The literature suggests that Cook Islanders maintain social networks that are used for familial well-being. There is potential for these spaces to be utilised in a community capacity building approach to promote health across borders. The quest for health within a Cook Islands paradigm is a shared experience, built upon kinship ties and an understanding of reciprocity. The model developed to position transnational health promotion within a Cook Islands paradigm incorporates this understanding and draws together other aspects found in the research such as the use of culture to guide programme development. Research in the field of health promotion and transnationalism is still an emergent field for Cook Islanders. It is hoped that as more is known, the proposed model will be developed further.

Limitations

The data obtained in the observations and interviews are inherently subjective and are not reflective of the situation for all Cook Islanders. The observations made were also not reflective of day to day behaviours. The absence of observations which link people with their everyday lives prevented discussion on how these behaviours may differ or mirror those conducted during “special” social events.

It must also be noted that the researcher’s limited knowledge of Maori may have limited the content of interviews held. All of those interviewed were native Maori speakers and they may have preferred to speak in Maori. All were fluent in English, but as noted earlier there is cultural knowledge held in language and the researchers inability to speak Maori may have prevented her from accessing this knowledge.

Contribution to body of knowledge

During the literature review there were few published materials specific to Cook Islanders in the field of transnationalism, obesity or health promotion. The prevalence of obesity among Cook Islanders in New Zealand and the Cook Island as well as the high level of mortality attributable to NCD’s demonstrates a need for evidence informed health promotion practice and intervention to address the issue. This dissertation adds to the existing body of knowledge by identifying how Cook Islanders in two settings promote health. It also starts to explore how transnational social fields between Cook Islanders in New Zealand and the Cook Islands could be used to promote health in both countries. Finally it suggests a model of transnational health promotion between Cook Islanders that could be used to shape future initiatives.

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