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Centre for Asian Health Research and Evaluation (CAHRE)

School of Population Health, The University of Auckland, New Zealand

The Centre for Asian Health Research and Evaluation (CAHRE) was formed on the 19th of May 2004 at a time when reliable data to understand the extent and severity of Asian health problems are scant. The mission of CAHRE is to develop critical and inter-disciplinary approach to improve health and wellbeing amongst members of Asian New Zealand population. CAHRE also has a vision for international collaboration with individual researchers and organisations.

CAHRE offers independent, university-based professional research and evaluation services:

- Collaborative research
- Educational and workforce training opportunities
- Intervention and evaluation
- Consultancy services

Partnerships

Although, CAHRE focuses on health and wellbeing of local Asian communities but is fully aware of research prospects in collaboration with national and international research institutes. The key advancements that CAHRE aspires through development and implementation of the partnerships are:

- Excellence in research
- Innovative and strengths-based approach to Asian health issues
- Exchanges of research expertise and academics
- Capacity building benefits both emerging and established researchers
- Building meaningful and strong links with community

Furthermore, the International Asian health conference that CAHRE organises biennially increases profile of the centre with further prospects of research collaboration and partnership. Such international research gathering also facilitates prospects for attending institutes and individuals for future cooperation and exchanges of ideas.

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FOREWORD

Kia ora. Members of the Conference Organising Committee and Editorial Committee are pleased to welcome you to the Third International Asian Health Conference and this Book of Proceedings. The theme for the 2008 Confernce is "Building Healthy Communities".

The 2008 Book of Proceedings consists of four sections namely:

- "Building Healthy Communities: Assessing the Needs and Setting Directions". This section focuses on findings from health needs assessment and other programmes of work.
- "Building Healthy Communities: In Actions". Action speaks lounder. This section has a collection of projects which had been delivered and evaluated- formally or informally.
- "Experience and Issues for Specific Communities". Specific communities in this case include women, older people, international students.
- "Breaking Barriers, Building Healthy Communities". To ensure fair access to health and human services, system and people barriers must be removed. These selected papers will shed light on this important topic.

I sincerely hope that this publication will make for interesting and thought-provoking reading.

I would also like to express my deep gratitude to Mr Sun Kim and Ms Rajal Purabiya for their help in formatting the manuscripts and putting this Book of Proceedings together within a very tight time frame. Also, my heartfelt appreciation goes to members of the Editorial Committee for reviewing the manuscripts in the midst of their already very busy schedule.

Associate Professor Samson Tse
Chair of the Editorial Committee

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Daya Somasundaram

ABSTRACT

The mental health needs of migrants can vary: from simple routine needs, seen in any normal population, to complex needs, more specific to Asian and other migrant populations. Though the small numbers of refugees, asylum seekers and those migrating on a family reunion would form the most vulnerable group compared to that of a voluntary, planned migration of skilled professionals, workers and students with robust, motivated personalities; there may be hidden, within the latter category, many who are migrating due to persecution, threat, violence or trauma but use the regular channels. Psychosocial risk factors that have been identified include a drop in personal socio-economic status following migration, a lack of English proficiency or communication difficulties; separation from family, neurotic personality and loss of self-esteem; alcohol consumption, risky behaviour; experience of racism and discrimination; alienation or isolation from cultural networks; past experience of flight and trauma; adolescent or senior age at time of migration; past psychiatric illness, inadequate knowledge and awareness of existing services, and cultural differences in the assessment and treatment of mental illness. Complex mental health problems would arise from the context of a multitude of such interrelated and interactive factors in addition to a diagnosable psychiatric condition. This paper uses qualitative data from participatory observation (migration process) and in-depth interviews of Asian clients from detention centres admitted to Glenside Hospital and the Supporting Survivors of Torture and Trauma (STTARS) in Adelaide, Australia to explore these factors and discuss psychosocial interventions. Protective factors are family and social support; host society policies and public attitudes towards immigrants and immigration; English proficiency; resilient personality; employment, housing and income; and cultural practices. At a primary health care level more can be done to increase awareness about mental health problems, provide information about services, how to access them and simple self help methods; allaying fears and misinformation; develop gender, family and culture sensitive services to cater to a variety of needs including interpreters and active listening, and understand Asian idioms of distress and explanatory beliefs. More can be done to promote better attitudes among clients, general population and health professionals; institute preventive measures at the community level and improve identification, multidisciplinary interventions and referral systems. At a proactive level there is a need to advocate for more supportive policies, planning and provision of services. Appropriate specialized care for those with severe problems like traumatisation, depression, psychosis and substance abuse will need to be available. It is being increasingly recognized that clients with complex mental health problems do best through a multidisciplinary, integrated, holistic, long-term approach that address their physical, psychological, familial, economic, socio-cultural and spiritual needs. Innovative, new approaches that have been found effective for preventive and therapeutic use at the individual and community levels for a range of physical and mental health problems include old, Asian cultural practices. For example, traditional relaxation techniques from Yoga and Mindfulness Based Cognitive Therapy (MBCT) has been found to be useful.

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INTRODUCTION

Migration from one country to another is always a stressful, challenging process. Leaving ones home, pulling out ones roots from familiar surroundings, relationships and way of life to transplant oneself into a completely different socio-ecological context can be very difficult. Then there are the hurdles and procedures of the migration itself, one has to manoeuvre oneself through complex procedures, regulations and officials that govern national and international movement. Finally one has to face and adapt to a new environment, country, society and culture.

The bonds to home, soil and village can be powerful. The home is often a place of protection, safety, and sanctuary. It represents the identity and closeness of the family in a familiar environment. The neighbourhood and community provide the points of reference, the daily rhythm and meaning to existence. Great indeed must be the forces that compel a person or their family to abandon their home and familiar environment, to seek another life in a foreign and strange place. For some the reasons for migration may not be so drastic. In the modern globalized village, the move from one part of the world to another is a mere transition from an urban city life style to a more or less similar environment. In the modern world of international travel, communication and liberal economical opportunities; the transfer to another city, branch or company could be an easy transition, even a habitual pattern enacted before. This is the skilled migrant category and accounts for the *'Healthy immigration effect'*. People and families in robust health and personalities, highly motivated and skilled in the ways of the modern world, come for economic reasons, to better themselves or settle down in a hospitable environment. Thus skilled immigrants are generally healthier and enjoy a better self-perceived sense of wellbeing than native-born persons. However, the health advantage of migrants erodes over time and disease patterns tend to converge to those of the host population (Tse & Hoque, 2006). New Zealand and Australia are particularly careful in restricting immigration to mainly skilled workers who would make a positive contribution to economical development.

The earlier understanding was that there would be more mental health problems, what was referred to as *'migration psychosis',* among immigrants. This arose from the finding of increased incidence of psychosis in certain non-Asian migrant communities compared to the host and home country (Odegaard, 1932; Sharpley et al., 2001; Thomas et al., 1993). The hypothesis was that it could be due to the stress of migration and acculturation and/or the tendency with those prone to mental illness migrating (Murphy, 1973). That is people with personality abnormalities, prodromal illness or those 'exported' by family were said to be more likely to migrate. However, more recent studies show that the health of the Asian recent immigrant population is better than the host population (Ministry of Health, 2006; Rasanathan, Ameratunga, & Tse, 2006; Takeuchi et al., 2007). However, this may reflect only those migrating under the skilled or business categories. The health of refugees and those coming for family reunification show much poorer health status. For example, in the UK, they are found to suffer from such physical conditions such as malnutrition, communicable diseases like Tuberculosis, hepatitis and HIV/AIDS; and physical injuries from war and torture as well as Depression, Anxiety and PTSD (Wilkinson, 2007).

Refugees and asylum seekers face considerable trauma before migration. The psychological consequences of displacement begin with the experience of the initial trauma with its attendant loss, death and destruction and other stressors. Fear of death

and persecution, the destruction and devastation of homes and villages, the concern for safety of loved ones, sets in motion the basic biological mechanism of flight and the psychological trauma of being uprooted. The immediate need is safety and shelter and this is often sought with relations and friends or in refugee camps. These temporary arrangements, especially if prolonged, can become extremely stressful in themselves. The crowded conditions, sharing of inadequate facilities, inconvenience and poor sanitation, lack of privacy and other interferences, concerns and worries of the inmates, the ongoing war and the consequent fear and uncertainty can all produce tensions and conflicts within the refugee population Raphael (1986). Refugees have often lost everything and have to depend on others for their basic needs. This often leads to loss of self-esteem, dignity and feeling of helplessness and *dependency*. They have to adapt to a new environment which can cause relationship problems and suspicion. Disruption of social network leads to what Erikson (1976) called '*loss of communality'*. Services are often poorly organised or completely lacking in war situations leaving the refugees uncared for. Family problems can arise due to separations, death, injuries, misunderstandings, lack of space due to overcrowding and trauma in members. They may spend considerable time in refugee camps and undertake hazardous, complicated journeys through many countries before applying to migrate.

The migratory process maybe as simple as applying for a visa online and taking a plane to the host country. But for many the visa procedures are complicated, frustrating and time-consuming. They may have to overcome hostile officials and strict rules. Some of the immigration procedures can be extremely humiliating and culturally insensitive. I can remember, in Cambodia, for the mandatory medical check up by the 'recognized' western doctor, applicants had to strip completely and wait for their turn. Although this may have been innocuous to a western person, it turned back many potential applicants. Australia had a policy of lengthy and mandatory detention of asylum seekers which significantly increased mental health problems (Fazel & Silove, 2006; Steel & Silove, 2001). It was interesting in my sample, detainees often found the long detention in Australia more stressful and difficult to bear, commonly triggering past traumatic syndromes, than the extremely traumatic experiences like detention and torture they had undergone in their home country. They had felt that at long last, they had left all the past behind and reached safety; but then had to face a similar detention process and possibility of being sent back.

If chosen, then comes arrival in the host country and the process of acculturation, adaptation or assimilation. These processes can manifest with increased levels of suicide, homicide, substance abuse, interpersonal conflict and aggression and a variety of psychological and psychosomatic health problems (Berry, 1990). Classically four basic outcomes have been described (see Figure 1).

	Maintain Home Culture YES	Maintain Home Culture NO
Participation with Host YES	Integration	Assimilation
Participation with Host NO	Separation	Marginalization

Figure 1. Berry's Model of Acculturation and Assimilation (Berry, 1990).

Some of the key risk factors experienced by immigrants in settling into host countries are (Patel & Stein, 2007):

- *Marginalisation and minority status*: Asians are often a minority but can reach a large proportion. In New Zealand they are expected to reach 15% of the population. However, the Asians are not a homogenous group and even within a country of origin their can be many ethnic groupings some of whom are marginalized. As a minority Asians often face racial discrimination, difficult employment opportunities and social suppression by the mainstream community which can lead to low self-esteem and depression
- *Socio-economic disadvantage*: Often it is the social and economic inequities in the home country and socioeconomic opportunities for advancement that cause migration in the first place. They may belong to a lower class, caste, tribe or suppressed ethnic group that faces social and economic hardships at home. This is particularly so in the rigid, hierarchical, segmented social structures found in Asian cultures. They would have experienced poverty and malnutrition which would have had a profound negative impact on the developing brains of infants and children. Migrants may thus arrive in an impoverished state, in poor health and children who perform poorly in educational settings. In the host country too, Asians find themselves at a socio-economic disadvantage, having lower incomes and social status. Those coming from a high socio-economic status in their home country may find the reduction in status as migrants difficult to bear and are often profoundly humiliated. For example, a person who had been respected professional back home may have to drive taxis, do demeaning labour work to survive or remain unemployed on social welfare.
- *Lack of family and social support*: Separations within family and extended family, loss of community support, lack of religious and cultural practices, rituals, worship. Phenomena of '*cultural bereavement'* (Eisenbruch, 1991).
- *Adaptation to the new culture:* Difficulties with English proficiency, education, employment, housing, visa status, exploitation in the labour market. Phenomena of 'culture shock'.
- *Age and Gender:* The elderly are particularly at risk. They may initially be more reluctant to leave home to which they would have stronger ties; find the migration process more strenuous, adaptation into the host country well nigh impossible and have more physical health problems. Intergeneration conflict would be common, though migrating families may find the grandparents useful for childcare, general support and treasure house of traditional values and knowledge. Some may insist on the reverse migration back to home. Children, adolescents and youth, particularly second generation, may have to grapple with excessive demands from traditional parents; intergenerational conflicts; changing identity crisis caught between that of the host country and their ethnic belonging; and educational and employment endeavours making them more prone to depression, risky behaviour and perhaps, suicide (Rasanathan et al., 2006; Lau & Thomas, 2008). Those undergoing adolescent crisis (Juang, Syed, & Takagi, 2007; Rasanathan et al., 2006), without one or both parents, without language skills and poor peer support are at an increased risk (Lau & Thomas, 2008). Unaccompanied children, as has been shown for Korean adoptees in America (Hubinette, 2007), could experience difficulties in their foster home.
  Females who head families (Smith, 2006), come as brides (Thai, 2007), enter the labour market (Smith, 2006), and those coping with disruptive family dynamics could decompensate.

METHOD

This presentation uses literature survey, qualitative data from participatory observation (as a refugee myself of the migration process and provision of services) and in-depth interviews of Asian clients from detention centres admitted to Glenside Hospital and the Supporting Survivors of Torture and Trauma (STTARS) in Adelaide, Australia. The

literature is dominated by studies of Asian Americans but more recently there have been attempts to look at the wider Asian Diaspora (Parrenas & Siu, 2007) and as indeed this series of annual Asian Health and Well-being conferences are doing. There are arguments for and against using Asian as a relevant field of analysis and interventions (Parrenas & Siu, 2007). I will not go into these here due to lack of time, but would like to the opportunity to suggest qualitative research as a most suitable methodology to explore this new, growing field, particularly the public health needs of Asians. Qualitative methods are best suited to describe, understand and interpret the complex context, reality and experiences of Asian immigrants, give voice to their concerns and needs and identify areas for more systematic quantitative research. Of the several methods for doing qualitative research (Liamputtong & Ezzy, 2005), it is significant that the cornerstone of all qualitative methodology is ethnography and participant observation the principal method (Crotty, 1998). The idea of participant observation is to participate in the experience and action of those observed. The subjective position of the observer, both involved and objective at the same time is crucial. It is only by entering into the world of those observed, by experiencing it as they do can the rich meaning and relevant context be understood. Strict quantitative methods may miss the point all together, consider only superficial variables and gather data with a western bias. However, to be a good participant observer, the researcher needs to learn the skill of impartial, nonjudgmental witnessing. There can be no better training for this difficult skill than the Hindu technique of *saattchi* or Buddhist *Vipassana.* It is appropriately referred to as the 'witness position'. Mastery of these techniques would give the researcher the ability to observe and witness events in a detached, impartial way; to interpret and analyse events and people; and gain insight(s) into what is happening.

Families

In working with Asian clients with complex mental health needs, invariable all of them do not have a supportive family environment among their other myriad problems. The recommendations for providing "Culturally Competent Services" in a Royal College of Psychiatrists' publication, gives pride of place to the family (see Box 1). The family is central to Asian 'collectivistic communities'. Families tend to think and act as a unit. There are strict hierarchical roles and obligations that emphasize harmony and supports each other during difficulties. The individual submerges his or her individual "self" within the nuclear and extended family dynamics. Migrating families have to make the transition to the more "individualistic" system in host mainstream societies of the Western world that emphasize emancipation from the family. As a result 'Asian immigrant families experience feelings of social and cultural isolation and struggle to function as family systems, especially when considering gender issues, intergenerational factors, and the process of acculturation and assimilation as related to family dynamics. Moreover, the immigrant families struggle within various ecological social systems outside the family system, including the educational, physical and mental health, economic, and political systems' (Kawamoto & Anguiano, 2006)

The family can be a source of support and help in the treatment process of clients as well as a cause of problems. Thus apart from background trauma from their home country and the host of socioeconomic, housing, visa and other problems, they may have to tackle difficulties within their families. The traumatized person often also contributes to the pathological family dynamics:

> *"B. was a middle aged man who had migrated with his family several years ago as a refugee. He had undergone severe trauma in his home country, including detention, torture and witnessing gruesome events of deaths and destruction. He was a loving father to his children but had difficulties with his wife who turned out to have a tendency toward liberated behaviour. He had ongoing problems with PTSD and Depression for which he abused alcohol and prescription drugs. Under the influence of alcohol he met with a Road Traffic Accident and suffered a fractured arm and some brain damage. This added pain and weakness of the arm and cognitive deficiency, particularly memory difficulties, to the earlier symptoms.*

Although well educated and intelligent, he was on a Disability Pension due to his physical and mental incapacity. The immigrant family also had the perennial economic and housing problems. Despite all these, he had given up alcohol and was making considerable progress in his treatment when he received news that his brother and sister in law had been killed by a rival tribe as a revenge for him having escaped. The surviving children and grandmother (clients mother) had escaped to a neighbouring country and were living in a refugee camp in terrible conditions. He felt directly responsible and terribly guilty. There was an immediate relapse and exacerbation of his symptoms. He hired a migration lawyer and went through the complicated process of trying to sponsor the orphaned children and his mother but the application was rejected. The lawyer demanded more money to appeal but was pessimistic about the possibilities. On leaving the lawyer's office, he appeared to have gone into a fugue and wandered the streets during the rainy night to turn up at home only the next morning in a dishevelled state. The wife was understandably (according to him) furious and in the ensuing argument he had hit her. She called the police and put a restraining order which left him homeless on the streets. He desperately wanted to get back to his family but was prevented by the legal and social system that had now been activated by domestic violence. He attempted suicide and was admitted to hospital. He was discharged to a temporary lodge and had to be admitted again after taking alcohol and another suicide attempt".

Once the issue of domestic violence had been triggered, the western oriented system worked subtlety to drive the family apart, ostensibly to protect the wife and children. With over a 50% divorce rate, it is more the norm and not viewed as a serious consequence in western society. While for this client, the support and help of the family was the one thing necessary for recovery. Without it he was doomed to a recurring cycle of instability and meaningless life. The possibility of eventual successful suicide was high. Significantly, the perpetrators back home have succeeded in reaching him in the safety of the host country, to destroy the very basis of his family life.

"Ms. H was a middle aged widow with two sons whose husband had been murdered back home for political reasons. She herself had undergone considerable trauma and hardship in escaping with her children that continues in frequent re-experiencing as flashbacks and nightmares. PTSD and Depressive symptoms are prominent in her mental state. She is illiterate and suffers from a variety of physical and mental health problems for which she is under treatment from a variety of medical systems (GP, Respiratory, ENT, Gynaecology, Eye, and Psychiatry). She suffers from severe Asthma which becomes exacerbated by different stresses including her family dynamics. She then is taken by ambulance to hospital but refuses stay there for more than a day as the children go hungry when she is not there to cook for them. They would come and hang around the hospital or wander the streets. She was on several types of medications, inhalers, nebulizer and oxygen at home. She has put on weight, becoming obese, further aggravating her arthritic and other physical conditions. She also accesses several services including social welfare (disability pension), housing, legal, education, NGO's, community, and others with whom she has multiple appointments and meetings, many of which she misses. She hardly understands all these procedures and is unable to get around to the different places. Yet, she is supposed to be following English and driving classes. At home she had problems with both children. The eldest, at 16 years, appears to be going through an adolescent crisis and externalises the stress through aggression and violence. He breaks all kinds of expensive items at home including the TV, computer, slams things as he walks back and beats up his younger brother. He leaves home and does not come back for long periods or nights. At school too he has constant problems with classmates, hitting them and getting into trouble. He does not respect the mother, often scolding her in 'filth' and once reported her to police saying she was not giving them food. She says he is

completely out of her control. The younger one tends to internalize his problems, becomes withdrawn, sad, biting his fingers. Both have counsellors and are being followed up by adolescent and child mental health. The home life is very emotional, stormy and unpredictable. They do not mix with other families, tend to withdraw from social life, isolate themselves, not participating in any of the cultural or religious activities of their community and have no social support. However, they are in constant contact with their home network through the telephone. Recently, news of the death of her brother in law in a car accident has upset the family functioning further. Again, the legacy of killing the father has set in motion the abnormal family dynamics".

The abnormal family dynamics, aggravated and sustained by the ill, incapable and hysterical mother, drove each family member to more maladaptive behaviour patterns while a healthy (if not nuclear, an extended) family dynamics would have settled each into a normative developmental pattern. This kind of supportive family environment cannot be substituted for by any number of well meaning, mainstream psychosocial services.

Thus when treating individual clients, there is a need to look at how best we can address the family as a unit and find support for them. However, the western family therapy approach with a modular, session with all family members in room with the therapist may not work. A holistic integral approach, working with all the family members, addressing their various needs and relationships as well as the family dynamics, finding and mobilizing support systems could be tried. In a healthy, supportive family environment, members would recover and may not need individual treatment as such. It is useful to involve the family from the outset of treatment by involving them in the initial history and assessment, encouraging their contribution and point of view. They could also be invited to sit in with the clients when appropriate in the regular sessions (mothers with young children should be encouraged to bring them and they could play or come and go from the outer room) and be given specific tasks, such as giving medication or massage, as well as used as co-therapists. At times, difficulties in family dynamics can be observed, assessed and even addressed in these settings.

Interventions

Clients with complex needs will need a multidisciplinary team to address their problems in an integrated, holistic way. Simple medication and/or counselling will not be sufficient in a majority of cases. However, preventive public health measures and early intervention can be very timely help before problems become complicated. Many of the difficulties are interrelated and feed into each other. Breaking the vicious cycle early or giving the necessary information or basic self help steps could be crucial. For example, many clients need information about what services are available, how to best access them and networking with the services to provide the links for the clients before they become bewildered, frustrated and depressed. Initially, they may need interpreters and social workers or befrienders to help them find their way around. Basic and simple educational and informational material in the language of the client like pamphlets, posters or media announcements on such issues as services, how to access them, common stress and psychosocial problems, do's and don'ts can be made available at common meeting places. Points of contact like social services and primary health care facilities should be culturally competent and sensitive (Box 1). Language is often a problem and skilled interpreters should be available. The role and function of the interpreter can be vital (Tribe & Raval, 2003). However, some interpreters could be problematic, particularly if from the same community, as sensitive clients may want to preserve confidentiality or the interpreter may inadvertently influence the relationship in subtle ways. Workers, including health staff, should become aware of cultural issues, preferences, sensitive areas, fears and concerns, variety of problems, possible solutions, referral pathways and common ethnic idioms, expressions and cultural nuances. Positive

attitudes; an openness, warmth and friendliness; and skills in dealing with multicultural clients and issues are essential.

Box 1. Culturally Competent Service (Patel & Stein, 2007).

- The family is usually the preferred point of intervention. Understanding family structure and dynamics will be helpful in service delivery.
- Be aware that individuals from minority groups will be struggling with the demands and ideals of at least two cultures.
- Be aware that individuals will make choices, life decisions and treatment decisions based on cultural forces.
- Appropriate pieces of cultural knowledge should be incorporated into day-to-day clinical practice and policy making.
- Cultural competence will involve working closely with natural informal network of a particular minority, for example local religious leaders or spirit healers.
- Cultural competence extends the concept of self-determination to the whole minority community, so minority groups should be encouraged to participate on boards and serve in the administrative team and be recruited to staff in the mental health teams at all levels.
- Cultural competent services should practise equal and non-discriminatory policies. Responsive and special outreach services for particular minority groups may also be helpful.

Health professionals should familiarize themselves with culture specific conditions and presentations, idioms of distress, emic and etic categories and provide a more broad therapeutic service. It is significant that in mental health, the Chinese have preserved the categories of neurosis and neurasthenia in the Chinese Classification of Mental Disorders (Lee, 2001). Generally, somatisation is a common way of presentation among Asians and could signify a variety of problems. Understanding cultural belief systems and explanatory models are important in interpreting complaints and developing a trusting relationship and rapport. Active listening, attention to body language and cultural and gender sensitiveness are important parts of communication skills. Referral for specialized care for those with severe problems like traumatisation, depression, psychosis and substance abuse will need to be done. It is being increasingly recognized that clients with complex mental health problems need a multidisciplinary, holistic, long-term approach that address their physical, psychological, economic, socio-cultural and spiritual needs (Table 1). The WHO definition of health gives a good framework to conceptualize multidisciplinary interventions that would address their complex needs (see Table 1):

> "*Health is a state of complete physical, mental, (family), social and (spiritual) well-being, and not merely an absence of disease or infirmity".*
>
> - World Health Organisation (WHO)

Table 1
Dimensions of Health

Dimensions of Health	Causes	Symptoms	Diagnosis	Interventions
Physical	Physical injury Infections Epidemics	Pain, fever, Somatization	Physical illness, Psychosomatic, Somatoform disorders	Drugs treatment, Physiotherapy, Relaxation techniques, massage

Psychological	Shock Stress Fear- Terror Loss Trauma	Tension, fear, sadness, learned helplessness	ASR, PTSD, Anxiety, Depression, Alcohol & Drug abuse	Psychological First aid, Psychotherapy, Counselling, Relaxation techniques, CBT
Family	Death Separation Disability	Vacuum Disharmony Violence	Family Pathology, Scapegoating	Family Therapy Marital Therapy Family Support
Social	Unemployment, Poverty, war	conflict, suicidal ideation, anomie, alienation, loss of communality	Parasuicide, Suicide, Violence, collective trauma	Group Therapy, Rehabilitation, community mobilization, Social Engineering
Spiritual	Misfortune, bad period, spirits, angry gods, evil spells, Karma	Despair, Demoralization, Loss of belief, Loss of hope	Possession	Logotherapy, rituals, traditional healing, Meditation, Contemplation, Mindfulness

The family unit has been included as it is paramount in most parts of the traditional world. When the family is affected, the members too are affected, while if the family is healthy the individual is either healthy or recovers within the family setting. The spiritual dimension has been put forward at various WHO fora but has not been formally accepted yet.

Innovative, new approaches that have been found effective for preventive and therapeutic use at the individual and community levels for a range of physical and mental health problems include old, Asian cultural practices. Physiologically similar to Jacobson's progressive muscular relaxation (1938) and Benson's relaxation response (1975), traditional techniques from Yoga and Buddhism produce profound muscular, physiological relaxation and mental tranquillity useful in Anxiety disorders, Somatization and psychosomatic stress aggravated conditions like hypertension, asthma and diabetes. Mindfulness Based Cognitive Therapy (MBCT) has been found effective for a number of common mental disorders including recurrent and chronic Depression (Baer, 2006).

Four simple methods were distilled out of the traditional practices after close study (Somasundaram, 2002). In addition, traditional massage was used where indicated to induce states of relaxation. The appropriate traditional methods were selected depending on the religion, culture, needs and outlook of the patient:

1. Breathing exer*cises (Pranayamam, Anapana Sati or mindful breathing)*
2. Muscular Relaxation *(Shanthi or Sava Asana, Mindful body awareness, Tai Chi)*
3. Regular Repetition of Words
    a. Hindus- *Jappa: Pranava mantra, 'OM';*
    b. Buddhists- Pirit or chanting: *Buddhang Saranang Gachchami;*
    c. Islam- *Takbir*, *Tasbih: Subhanallah;*
    d. Catholic Christians- *Rosary, prayer beads:* the Jesus prayer (*Jesus Christ have mercy on me*)
    e. Cambodia-*Keatha*, *angkam*: P*uthoo*.
    f. Scientific- T.M.
4. Meditation *(Dhyanam, Contemplation, Samadhi, Vipassana):*
5. Massage*: Aurvedic* or *Siddha* oil massage and the Cambodian, t*hveu saasay*

Particularly in torture survivors with musculoskeletal pains and distorted body image due to the systematic infliction of excruciating pain and injury to various parts of the body, relaxation methods, massage and yoga were found to be useful. Similarly in landmine

victims and others with amputation experiencing phantom limb problems, these methods were used to help to restore a feeling of wholeness. For certain culture bound syndromes like *Dhat syndrome* in South Asia and idioms of distress like *che kabal* in Cambodia or *Perumuchu* in Sri Lanka, these cultural methods were useful. In the long-term management of Alcohol and Drug Abuse, Yoga and/or Mindfulness was introduced as a means of changing life styles.

They were generally not used in cases of psychosis or epilepsy, except for limited and specific indications, for example during rehabilitation or prominent Somatization. In those who had difficulty in practicing the relaxation methods (usually those with marked tension and anxiety), they were encouraged to start with the third method of repetition of words. They were then progressively started on the other methods. Meditation was not commonly used as the first three. It was reserved for more suitable clients, particularly those willing to learn from a *guru, monk* or adept. Indeed, meditation is contraindicated in schizophrenia or other psychosis. We found that meditation could precipitate psychotic illness in a predisposed personality, aggravate a tendency to fantasy or exacerbate pre-existing symptoms.

As mental distress in Asian cultures is often experienced and expressed in somatic terms, it will benefit from interventions structured initially in physical terms (Kirmayer, 1996; Bracken, Geiller, & Summerfield, 1995). These practices are especially helpful for somatoform disorders like somatization, neurasthenia, hypochondriasis and conversion hysteria where there is abnormal preoccupation with the body. The exercises will help to divert the attention away into more healthy body awareness. Other conditions like anxiety, depression, PTSD and culture bound syndromes that manifest through somatic complaints will also be helped by these practices. Research shows that psychosomatic diseases like asthma (Nagendra & Nagarathna, 1986), gastritis (Nagendra, Nagarathna, Survinder, & Pruthi, 1988), hypertension (Patel, 1973; Ketheswaranathan & Koneswary, 1995; Blackwell, Bloomfield, Gartside, Robinson, Hanenson, & Magenheim, 1976) , eczema as well as non insulin dependent diabetes mellitus (Nagendra & Nagarathna, 1984; Puvaneanthiranathan, 1994) and other common ailments (Monro, Nagarathna, & Nagenda, 1990) will be benefited. However, though not all studies have shown uniform benefit (van Montfrans, Karemaker, & Wieling, 1990). The paucity of well designed studies on the efficacy of relaxation exercises in these conditions is striking, and perhaps, a reflection of the power of the pharmaceutical industries.

At the psychological level, these methods produce a state of relaxation countering states of arousal, anxiety and tension. They are indicated in minor mental health disorders (neurosis) like anxiety disorder (Miller, Fletcher, & Kabat-Zinn, 1995) panic, phobia (in systematic desensitization), PTSD (Somasundaram, 1997), hysteria, hypochondriasis, vegetative depression and neurasthenia. Relaxation exercises are used as part of other interventions, for example in the behavioural method of systematic desensitization.

The benefits of these originally spiritual practices are not confined to producing relaxation. When methods are culturally familiar, they tap into past childhood, community and religious roots and thus release a rich source of associations that can be helpful in therapy and the healing process. Mindfulness and meditation draw upon hidden resources within the individual and open into dimensions that can create spiritual well-being and give meaning to what has happened. Although these techniques do no formal psychotherapy, they may accomplish what psychotherapy attempts to do by releasing cultural and spiritual restorative processes.

CONCLUSIONS

Asian immigrants may initially appear robust and resilient. However, vulnerable groups like refuges, asylum seekers, those coming for family reunioun, elderly, women, unaccompanied children, second and later generations may have develop a variety of

mental health problems. Qualitative research may help to delineate the needs and problems faced by the Asian community in new settings. Culture sensitive services, family approaches and traditional methods may help to ameliorate the complex difficulties faced by Asian clients.

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ASIANS IN NEW ZEALAND: INSIGHTS AND IMPLICATIONS

Elsie Ho

ABSTRACT

In recent years, Asian peoples and their concerns have received much more attention in New Zealand than ever before. Part of the reasons for this is that Asians now make up the fastest-growing population groups in the country today. In 1986, the Asian population in New Zealand was just under 53,880, or 1.7 percent of the total population. Twenty years on, this population had grown by 558 percent, to 354,550 in 2006. While Asians now make up 9.7 percent of the total population, their numbers are expected to rise to 790,000, or 16.0 percent of the total population, by 2026.

The rapid growth of the Asian population has implication for policy, planning and service developments, yet the dynamics and diversity within this population is often not well understood. This paper uses New Zealand census data to look at peoples of Asian ethnicities in New Zealand, and how this demography is changing over time. It also examines the considerable variations amongst the people grouped under the term 'Asian' with respect to their origin, ethnic affiliation, migration history, age-sex composition, and languages spoken. Given the complexities within the Asian communities, interpreting population statistics on Asians as a single category is misleading. The paper concludes with a reference to the 2008 projections of New Zealand's Asian population, and the challenge of improving the collection and reporting of ethnic data.

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INTRODUCTION

The ethnic mosaic of New Zealand's population is changing with the Māori, Asian and Pacific populations making up an increasing proportion of the total population. In 1986, 85.1 percent of the New Zealand's population were of European ethnic origin, 12.4 percent Māori, 4.0 percent Pacific and 1.7 percent Asian. By 2006, the Māori, Asian and Pacific populations had all increased their shares of the New Zealand population (to 14.9 percent, 7.2 percent and 9.7 percent respectively), while the proportion of the European population had declined to 70.6 percent. Over this period the fastest growing ethnic population of New Zealand were the Asians.

Despite the increasing visibility of Asians in New Zealand, the diversity of peoples grouped under the term 'Asian' is often not well understood, by the general public as well as in policy contexts. There are popular assumptions that Asians in New Zealand were all born in countries in Asia, and that Chinese must come from China or Indians must come from India. Yet one in five people classified as 'Asians' in the 2006 census had been born in New Zealand, and Chinese and Indians in New Zealand may come from different parts

of the world, while some may have been born in New Zealand. Another misconception is that people who self-identify as Asians are non-European, non-Māori or non-Pacific Islanders. Yet the reality is that peoples of Asian ethnicities can and do identify with more than one ethnicity. Indeed, there is a trend towards higher degrees of ethnic mixing as the New Zealand-born component of the Asian population increases.

This paper uses New Zealand census data to look at peoples of Asian ethnicities in New Zealand, and how this demography is changing over the last two decades. It also examines the considerable variations within the Asian communities with respect to their origin, ethnic affiliation, migration history, age-sex composition, and languages spoken. Given the complexities within the Asian communities, interpreting population statistics on Asians as a single category is misleading. The paper concludes with a reference to the 2008 projections of New Zealand's Asian population, and the challenge of improving the collection and reporting of ethnic data.

DEMOGRAPHIC CHANGES, 1986-2006

Over the last two decades the growth in the Asian population is largely driven by migration. The 1986 Census of Population and Dwellings is a very useful marker for the end of an era in New Zealand's history of immigration — it took place just before a fundamental change in government policy in August 1986 which abolished a traditional source-country preference (the United Kingdom, Europe, North America and the Pacific) and opened up immigration to non-traditional sources. This policy change, combined with the subsequent introduction in 1991 of a points selection system which rated prospective migrants on their qualifications, work experience, age and settlement factors, led to much larger and diverse flows of peoples from countries in Asia entering New Zealand (Trlin, 1992, 1997; Bedford & Lidgard 1997). Between the censuses of 1986 and 2006, the share of overseas born within the Asian population increased from 55.6 percent to 79.3 percent (Table 1).

When the overseas-born component is further broken down into countries in Asia and other countries, the Asia-born population increase of 213,192 people accounted for 70.9 percent of the overall Asian population increase between 1986 and 2006. The largest numerical increases during this period were people born in China and India (with an increase of 72,690 and 37,170 respectively). In percentage terms, however, the fastest growing groups were people born in South Korea, Taiwan, Bangladesh, Pakistan, Philippines and Thailand (Table 1).

It is important to note that within the Asian population there are a significant number of people who had not been born in countries we usually associate with Asia — for example, in Africa, America, Australia, Europe, the Pacific and the Middle East. In the 2006 census, 30 percent of the Asian population (106,188) had been born in countries outside Asia. In fact, one in five Asians (70,650) had been born in New Zealand, and 8.5 percent (30,300) born in Fiji (Table 1).

Table 1
New Zealand Resident Population Identifying With Asian Ethnicities by Birthplace, 1986-2006

			Change between 1986-2006	
Birthplace	1986	2006	Number	Percent
New Zealand	**23,694**	**70,650**	**46,956**	**198.2**
Percentage of total Asian ethnicities	*43.9*	*19.9*		
Asia*				

China, People's Republic of	4,602	77,295	72,693	1,579.6
India	4,272	41,445	37,173	870.2
Korea, Republic of	369	28,434	28,065	7,605.7
Philippines	1,167	14,790	13,623	1,167.4
Malaysia	2,700	13,587	10,887	403.2
Taiwan	153	10,683	10,530	6,882.4
Japan	1,323	9,114	7,791	588.9
Sri Lanka	870	6,993	6,123	703.8
Hong Kong (Special Administrative Region)	1,428	6,876	5,448	381.5
Thailand	567	5,817	5,250	925.9
Cambodia	2,604	5,688	3,084	118.4
Vietnam	2,499	4,746	2,247	89.9
Indonesia	681	3,591	2,910	427.3
Singapore	1,005	3,327	2,322	231.0
Pakistan	111	1,923	1,812	1,632.4
Bangladesh	54	1,389	1,335	2,472.2
Other Asia	798	2,670	1,872	234.6
Total, Asia	**25,176**	**238,368**	**213,192**	**846.8**
Percentage of total Asian ethnicities	*46.7*	*67.8*		
Other countries				
Fiji	2,415	30,306	27,891	1,154.9
South Africa	102	2,832	2,730	2,676.5
United Kingdom	438	1,278	840	191.8
Australia	243	1,080	837	344.4
Other	1,641	7,182	5,541	337.7
Total, Other countries	**4,839**	**42,678**	**37,839**	**782.0**
Percentage of total Asian ethnicities	*9.0*	*11.4*		
Not stated	312	2,856	2,544	815.4
Percentage of total Asian ethnicities	*0.6*	*0.8*		
Total, Asian ethnicities	**54,021**	**354,552**	**300,531**	**556.3**
% born in New Zealand	*43.9*	*19.9*		
% born overseas	*55.6*	*79.3*		

* Includes people who had been born in Northeast Asia, Southeast Asia and South Asia but excludes those born in Afghanistan and the Central Asian republics.
Source: New Zealand Census of Population and Dwellings, 1986 and 2006.

Overall, the population that identified with Asian ethnicities (including the New Zealand-born) had increased by 556 percent over the 20 years since the 1986 immigration policy changes (Table 1). Within this broad grouping, there are a wide range of ethnic affiliations such as Chinese, Indian, Korean, Filipino, Japanese, Sri Lankan, Cambodian, Thai, Malay, Indonesian and Laotian (Table 2).

Table 2
New Zealand's Asian Ethnic Groups, 1986-2006, and Proportion Born in New Zealand In 2006

Ethnic group*	1986	2006	Percentage increase 1986-2006	% born in NZ, 2006
Chinese	26,616	147,567	454.4	21.8
Indian	15,810	104,583	561.5	22.8
Korean	441	30,792	6,882.3	6.1
Filipino	1,491	16,938	1,036.0	17.4
Japanese	1,788	11,907	565.9	21.1
Sri Lankan	1,134	8,370	638.1	13.0
Cambodian	2,256	6,918	206.7	24.2

Thai	393	6,057	1,441.2	16.1
Vietnamese	1,728	4,770	176.0	21.7
Malay	765	3,537	362.4	17.0
Indonesian	534	3,261	510.7	19.2
Total, Asian ethnicities	**54,021**	**354,552**	**556.3**	**19.9**

*Where a person reported more than one Asian ethnic group, they have been counted in each applicable category.
Source: New Zealand Census of Population and Dwellings, 1986 and 2006.

The Chinese and Indians, who have settled in New Zealand since the mid-19th century, are New Zealand's two largest Asian groups (McKinnon 1996; Table 2). Together these two groups accounted for 71.1 percent of the total Asian population in 2006 (354,552).

The numbers of people self-identifying as Chinese or Indians (147,567 and 104,583 in 2006; Table 2) are much larger than the numbers born in China and India (77,295 and 41,445 respectively; Table 1). This is because people who self-identified as Chinese in the census may be new migrants born in China or in other countries such as Hong Kong, Taiwan, Malaysia or Singapore, or they may be established migrants who have been resident in New Zealand for over 20 years, or they may have been born in New Zealand (Ho, 2006; Ip 2003). Similarly, among those who self-identified as Indians in the 2006 census, some had been born locally, and some were from India, Fiji or other parts of the world.

For people who self-identified with other Asian ethnicities, their shares of the total Asian population changed dramatically between 1986 and 2006. Cambodia and Vietnam were the major sources of refugees for New Zealand during the 1970s and early 1980s. In 1986 the Cambodian and Vietnamese populations in New Zealand made up 7.4 percent of total Asians. By 2006, although their numbers had more than doubled, their combined shares of the total Asian population had reduced to 3.3 percent. People identified as Filipino, Japanese and Sri Lankan were also groups that had more than 1,000 each in the resident population in 1986 (Table 2). Between the censuses in 1986 and 2006, their combined shares of the Asian population increased from 8.2 percent to 10.5 percent.

Over this period the largest percentage increases were recorded for the Koreans and Thai. In 1986, the Korean population in New Zealand was less than 500. By 2006 it was nearly 70 times as large as it had been two decades earlier. The Thai population also increased from less than 400 in 1986 to just over 6,000 in 2006, or an increase of 1,441 percent. Percentage increases in the Indonesian and Malay populations between 1986 and 2006, though not as large as those of the Koreans and Thai, were between 360 percent (Malay) and 510 percent (Indonesian) (Table 2).

Given that different Asian ethnic groups have different migration histories in New Zealand, it is not surprising that there are considerable variations in the proportions of the New Zealand-born in different Asian ethnic groups (Table 2). The Chinese, Indian, Cambodian, Vietnamese and Japanese groups, which have longer settlement histories in New Zealand, have large proportions of their populations born in New Zealand (ranging from 21 percent to 24 percent). Among the more recently established groups, the Koreans have the lowest proportion (6 percent) of New Zealand-born (Table 2).

Mixed Ethnic Affiliations

Since 1981 the question about ethnicity in the census allows individuals to self-identify with more than one ethnic group. When the different combinations of ethnicity for the Chinese, Indian and Filipino populations resident in New Zealand in 2006 are examined, the proportions identifying with only one ethnicity are found to make up the great majority in the three groups — 88.5 percent of the Chinese, 91.0 percent of the Indians and 85.8 percent of Filipino said they belonged to only one ethnic group (Table 3).

The shares of only Chinese, only Indian and only Filipino were smaller, however, for children aged 0-14 years — one in three Filipino children were recorded as multi-ethnic, while for Chinese children the share was approaching 30 percent, and in the case of Indian children it was just under 18 percent.

The main ethnic combinations for the Chinese and Indians were with European and European Māori (the dominant ethnic groups in New Zealand), not with other Asian ethnic groups. In the case of the Filipino, European and other Asian ethnic groups were the dominant mixes (Table 3).

The extent to which the Chinese, Indian and Filipino populations are becoming more multi-ethnic becomes much clearer when the New Zealand-born and the overseas-born components are examined separately (Table 4). Just over 60 percent of the New Zealand-born Filipino identified with more than one ethnicity, with almost as many in the Filipino European category as in the sole Filipino ethnicity category (Table 4). In the case of the Chinese and Indians, the shares of the sole ethnicity category drop to 60 percent and 70 percent respectively for the New Zealand-born populations. In all cases of the overseas-born, at least 96 percent are in the only Chinese, only Indian and only Filipino categories.

Although the ethnic combinations of only three ethnic groups (Chinese, Indian and Filipino) are studied in this paper, these three populations are not intended to be representative of all Asian ethnic groups. Indeed, it is recognised that Asian ethnic groups vary greatly in the proportion of people identifying with more than one ethnic group. Yet two trends become apparent from the data in Tables 3 and 4. First, young Chinese, Indian and Filipino are more likely to belong to more than one ethnic group than people in the older age groups of their respective ethnic groups. Second, the New Zealand-born are more likely than their overseas-born counterparts to be of mixed ethnicity. The higher degree of mixed ethnicity in the younger age groups reflects the greater number of mixed ethnic marriages amongst Asians. Additionally, amongst the Chinese, Indians and Filipino of mixed ethnicity background, the most frequently reported ethnic combinations were with European. This suggests that particular Asian peoples are becoming more mixed in terms of their ethnic affiliations and are not isolating themselves from the majority populations.

Looking ahead to 2026, when there will be a much larger share of New Zealand-born in the Asian populations, there will be a much higher share of Asian peoples in the mixed-ethnicities categories.

Table 3
Ethnic Combinations, Chinese, Indian and Filipino Populations, 2006

Ethnic combinations	Children (0-14 years)		Total (all ages)	
	Number	Percent	Number	Percent
Chinese only	18,816	72.9	130,572	88.5
Chinese European only	2,388	9.3	4,596	3.1
Chinese Māori only	225	0.9	1,005	0.7
Chinese Pacific only	546	2.1	1,914	1.3
Chinese Asian only	552	2.1	2,088	1.4
Chinese European Māori only	984	3.8	2,031	1.4
Chinese European Pacific only	410	2.0	1,119	0.8
Chinese European Asian only	6	0.0	12	0.0
Chinese Māori Pacific only	225	0.9	378	0.3
Chinese Māori Asian only	9	0.0	27	0.0
Chinese other combinations	1,533	5.9	3,825	2,6
Total Chinese combinations	**25,794**	**100.0**	**147,567**	**100,0**

Indian only	21,141	82.7	95,133	91.0
Indian European only	1,626	6.4	3,261	3.1
Indian Māori only	402	1.6	762	0.7
Indian Pacific only	585	2.3	1,257	1.2
Indian Asian only	138	0.9	462	0.4
Indian European Māori only	597	2.3	1,068	1.0
Indian European Pacific only	189	0.7	306	0.3
Indian European Asian only	54	0.2	108	0.1
Indian Māori Pacific only	114	0.4	168	0.2
Indian Māori Asian only	6	0.0	27	0.0
Indian other combinations	702	2.7	2,028	1.9
Total Indian combinations	**25,554**	**100.0**	**104,580**	**100.0**
Filipino only	2,937	66.9	14,538	85.8
Filipino European only	717	16.3	1,263	7,5
Filipino Māori only	51	1.2	66	0.4
Filipino Pacific only	45	1.0	60	0.4
Filipino Asian only	123	2.8	255	1.5
Filipino European Māori only	96	2.2	129	0.8
Filipino European Pacific only	21	0.5	21	0.1
Filipino European Asian only	33	0.8	45	0.3
Filipino Māori Pacific only	0	0.0	3	0.0
Filipino Māori Asian only	0	0.0	3	0.0
Filipino other combinations	366	8.3	552	3.3
Total Filipino combinations	**4,389**	**100.0**	**16,935**	**100.0**

Source: Bedford and Ho, 2008, p.6

Table 4
Ethnic Combinations, New Zealand-born and Overseas-born Chinese, Indian and Filipino Populations, 2006

Ethnic combinations	NZ-born (all ages)		Overseas-born (all ages)	
	Number	Percent	Number	Percent
Chinese only	19,152	59.6	110,307	96.6
Chinese European only	3,825	11.9	735	0.6
Chinese Māori only	957	3.0	36	0.0
Chinese Pacific only	1,140	3.6	747	0.7
Chinese Asian only	576	1.8	1,500	1.3
Chinese European Māori only	1,965	6.1	51	0.0
Chinese European Pacific only	948	3.0	156	0.1
Chinese European Asian only	9	0.0	3	0.0
Chinese Māori Pacific only	363	1.1	12	0.0
Chinese Māori Asian only	27	0.1	0	0.0
Chinese other combinations	3,147	9.8	603	0.5
Total Chinese combinations	**32,109**	**100,0**	**114,150**	**100.0**
Indian only	16,641	69.8	77,742	97.3
Indian European only	2,317	10.6	726	0.9
Indian Māori only	735	3.1	12	0.0
Indian Pacific only	702	2.9	540	0.7
Indian Asian only	132	0.6	327	0.4
Indian European Māori only	1,029	4.3	27	0.0
Indian European Pacific only	264	1.1	42	0.1
Indian European Asian only	75	0.3	30	0.0
Indian Māori Pacific only	162	0.7	3	0.0
Indian Māori Asian only	27	0.1	0	0.0
Indian other combinations	1,554	6.5	417	0.5
Total Indian combinations	**23,838**	**100.0**	**79,866**	**100.0**

Filipino only	1,125	38.2	13,347	96.0
Filipino European only	1,026	34.8	228	1.6
Filipino Māori only	54	1.8	9	0.1
Filipino Pacific only	51	1.7	9	0.1
Filipino Asian only	96	3.3	146	1.1
Filipino European Māori only	117	4.0	12	0.1
Filipino European Pacific only	18	0.5	3	0.0
Filipino European Asian only	39	1.3	9	0.1
Filipino Māori Pacific only	3	0.1	0	0.0
Filipino Māori Asian only	3	0.1	0	0.0
Filipino other combinations	414	14.1	135	1.0
Total Filipino combinations	**2,946**	**100.0**	**13,908**	**100.0**

Source: Bedford and Ho, 2008, p.8

Age-sex Composition

The above discussion highlights the considerable value of disaggregating data on age and birthplace (New Zealand-born or overseas-born) to provide better understanding of the characteristics of Asians of mixed ethnicity. In the diagrams that follow, the age structures of the Chinese, Indian, other Asian and total Asian ethnic populations in the 2006 census are shown. For each group, the age sex compositions for its New Zealand-born and overseas-born components are given first, and then for all people in the relevant group (total population) (Figures 1 and 2).

It is readily apparent from the diagrams that the three components of the Asian population display rather different age structures. The age compositions of the New Zealand-born components of the Chinese and Indian populations reflect the long-established settlement of these two groups — there are Chinese and Indians aged over 75 years (Figure 1) but none aged over 65 years in the other Asian New Zealand-born pyramid (Figures 2). Besides, the New Zealand-born components of all four populations have very young age structures — 66.8 percent of the New Zealand-born Chinese in 2006 were under 20 years of age, while the proportions of under 20 were even higher for the New Zealand-born Indians (73.7 percent), other Asians (90.0 percent) and total Asians (74.3 percent).

The age compositions of the overseas-born components of the Chinese, Indian and other Asian differ markedly. In the case of the Chinese, there is much more extensive growth in the tertiary education age groups — one-third of the overseas-born Chinese in 2006 were between 20 and 29 years of age (Figure 1). This reflects a combination of international student flows as well as the immigration of families with children in their teenage and young adult years.

There is a similar, but much less pronounced bulge in these age groups in the other Asian population (Figure 2). However, a much more dominant feature of the overseas-born other Asian age pyramid is a distinctive female bias at all ages above 20 years. A significant share of the female surplus over the age of 25 years can be accounted for by intermarriages of Southeast Asian women, especially Filipino and Thai, with New Zealand men of European, Māori and Pacific ethnicities (Badkar et al 2007).

The Indian overseas-born age pyramid is quite different again from the Chinese and the Other Asian populations. A much more balanced age-sex distribution is found for the Indians, with a large proportion of both males and females in a wide age range (25-49 years) (Figure 1). This population structure reflects a more gradual expansion of migration of young adults and families, rather than flows strongly influenced by movement for tertiary education, or by the astronaut family strategy that is partly responsible for the surplus of females in the Chinese overseas-born population at ages between 30 and 49 years (Figure 1; also see Ho, 2003; Ho and Farmer, 1994).

Clearly, disaggregating data on the age structures of the Chinese, Indians and other Asians into their New Zealand-born and overseas-born components helps to explain the marked differences in age structures of the three groups. When the New Zealand-born are removed and only the overseas-born are left in the pyramids, the very small percentages of people in the very young overseas-born population aged 0-4 years in the Chinese, Indian and other Asian populations become very obvious (Figures 1 and 2).

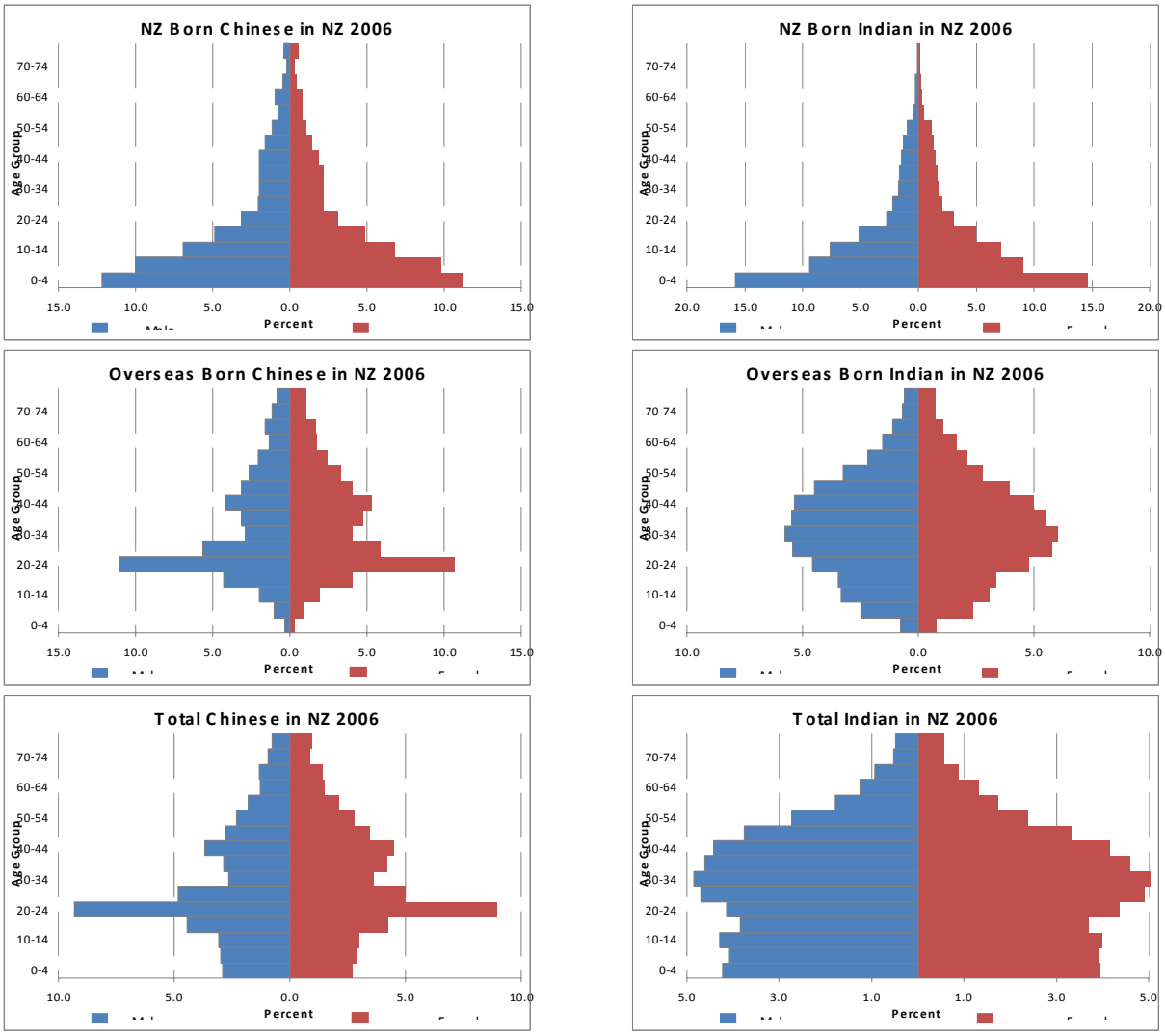

Figure 1. Age-sex composition of the Chinese and Indian populations, 2006.
Source: New Zealand Census of Population and Dwellings, 2006

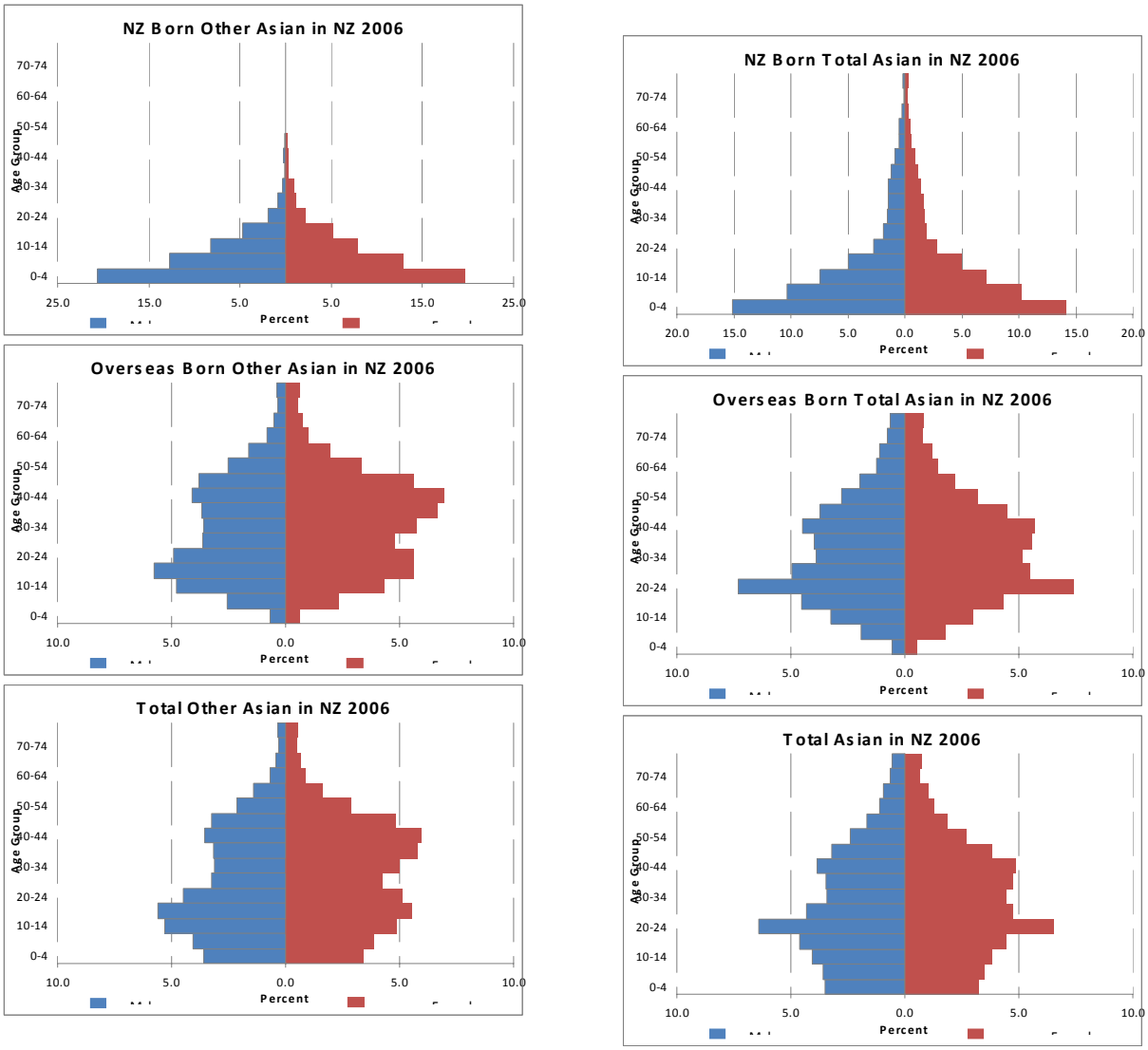

Figure 2. Age-sex compositions of Other Asian and Total Asian ethnic populations, 2006. Source: New Zealand Census of Population and Dwellings, 2006.

Languages

Finally, New Zealand's Asian peoples are very diverse in the languages they speak. In 2006, high proportions of the Chinese and Indian ethnic populations spoke English than either a Chinese or an Indian language (Table 5). Linguistic diversity amongst the Chinese is especially high, reflecting the wide range of countries they came from.

Table 5
Major Asian Languages, and English and Māori, Spoken By People Identifying With Asian Ethnicities, 2006 (Percentages)

Language	Chinese	Indian	Other Asian ethnicities *	Total Asian
	%	%	%	%
English	78.8	87.9	80.6	81.9
Māori	0.7	0.7	0.3	0.5
Chinese languages	69.7	0.2	3.0	29.7
Indian languages	0.1	65.0	5.0	20.7
Sinhala (Sri Lanka)	0.0	0.0	3.6	1.1
Pashto (Pakistan)	0.0	0.0	0.8	0.3
Persian	0.0	0.1	1.5	0.5
Korean	0.1	0.0	24.6	7.4
Japanese	0.7	0.1	8.8	2.9
Thai	0.2	0.0	4.9	1.5
Khmer	0.4	0.0	5.1	1.6
Vietnamese	0.4	0.0	3.5	1.2
Lao	0.0	0.0	1.2	0.4
Tagalog (Philippines)	0.1	0.0	11.2	3.4
Malay	2.4	0.9	1.9	1.7
Bahasa Indonesian	0.8	0.1	2.4	1.0
Total in ethnic group	**147,570**	**104,583**	**105,708**	**354,549**

* Includes people who are not Chinese, not Indian and whose ethnicity is not stated.
Source: Bedford and Ho, 2008, p.10.

A detailed examination of five groups of Asian peoples who spoke other languages but not English, using 2001 census data, is provided in a report for the Mental Health Commission in 2002 (Ho et al 2002). In this report, data on five ethnic groups (Chinese, Indian, Korean, Cambodian and Vietnamese) and on the total Asian population, broken down by gender, age group and years in New Zealand (under 10 years; all residents) were analysed. The data revealed considerable diversity in language capability within the Asian populations (Table 6). Across ethnic groups, much higher proportions of the Korean, Cambodian and Vietnamese ethnic populations could not speak English (21 percent to 35 percent for all residents aged 15 years and over; Table 6) than either Indians (6 percent for males and 10 percent for females) or Chinese (18 percent for males and 21 percent for females). However, there are clear age and gender differentials. Hence, the proportions of older Indians aged over 65 years who could not speak English (19 percent for men and 46 percent for women; Table 6) were considerably higher than the proportions of young Koreans, Cambodians or Vietnamese in the 15-24 year age group who had no English (10-14 percent for males and 11-17 percent for females; Table 6). Age of arrival is pivotal in the acquisition of a new language.

Table 6
People Identifying With Asian Ethnicities Aged 15 Years and Over Who Spoke Other Languages But Not English or Māori, 2001 (Percentages)

	Age group (years)									
	15-24		25-39		40-64		65+		Total, 15+	
	M	F	M	F	M	F	M	F	M	F
Ethnic group	%	%	%	%	%	%	%	%	%	%
Recent Immigrants*										
Chinese	10	9	14	19	35	42	77	85	24	27
Indian	5	7	6	7	10	23	29	56	8	14
Korean	15	12	22	30	27	34	…	…	22	28
Cambodian	20	26	30	44	43	66	…	…	33	47
Vietnamese	15	21	32	29	55	60	…	…	31	38
Total, Asian ethnicities	9	9	14	15	24	33	62	71	17	21
All residents										
Chinese	7	7	14	15	25	31	52	62	18	21
Indian	3	5	5	6	7	14	19	46	6	10
Korean	14	11	21	29	27	27	…	…	21	27
Cambodian	11	17	18	29	31	47	…	…	22	35
Vietnamese	10	14	25	31	33	41	…	…	23	31
Total, Asian ethnicities	7	7	11	12	17	23	41	54	13	17

* Includes people who were born overseas and had been resident in New Zealand for under 10 years at the time of the 2001 census.
… Percentages not given when numbers are very small.
Source: Ho et al, 2002, p.12 & 13.

The length of residence in New Zealand is another important factor. Most Cambodians and Vietnamese did not speak English prior to coming to New Zealand. Hence, compared with their total populations and across all age groups, much higher proportions of Cambodian and Vietnamese recent immigrants (resident in New Zealand for under 10 years) could not speak English (Table 6). Because of the diversity within Asian communities, disaggregating data on gender, age and length of residence reduce the problem of over-generalisation and gives a better understanding of the experiences of Asian peoples.

LOOKING FORWARD

In April 2008 Statistics New Zealand released *The National Ethnic Population Projections: 2006 (base) – 2026.* Series 6 of the ethnic projections, which assume medium fertility, mortality, net migration and inter-ethnic mobility, show that the Asian population will grow to 788,000 by 2026, or an increase of 95 percent over the next 20 years. This growth is much higher than the increases projected for the Pacific, Māori, or European ethnic components (Statistics New Zealand 2008). According to this projection, Asians will make up 16 percent of the total New Zealand population by 2026.

Clearly, the rapid growth of Asian populations in New Zealand has significant implication for policy, planning and service development. In 2002, the Office of Ethnic Affairs launched the *Ethnic Perspectives in Policy* resource document which highlighted the need for government agencies to make ethnic people, including Asians, more 'visible' in the policy process (Office of Ethnic Affairs 2002). The *Police Ethnic Strategy Towards 2010* (New Zealand Police 2004), and *Te Tāhuhu: Improving Mental Health 2005-2015* (Ministry of Health 2005), launched in 2005, both placed an emphasis on addressing the needs of our increasingly diverse communities and developing responsive services for these communities.

Accessing good-quality data/information on the changing demographics and needs of New Zealand is vitally important for planning and policy making (New Zealand Police 2004; Office of Ethnic Affairs 2002). The Census of Population and Dwellings holds an enormous amount of information on individuals, families and households and is the foundation for the analysis of Asian populations in New Zealand (Ho et al 2002, 2005, 2006, 2007). A major challenge for analysing census data, as this paper has shown, is the considerable variations between and within ethnic groups with respect to age-sex composition, origin, religious affiliations, languages spoken, etc. To improve data quality and avoid over-generalisation, it is necessary to disaggregate data where appropriate, rather than treating 'Asian' as just one single ethnic group.

Censuses, however, provide limited information on health measures. Only recently large-scale systematic data on the health of Asian peoples, derived from public surveys and selected administrative databases, are being collected and reviewed (Ministry of Health 2006, 2008; Rasanathan et al 2006b). These initiatives entail focusing attention and resources on specific problems areas (e.g. obesity, diabetes and cardiovascular problems among Indian peoples) and possible markers of progress. However, some broad problems with public surveys exist. Sample size and sample design may inadvertently exclude certain groups, or lump smaller groups in the 'other' category, resulting in masking areas of need through 'averaging' — that is, the good health for Asian peoples overall may mask the health concerns of some smaller groups (Abbott Young 2006; Rasanathan et al 2006a; Tse et al 2006). Hence other types of information, such as qualitative studies, will always be required to give a 'voice' to minority ethnic communities or special groups, such as youth and or older people. Indeed, in order to address the information needs for policy formulation, combining census data and quantitative measurement from public surveys with in-depth and contextually sensitive studies and analysis will generate a richer understanding of important issues of concern for New Zealand's diverse Asian communities.

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ONE FORMULA DOES NOT FIT ALL: ETHNIC DIFFERENCES IN NEW ZEALAND PEOPLE

Elaine Rush, Purvi Chhichhia, Jewel Wen, Sunnie Xin, Janet Rowan & Lindsay Plank

ABSTRACT

Health is a dynamic state and is profoundly influenced by previous nutrition and patterns of life. Risk for disease accumulates throughout the lifespan and differences can be seen by sex and ethnicity from birth. A number of small Auckland-based studies with Asian participants are presented to illustrate ethnic differences that should be considered when health risk and lifecourse are assessed. They support the concept that the best prevention would be achieved by changes in diet and activity of the mother before conception.

Rush, E., Chhichhia, P., Wen, J., Xin, S., Rowan, J., & Plank, L. (2008). One formula does not fit all: Ethnic differences in New Zealand. In S. Tse, A. Sobrun-Maharaj, S. Garg, M. E. Hoque & Y. Ratnasabapathy (Eds.), (2008) *Building healthy communities. Proceedings of the Third International Asian Health and Wellbeing Conference, September 8-9* (pp. 28-32). Auckland, New Zealand: University of Auckland

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BACKGROUND & OBJECTIVES

Chronic disease statistics and other measures of health are often collected in adults and followed to future disease endpoints. The origins of ill health can be tracked from conception, through gestation, childhood, adolescence, young adulthood and later adult life (Ben-Shlomo & Kuh, 2002). At the same time there is evidence that disease risk is associated with ethnicity and, for immigrants, time spent in the adopted country. Rising costs of food and petrol limit the access to foods that "given enough money" people would choose to buy. Fruit and vegetables are one example. Similarly a change in climate and food access with migration may have profound long term effects. New Zealand soil is poor in fluoride, selenium and iodine, many of our meat and dairy products are high in saturated fat and white bread is the cheapest and least nutrient dense bread available.

Table 1 is a simplified depiction of the accumulation of risk for chronic disease in relation to malnutrition. Obesity is a form of malnutrition – an imbalance in energy input versus output in relation to the macronutrients that provide energy: carbohydrate, fat, protein and alcohol. Micronutrients do not provide energy but are essential for life functions. A person may be obese but micronutrient deficient i.e. malnourished.

Table 1
Accumulation of Risk for Chronic Disease Related to Malnutrition across the Lifecourse - Selected Examples

Life stage	Examples of environment and behavioural risk factors that contribute to accumulation of risk	Specific nutrients
Maternal health status at time of conception Compromised growth in utero	Maternal: smoking, obesity, low physical activity, socioeconomic status, education of mother	Folate, Iodine, Alcohol, Vitamin B_{12}, Vitamin D
Infancy & childhood	Passive smoking infections and illness, air pollution, growth rate, activity	Breastfeeding depends on maternal nutrition Sugary drinks, nutrient poor refined foods
Adolescence	TV and screen time, food behaviours, physical activity, smoking, obesity and/or lack of muscle, changed eating patterns: vegetarianism in girls	Dietary patterns associated with low Vitamin B_{12}, iron (Low consumption of red meat), Vitamin D insufficiency (sunshine vitamin)
Adult	Education, occupational hazards	
Elderly	Health behaviours, smoking	

Both the 2002/2003 and the 2006/07 New Zealand Health Survey reported that the self-reported prevalence of diagnosed diabetes was higher among Asians compared with Europeans, but, in contrast, found that Asian women for both surveys had the lowest self-reported diagnosed hypertension prevalence of all ethnic groups (Ministry of Health, 2003; Ministry of Health, 2008) A further analysis of the 2002/2003 survey by Asian ethnic subgroups (n=1173, (Ministry of Health, 2006) found no significant differences between Chinese, South Asians, Koreans or Southeast Asians for self-reported hypertension, heart disease, or stroke, but a significantly higher prevalence of self-reported diabetes, particularly in South Asians, and treated hypercholesterolemia. Indians (South Asians) were more likely to have been tested for cholesterol and diabetes in the past 12 months than New Zealand Europeans and the total population, respectively (Ministry of Health, 2006). The 2006/07 New Zealand Health Survey has not yet undergone any subgroup analysis of the Asian group which numbered 2255.

Clearly there are differences in health and health needs among Asian ethnic groups. The objective of this report is to collate New Zealand specific evidence of the tracking of health through the lifecourse and to consider selected health risks that may be modifiable by changes in dietary and physical activity patterns.

Evidence from five studies relevant to Asian in New Zealand and the lifecourse model will be presented in the context of supporting international evidence. These studies are described.

REVIEW OF STUDIES

We have been performing body composition measurements on two-year olds as part of a longitudinal follow up study (The Metformin in Gestational Diabetes: The Offspring Follow Up [MIG TOFU] study) of children whose mothers had gestational diabetes and were randomised to treatment with metformin or insulin during pregnancy (Rowan et al., 2008). In addition to anthropometry, whole body dual-energy X-ray analysis (DEXA) has been performed when possible. We have undertaken an interim analysis to investigate whether there are differences in regional fat deposition according to maternal treatment, maternal glucose control, gender and ethnicity of the child. Sixty one children (24M, 37F) with a mean age 2.2 yrs (range 1.9-3.1) have been scanned

with appropriate quality. No differences in abdominal body fat percent were found between the insulin and metformin treatment groups after correction for age, ethnicity or maternal glucose control. Girls tended to have more abdominal fat and a higher subscapular to triceps skinfold ratio than boys but this did not reach significance. When separated by ethnicity, there were 21 European, 13 Pacific, 5 Chinese, 10 Indian, 4 Maori, and 8 Other (African, Hispanic, Middle Eastern) children. Analysis of covariance with adjustment for age revealed that percentage abdominal body fat in European children (17.3%) was significantly lower than Pacific (23.0%, p=0.03), Chinese (24.4%, p=0.05) and Indian (23.7%, p=0.02) but not Maori (17.2%, p=0.96) or Other (17.6%, p=0.94). Maternal treatment and glucose control were not related to the percentage abdominal fat of the child but maternal body size was related to child body size.

In collaboration with Dr CS Ranjan in Pune, India (Yajnik et al., 2005; Yajnik, 2006; Yajnik et al., 2008) we have been investigating the relationship of dietary pattern to health, focusing particularly on intergenerational effects. Many Indian people are vegetarian and at risk of vitamin B_{12} insufficiency as B_{12} can only be obtained from animal foods. Because preadolescence is a critical period of growth we assessed B_{12} status in six meat-eating (ME) and six non-meat-eating (NME) 9-11 years old, Tanner stage 1, migrant Indian girls by haematology, fasting B_{12}, folate, methyl malonic acid (MMA) and 7-day-diet-diary analysis. No girls had any evidence of anaemia. Reported B_{12} intake correlated with serum B_{12} (r=0.74, P=0.006). Serum B_{12} was lower in NME girls compared with ME girls (232+/-95 vs 543+/-201 pmol l^{-1}, p=0.01). Two NME girls were deficient in B_{12} (serum B_{12}<170 pmol l^{-1}, MMA>0.26 µmol l^{-1}). Overall serum B_{12} was low (388+/-221 pmol l^{-1}) and serum folate intake high (27+/-8 pmol l^{-1}; 342+/-269 µg day^{-1}). Asymptomatic B_{12} deficiency is present in NME migrant Indian preadolescents in the presence of high folate.

From the above study (Rush et al., 2007b) we concluded that supplementation with B_{12} in this group may be necessary to improve future health outcomes and have undertaken a study looking at the vitamin B_{12} status of women with different dietary patterns.

A pilot study of 38 New Zealand women (19-48 y) found that the best way to predict B12 insufficiency was to ask about dietary practice. Of the 12 participants who did not consume red meat (non-red-meat-eaters, NRME) 8 (i.e. 2 out of 3) had low serum vitamin B12 and holo-TCII (a better marker of B12 status). Similarly 5 of the 6 Indians had low vitamin B12 status – 4 did not eat meat and one did. Compared with the rest of the group Indians reported a diet that had low energy density, high carbohydrate, low protein and low fat.

Furthermore, body composition varied by dietary pattern. NRMEs and Indians had significantly higher body fat percentage and weaker grip strength than red-meat-eaters (RMEs) / non-Indians. In addition, Indians had significant higher waist-to-hip ratio compared to non-Indians (0.83 ± 0.05 cf 0.76 ± 0.04, p=0.02), which suggested that these Indian women were more likely to have accumulated more central fat than the other women, in agreement with our previously reported work (Rush et al., 2007c).

In New Zealand Health surveys criteria for classification of obesity and overweight have varied by ethnicity. We have undertaken a study using DEXA analysis of body fat to compare:

1. Relationships between body mass index (BMI) and percentage body fat (%BF) of European (M29, F37), Maori (M23, F23), Pacific (M15, F23), and Asian Indian (M29, F25) with New Zealand Chinese (M20, F23) aged 30-39 years; and
2. Fat distribution, appendicular skeletal muscle mass (ApSM), bone mineral density (BMD) and limb bone lengths across these five ethnic groups.

The main findings were:
For a fixed BMI, New Zealand Chinese had a higher %BF than European and less %BF than Asian Indian. At a %BF equivalent to a BMI of 30 $kg.m^{-2}$ in Europeans (WHO threshold for obesity), BMI values for Asian Indian and New Zealand Chinese women were 5.8 and 2.2 BMI units lower than European, respectively, and for Asian Indian and New Zealand Chinese men, 8.2 and 3.0 BMI units lower.

Abdominal-to-thigh fat ratio of New Zealand Chinese was higher than that of European ($p<0.001$) and similar to that of Asian Indian. New Zealand Chinese had a significantly higher central to appendicular fat ratio than both Asian Indian and European ($p<0.001$). New Zealand Chinese were centrally fatter than European and Asian Indian.

For the same height and weight, New Zealand Chinese had 2.1 kg less FFM ($p=0.039$) and 1.4 kg lessApSM ($p=0.007$) than European. New Zealand Chinese had 3.2 kg more FFM ($p=0.001$) than Asian Indian and similar ApSM to Asian Indian.

For the same weight, New Zealand Chinese and European had similar BMD for both female and male. Male New Zealand Chinese had a higher BMD (by 0.07 $g.cm^{-2}$, $p= 0.001$) than male Asian Indian.

Among the five ethnic groups, DEXA measurements of bone lengths showed that, for the same DEXA-measured height, New Zealand Chinese had the shortest leg and arm bone lengths (by 1.5cm, $p=0.016$ and 2.3cm, $p=0.001$, respectively).

Therefore, the relationship between percent body fat and BMI for Asian Indian and New Zealand Chinese differs from Europeans and from each other, which indicates that different BMI thresholds for obesity may be required for these Asian ethnic groups.

Similar differences in body composition and fat distribution among a larger sample (age 17-80 y) of European, Maori, Pacific Island and Asian Indian adults have been previously published (Rush et al., 2004; Rush et al., 2007c).

Finally we have been able to show that a reduction of abdominal fat and chronic disease risk factors by lifestyle change in migrant Asian Indians aged >50 years is possible (Rush et al., 2007a).

CONCLUSION

These studies add to the evidence that disease risk associated with diet, body composition and physical activity accumulates throughout the lifecycle and that there are distinct ethnic differences among the major ethnic groups in New Zealand.

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We gratefully acknowledge the contribution of all the participants in these studies. These research projects were supported, in part, by the Ministry of Health and the Health Research Council of New Zealand and the Auckland University of Technology contestable Research Fund.

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SPECIAL REPORT: HEALTHCARE NEEDS OF ASIAN PEOPLE IN THE WIDER CHRISTCHURCH AREA

**Wayne Reid, Simon Tam, Sandra Tam,
Anna AhKuoi & Shelly Hou**

EXECUTIVE SUMMARY

BACKGROUND

Partnership Health Canterbury is the largest primary health organisation (PHO) in New Zealand with an enrolled population in excess of 350,000 people. During the 2007/2008 financial year the PHO will be responsible for around $60 million of public health funding.

During the final quarter of 2007 and the first half of 2008, Partnership Health Canterbury carried out research into the current state of primary health care needs of our Asian migrant population. The primary motivation was the knowledge that considerable confusion existed within our migrant populations as to the manner in which the New Zealand health system functioned. This was resulting in low access, increased usage (anecdotal) of the Christchurch emergency department for non-emergency treatment and unmet primary health care need.

To enable substantive recommendations, Partnership Health Canterbury initiated a health care survey targeted at the Asian migrant population. The knowledge gained has offered vital insight into the depth of unmet need. This has allowed us to formulate recommendations for both the Ministry of Health and the Canterbury District Health Board

The main aims of the survey (including both patients and health professionals) were to ascertain;

- whether the experiences of Asian migrants in Canterbury were similar to those in the Waitemata area
- the issues and problems faced by both migrants and health professionals
- the level of unmet primary health care needs within the Asian migrant group

RESULTS

The following is a summary of the findings:

- The project surveyed a total of 229 individuals representing 480 family members
- Patient focus group numbers totalled 164 Chinese and Korean individuals
- Health professionals numbered 36
- Of the survey respondents, 35% were Chinese, 31% Korean and 30% Japanese. Limited feedback was received from other Asian groups but was included in the overall totals.
- 27% of survey respondents had limited or no English speaking skills. (This was more pronounced in the Chinese group with 34% claiming limited or no English speaking skills.)
- Overall educational qualifications were higher with Koreans; 51% claiming a Bachelor's Degree or higher. Only 30% of the Chinese and Japanese claimed the same educational level.
- Korean and Japanese migrants tended to arrive as a family unit whilst the Chinese tended to arrive as individuals – the majority of whom were students. Thus the Chinese had fewer or no family members on whom to depend in times of stress.
- Aside from the 61% of the total respondents reporting general illness, the significant health concerns were backache (24%); focus groups identifying a number of participants where osteoporosis was identified as the probable cause, allergic diseases (23%), dental problems (36%), stress or depression (26%).

- Need exists for language-specific health information, qualified Asian health professionals and a specific Asian health-orientated health centre
- Cultural training for New Zealand health professionals is vital

RECOMMENDATIONS

The report recommends that:

- Policy guidelines need to be developed at a national level to not only ensure equity of access for *all* people but to enforce that goal
- Funding to be made available for the development of an Asian-specific health service
- Funding to be made available for an active study into the language requirements for migrants
- Research and funding to be made available for workforce development to increase the number of Asian professionals
- Funding for the publication of language-specific publications
- The development of an 0800 Canterbury-wide "Asian Helpline"
- Improved awareness and access to Asian online health services

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SECTION 1: INTRODUCTION

Background

During the first six months of 2007, Partnership Health Canterbury – through Christchurch Resettlement Services – carried out research into the primary health care needs of our increasing refugee population. This research was instigated due to the lack of detailed information on newly arrived residents and the concern that adequate health funding was not available to meet their needs.

It became apparent that confusion existed as to what set a refugee apart from a migrant; that unmet health needs were considerable and quite different and that the primary health care strategy did not specifically address the health needs of those people foreign to our health system.

Anecdotal evidence from a number of sources including general practice, practice nurses, Elder Care Canterbury, Youth Sexual Health services, media articles, secondary care health services and cultural groups portrayed a picture of unmet need in many migrant areas, not just health. This, coupled with the growing migrant population, the increasing incidence of medical conditions such as diabetes, fatty liver and obesity amongst our Asian population, convinced us that research was needed to ascertain both the level of need and the degree to which the New Zealand system was meeting that need – if at all.

Online research revealed the existence of the Asian Health Support Service pioneered in 1999 by the then Waitemata Health (now Waitemata District Health Board). In 1999 and 2000, the Asian Health Support Service was responsible for conducting two surveys aiming to identify the health care needs of Asian migrants to Auckland.

Population Data

According to the 2006 Census, 354,549 Asian people live in New Zealand. This is a 49% increase over the 2001 Census total. As a percentage of the total population, the Asian population increased from (2001) 6.4% to (2006) 8.8% (see Table 1 and 2).

Table 1
Ethnic Groups in Christchurch and New Zealand – 2001 Census (Statistics New Zealand)

Ethnic Groups in Christchurch City and New Zealand, 2001 Census				
	Christchurch	**New Zealand**	**% Christchurch Total**	**% New Zealand Total**
European	342,327	2,871,482	86.1%	76.8%
Māori	26,535	526,281	6.7%	14.1%
Pacific peoples	8,103	231,801	2.0%	6.2%
Asian	18,450	238,176	4.6%	6.4%
Other	2,217	24,993	0.6%	0.7%
Total	397,632	3,737,277	100%	

Table 2
Ethnic Groups in New Zealand – Census 2006 (Statistics New Zealand)

Ethnic Groups in Christchurch City and New Zealand, 2006 Census				
	Christchurch	**New Zealand**	**% Christchurch Total**	**% New Zealand Total**
European	295,095	2,609,589	79.8%	64.8%

Māori	25,725	565,329	7.0%	14.0%
Pacific peoples	9,468	265,974	2.6%	6.6%
Asian	26,631	354,549	7.2%	8.8%
Other	12,651	430,881	3.4%	10.7%
Total	369,570	4,027,942	100%	

Note: 1; The decrease in the European population and the smaller increases in both the Maori and Pacific Island populations are created by the number of people declaring New Zealander as his/ her cultural group. This is reflected in the increase in the 'Other' group. 2; The total population includes those ethnicities not included elsewhere in Census data. If this group is not included in the total, the Asian population is 9.2%.

Table 2 shows that 26,631 Asian people live in the Christchurch area (Christchurch City, Banks Peninsula, Waimakariri and Selwyn). This is a 44% increase over the 2001 Census total. By the year 2016, the Christchurch Asian population is projected to grow to 37,300 people - a growth of 89.3%

During the period between the 2001 and 2006 Censuses (Table 3), the Asian population became the second largest cultural group in Christchurch exceeding that of Maori by 0.2% or around 1,000 people. It is not expected that this cultural ranking will alter in the future.

Table 3
Ethnic Groups in Christchurch – Census 2001-2006 (Statistics New Zealand)

Ethnic Groups in Christchurch City, 2001–2006 Censuses			
	2001	**2006**	**Growth**
European	342,327	295,095	-13.8%
Māori	26,535	25,725	-3.1%
Pacific Peoples	8,103	9,468	16.8%
Asian	18,450	26,631	44.3%
Other ethnicity–other	2,217	12,651	470.6%
Total	397,632	369,570	-7.1%

The variance in the New Zealand male/female group is more pronounced in the Asian, European and New Zealander populations (Figure 1). Maori slightly favour female (14.6%/14.7%), Pacific Island slightly favour male (7.0%/6.8%), Europeans favour females (66.7%/68.4%), the Asian group is split (9.0%/9.4%) whilst the New Zealander group favours males (11.8%/10.4%).

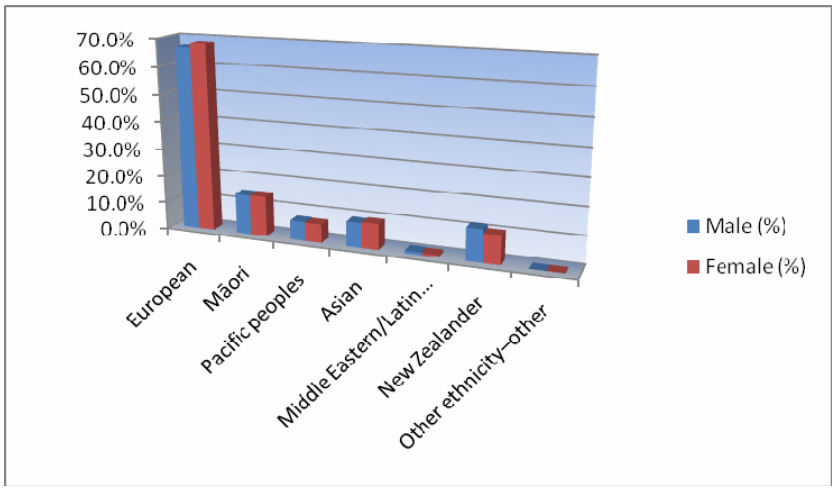

Figure 1: New Zealand groups: age/gender – Census 2006 (Statistics New Zealand).

In the Christchurch population, the variance in the male/female group is more pronounced in the Asian and New Zealander population than any other (Figure 2). Maori slightly favour male (7.9%/7.3%), Pacific Island are evenly split, Europeans favour females (74.0%/76.8%), the Asian favour females (7.5%/8.0%), whilst the New Zealander group favours males 14.0%/12.0%.

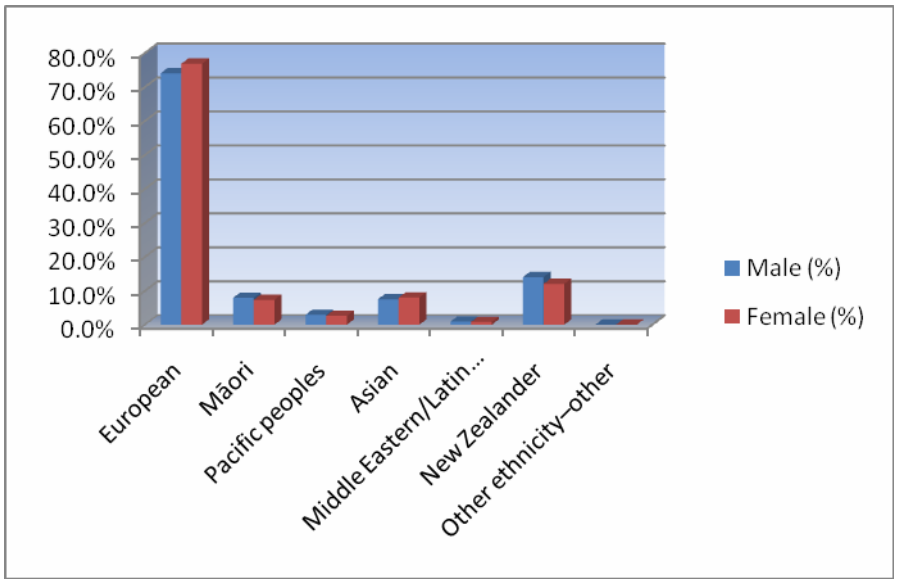

Figure 2: Christchurch groups: age/gender – Census 2006 (Statistics New Zealand).

The growth in the Asian population is shown in Figure 3. Whilst growth is seen across all age groups, it is more marked across both genders in the 15-29 group and females aged 30-64 years. The latter may reflect the increasing number of intercultural relationships. The over 65 growth reflects the increasing number of older immigrants entering New Zealand under family reunion streams.

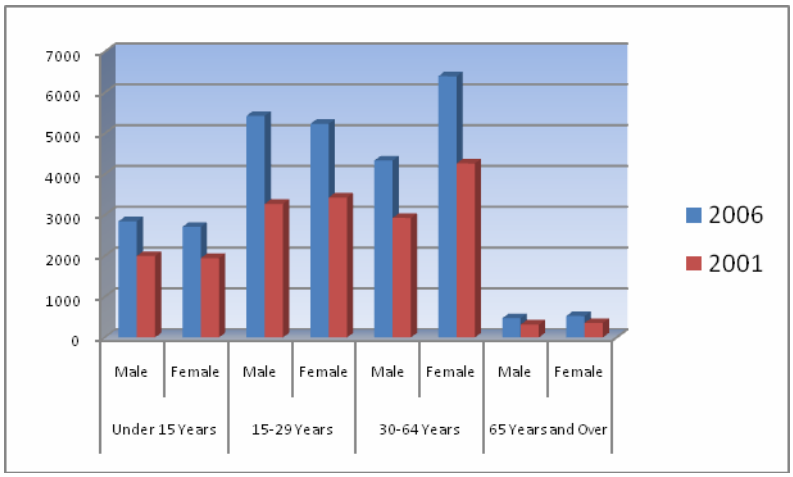

Figure 3. Age/gender in the Christchurch Asian group – Census 2006 (Statistics New Zealand).

SECTION 2: OBJECTIVES AND METHODOLOGY

Objectives

The objectives of the present Asian Healthcare Needs Survey were similar to (but not identical to) the Waitemata DHB (Ngai, Latimer & Cheung. 2001) study:

- What are the healthcare needs of the Asian population; what support systems are commonly used; how are problems handled; are we meeting health needs; what level of unmet need exists?

- What areas of difficulties (perceived and otherwise) are being experienced by health and other professionals with regard to the care and wellbeing of Asian peoples; what are the opinions of Asians living in Christchurch and of the professionals working with the Asian population; what are the solutions for improving health service provision for the benefits of Asian peoples?

- What types of health information - format and language - are required by the Asian population to meet their informational needs both now and in the future

- With the increasing levels of migration into Canterbury, it is vital we future-proof primary health care resources for migrants. To achieve this we must first ascertain needs – both met and unmet.

- To compare the results obtained in our own survey with those of the Waitemata DHB to ascertain any existing national differences.

Methodology

Methodology was based on that used by the Waitemata DHB. The format of their self-completed survey was adapted for Canterbury usage. Our selection criteria excluded those New Zealand-born of Asian descent. It was important we include those newly arrived and those who had been in New Zealand for many years.

The survey was distributed through Asian societies, public libraries, one shopping mall, representatives of the Chinese, Korean, Japanese and Filipino communities, churches and various ethnic forums. It was also available on the Partnership Health Canterbury website and distributed online to ethnic contacts. Advertising was carried in the Chinese and Korean media.

The collection of data consisted of face-to-face interviews (with both service users and professionals), focus groups and self-completed surveys. (Funding issues prevented a more comprehensive approach.) Surveys were completed and returned during focus groups, by individuals in the post or by societies. Data was then analysed and translated by the authors or volunteers.

Of the 1,000 surveys distributed, 229 were returned. These represented a total of 480 family members. Whilst this appeared to be a low response compared to the survey carried out in Auckland, it represented close to 10% of the total Christchurch Asian population (The Auckland survey represented 0.8% of their total Asian population). Patient focus group numbers were 164 whilst 36 health professionals (including general practice staff, student health, dietary professionals and Chinese traditional medicine practitioners) took part.

In looking at the professional population as a whole, it was important that we did not look to the opinions of just health professionals. Good (or bad) health can result from societal, environmental, educational and other factors just as it can from physical or medical concerns. Thus it was important to seek the opinions of churches, schools, universities, Citizen's Advice Bureau staff, Women's Refugee, various ethnic forums and the ethnic media as well as medical professionals. Due to the fact that Partnership

Health Canterbury has good ethnicity data, it was a simple matter to access the most relevant general practices.

Initially, English language surveys were put into the field prior to Christmas 2007. Subsequently, Chinese and Korean language editions were put into the field at the beginning of February 2008. A cover letter in Japanese was also added to the English edition.

No pre-test was undertaken in Canterbury, assuming that the survey used by the Waitemata DHB would suit our purposes.

The results of the survey reflect the input of all respondents plus comments and suggestions made in all focus groups.

It is important to note that it is recommended that this survey be undertaken in the future on a much wider scale to ensure a broader reach. Whilst this will not necessarily alter the outcome of the present survey, it may – in time – reinforce current findings. The implementation of recommendations from the current survey should not be a factor in the timing of any future survey.

SECTION 3: RESULTS AND COMMENTARIES

Part 1: Survey Results

3.1 Demographic profile of respondents

To avoid duplication of cost, our survey template mirrored that used by the Waitemata DHB. Figure 4 shows that the total female response (67%) was greater than the male response (33%).

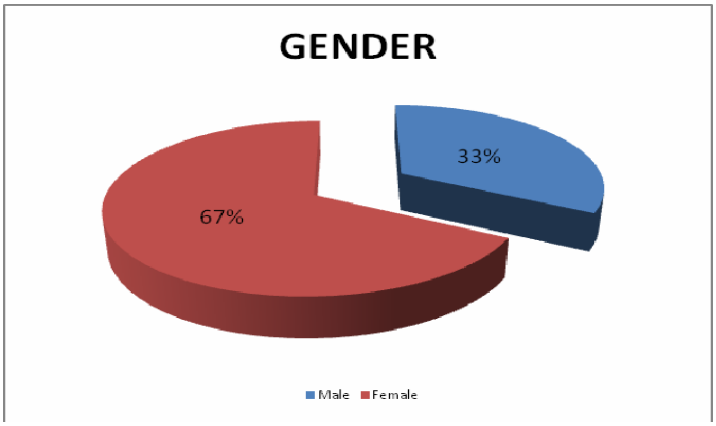

Figure 4. Gender groups of respondents.

229 individuals completed the survey on behalf of 480 family members. Figure 5 shows that the highest number of completed surveys came from the 25-44 age group (51%). This was followed by the 45-64 age group (31%), the 15-24 age group (8%), the 65-74 age group (6%), and finally the 75+ age group (4%). (With the exception of the 65 + group, the age response was similar to Waitemata. The response of the Waitemata 65+ group was 3% as opposed to 10% in Christchurch.)

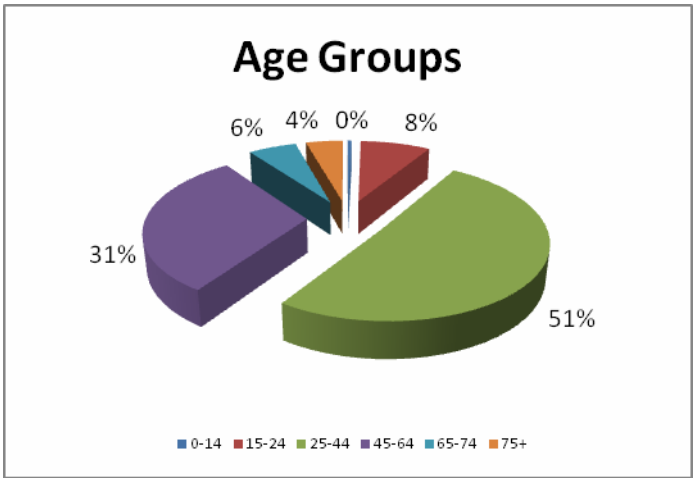

Figure 5. Age groups of the respondents.

The majority of the individual 15-24 age group (89%) was the Chinese group (Table 4). This may have been the result of the immigration process. Distinct differences were noted in the manner in which differing cultures immigrated to Christchurch. Both Koreans and Japanese tended to arrive as family groups whilst the Chinese as individuals – mainly students. Thus the Koreans and Japanese tended to be more (initially) family-orientated than the Chinese. Korean families showed a tendancy to separate for work more than other cultures. By this it is meant that the husband returns to Korea for extended periods for work-related activities. This adds further pressure on the family nucleus.

Ninety percent of the 75+ age group was Chinese, whilst the largest response for the 25-44 age group was Japanese. The Korean response was more even over the three age groups 25-44, 45-64 and 65-74.

Table 4
Ethnic Response by Age and Ethnicity

	Chinese	**Korean**	**Japanese**	**Filipino**	**Others**
0-14	0%	0%	100%	0%	0%
15-24	89%	11%	0%	0%	0%
25-44	24%	32%	40%	3%	1%
45-64	27%	36%	29%	7%	1%
65-74	46%	38%	8%	0%	8%
75+	90%	10%	0%	0%	0%

Thirty-five pecent of the individual responders (Figure 6) were Chinese, making that ethnic group the largest. This was followed by Koreans (31%) and Japanese (30%).

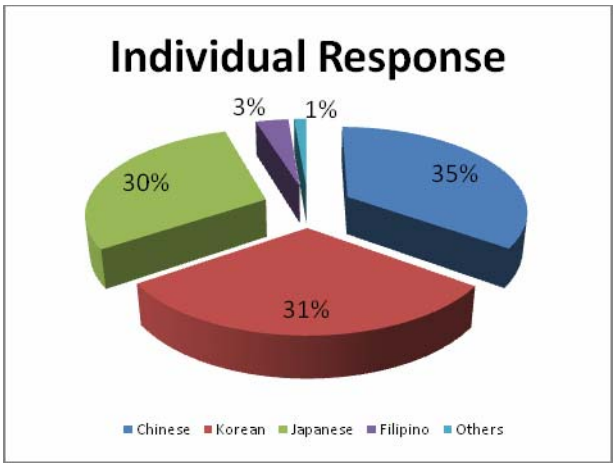

Figure 6. Response by individual ethnicity.

When the total response (Figure 7) included family members, the Japanese group was the largest with 38%. This was followed by the Koreans (31%) and the Chinese (28%) indicating a direct result of immigration patterns with more Korean and Japanese arriving in New Zealand as a family unit whilst the Chinese tend to arrive as individuals.

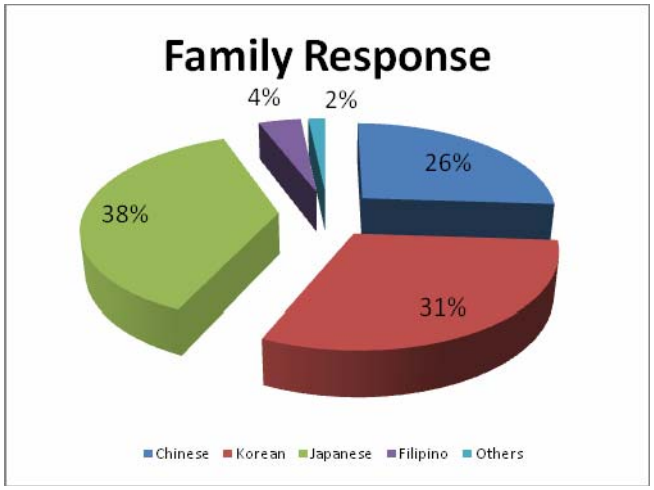

Figure 7. Response by ethnic family group.

Table 5 sets out the total population of Partnership Health Canterbury by ethnicity. Although the total Asian population of Christchurch is 7.2% (Table 2), it only makes up 5.02% of our enrolled population. (See Section 4; Patient Enrolment)

3.2 Partnership Health Canterbury Population Grouping

Table 5
Total Population by Ethnicity of Partnership Health Canterbury (May 2008)

	New Zealand European	Maori	Pacific Islanders	Asian	Not Stated	African	Middle Eastern	Other	Grand Total
0-14	50009	7187	2518	4077	3208	358	248	2857	**70462**
15-24	32796	3811	1319	2782	2605	174	125	2257	**45869**
25-44	74932	5769	2134	6151	6220	344	244	576	**96370**
45-64	77059	3341	1245	3800	5106	125	183	399	**91258**
65-74	22391	592	220	687	1247	15	18	83	**25253**
75+	23236	237	77	310	1230	8	10	62	**25170**
Total	**280423**	**20937**	**7513**	**17807**	**19616**	**1024**	**828**	**6234**	**354382**

Totalling 27.4%, the 45-64 age group is the largest of our enrolled population; a direct indication of our aging population.

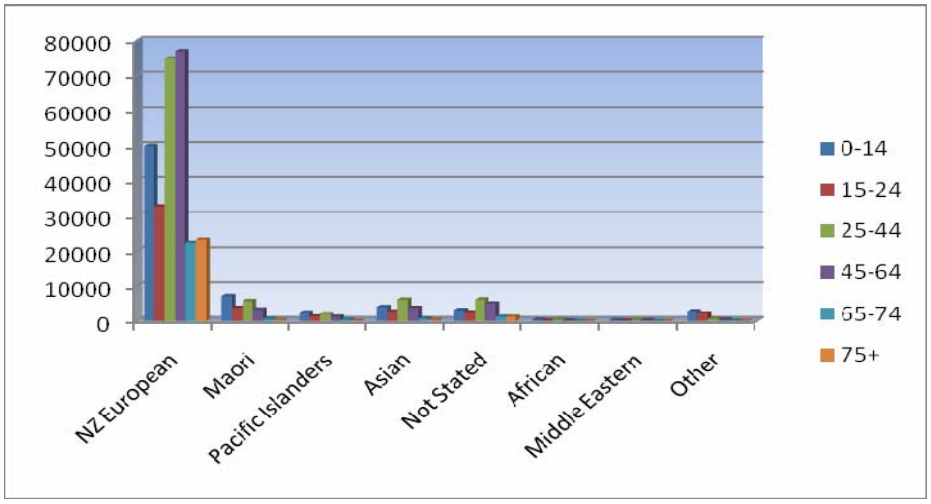

Figure 8a. Ethnic population of Partnership Health Canterbury (inc European).

Of all other ethnic groups, the largest is the 25-44 age group (Tables 8a and 8b). Within this group the Asian group is the largest (34.5%) followed by Maori (27.6%).

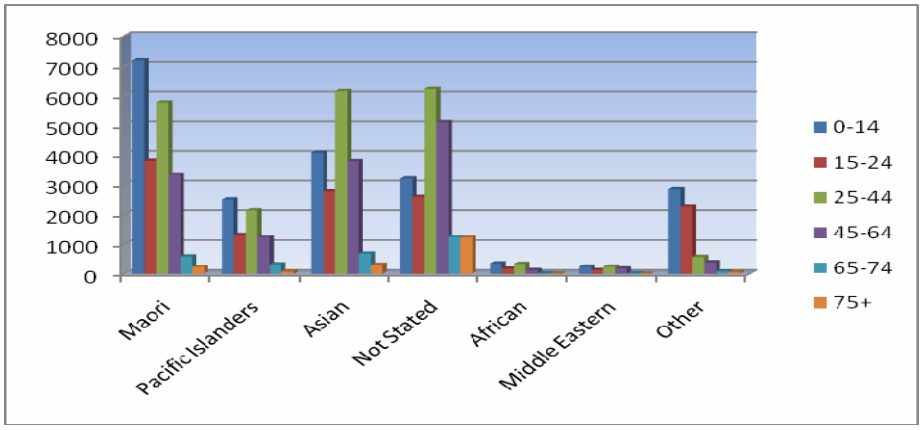

Figure 8b. Ethnic population of Partnership Health Canterbury (ex European).

3.3 Language Ability

Of the total respondents, only 23% indicated English fluency (*Figure 9*); whilst 31% indicated they could "communicate". 8% of the total population indicated an inability to speak English with a further 19% indicating limited English skills. (In the Waitemata study, 21% of respondents indicated limited or no English language skills.)

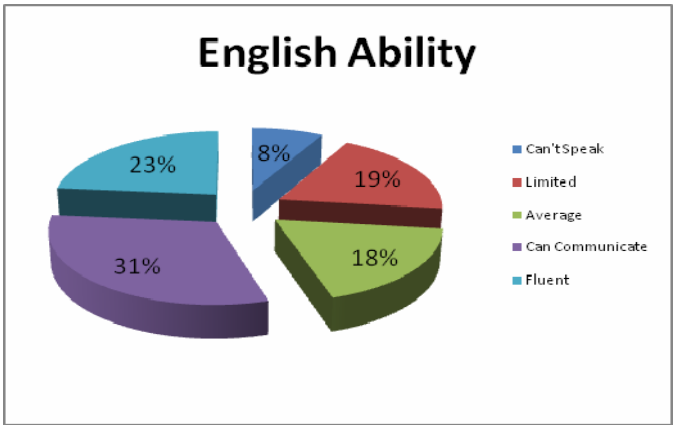

Figure 9: English ability of all respondents

It is clear that language skills differed by a great degree between the individual ethnic groups (*Figure 10*). Overall the Japanese showed the highest level of English language skills with 64% indicating above average English capability, Chinese (53%), and Koreans (40%).

The Chinese showed the highest level of limited or no English ability (34%), Koreans (30%) and Japanese (10%). The Chinese showed the highest level of no English skills with 12%. This may be an indication of the increasing number of older parents immigrating to Canterbury under family streams.

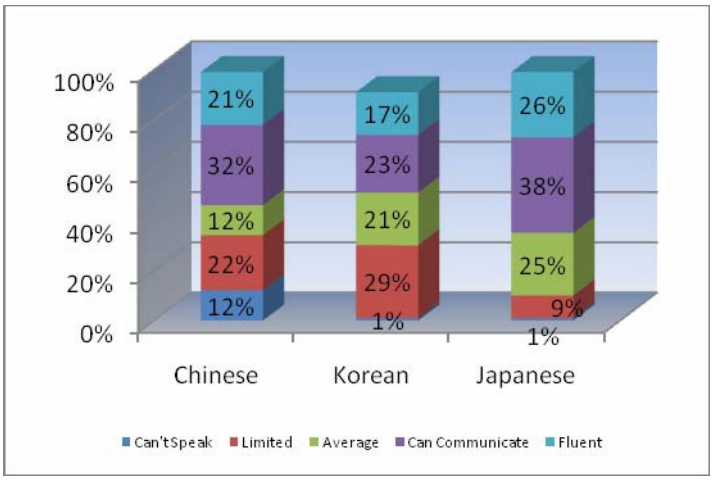

Figure 10. English ability by ethnicity.

3.4 Educational Attainment

46% of respondents (Figure 11) attained educational qualifications above that of a Bachelor's Degree prior to arrival in Canterbury. (At the same level, Waitemata DHB was 53%.)

25% of respondents - identical to Waitemata - indicated their highest educational attainment on arrival as being secondary level or under. This was more noticeable amongst both male and female above 45 years pf age.

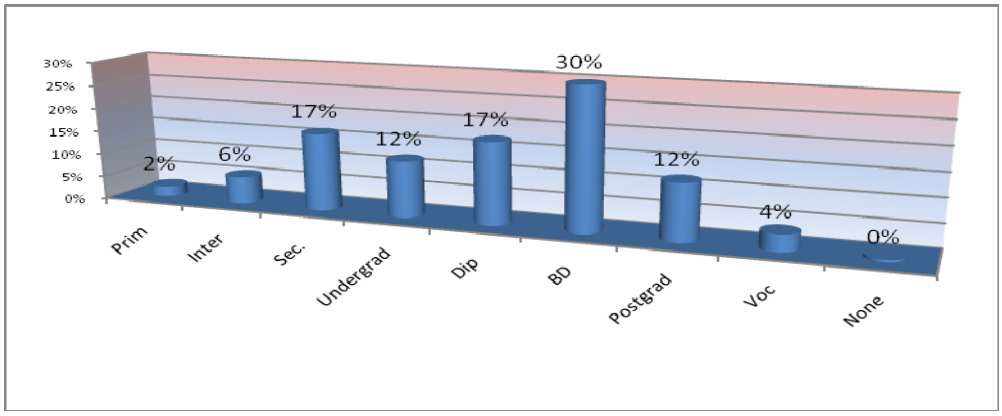

Figure 11. Educational attainment of the total population.

The Korean group had the highest level of educational attainment with 74% reporting qualifications above that of a Bachelor's degree. At the same level, both the Chinese and Japanese groups were level at 30%. (Figure 12)

Forty percent of the Chinese group, 22% of the Japanese and 14% of the Koreans arrived with primary/secondary school qualifications - 24% female, 22% male. Invariably these were older respondents. Of the total respondents over the age of 45 with primary/secondary qualifications, 31% were female and 32% were male.

Of the 25-44 age group, 20% of females and 12% of males arrived with primary/secondary qualifications.

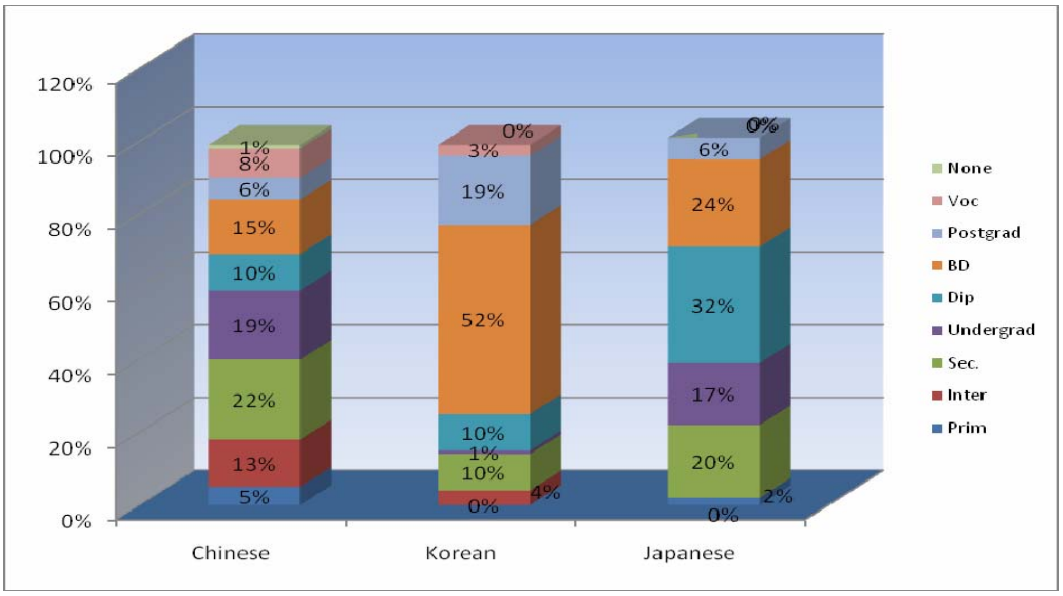

Figure 12. Educational attainment by ethnicity.

3.5 Family Health Indicators

'Relationships with New Zealanders' and 'Employment' were the two biggest issues with all respondents (Figure 13). 59% of respondents reported both neutral and negative relationships with New Zealanders and 48% reported neutral and negative employment experiences. Of concern is the high number (26%) reporting neutral or negative personal relationships. Highest amongst the Japanese respondents (39%) and the Korean respondents (34%), it was also alluded to on a number of occasions in the Korean focus groups.

On the whole, communication with children was seen as positive (65%) with only 20% reporting that it could improve. Within that group the Koreans reported the highest level of communication difficulties at 33% - Chinese 21%, Japanese 18%. The Chinese were the largest group to report no child experience.

Whilst 61% of parents were satisfied with their children's education, language was reported to be the major difficulty in this area.

Only 37% of respondents felt that their employment is positive, however 68% felt that there are many employment opportunities.

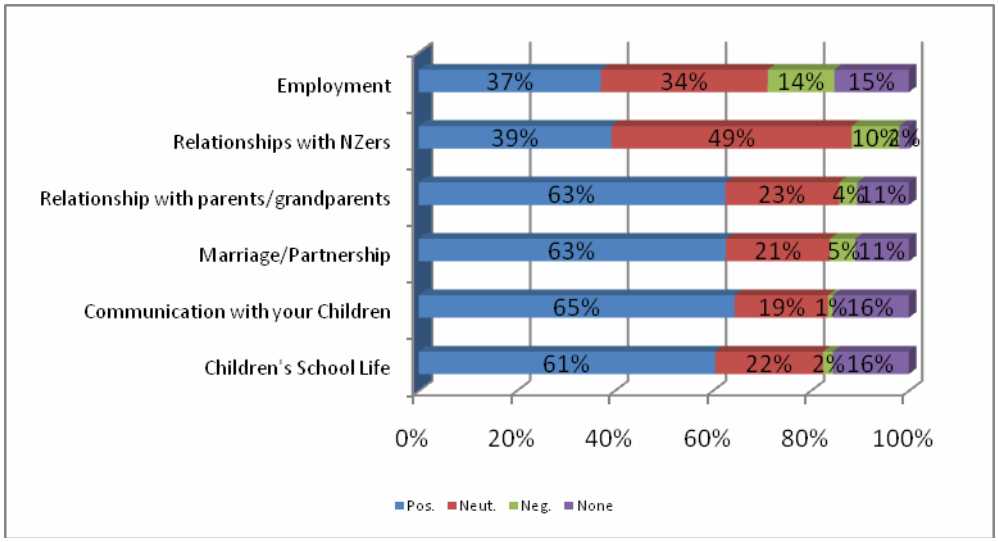

Figure 13. Personal and family experiences in Christchurch.

The overwhelming percentage of respondents felt that external support systems are positive (Figure 14). 78% felt there are many opportunities to improve their English. A high level of participants (82%) reported friends from within their own culture whilst 68% reported having New Zealand friends.

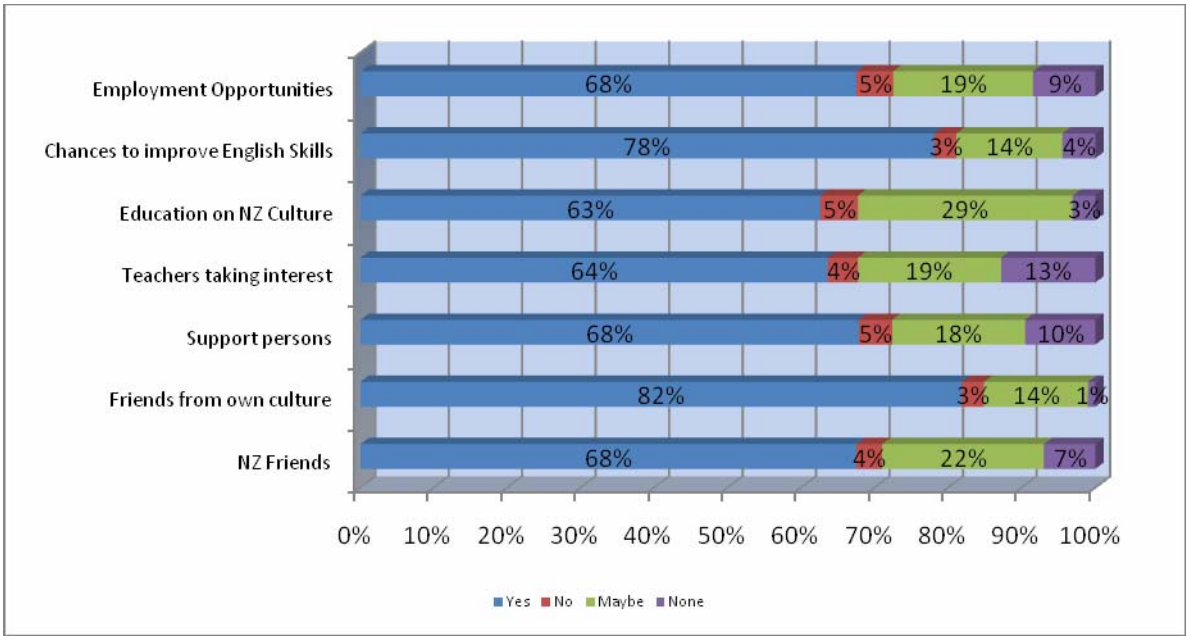

Figure 14. Support systems.

3.6 Health-Related Risk Factors

Of the four major risk factors, (Figure 15a) smoking was the major concern (29%). Interesting to note that in all factors, it was the overall female response that registered the highest amongst the concern responses. In their own societies, it is not common for women to smoke or take alcohol. Thus we can assume that many of the negative responses were made by females concerned about their husbands/partners.

Gambling is becoming of increasing concern. 736 calls were received by the Auckland-based Asian Gambling Hotline in 2006. This was an increase of 12.2% over 2005. Whilst over 70% of these callers were male, the number of female callers increased by 37.2%.

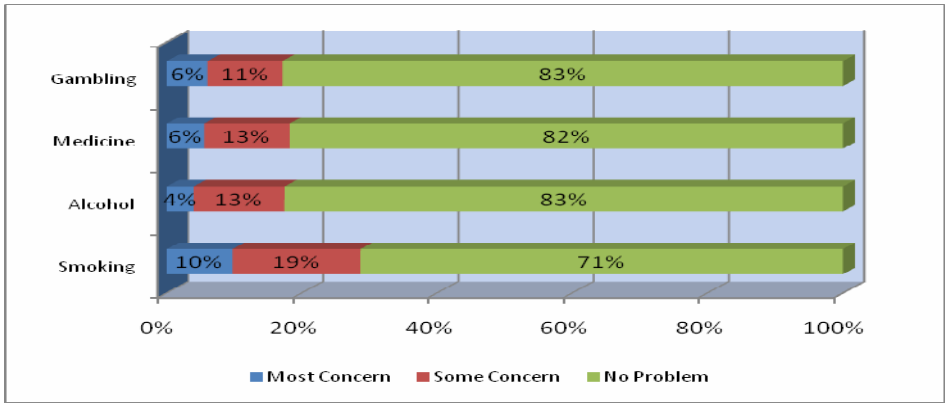

Figure 15a. Health risk factors.

Amongst Chinese respondants (Figure 15b), 37% reported smoking to be of concern and 26% reported gambling to be of concern. This was spread across all age groups with a higher incidence amongst the 15-24 group.

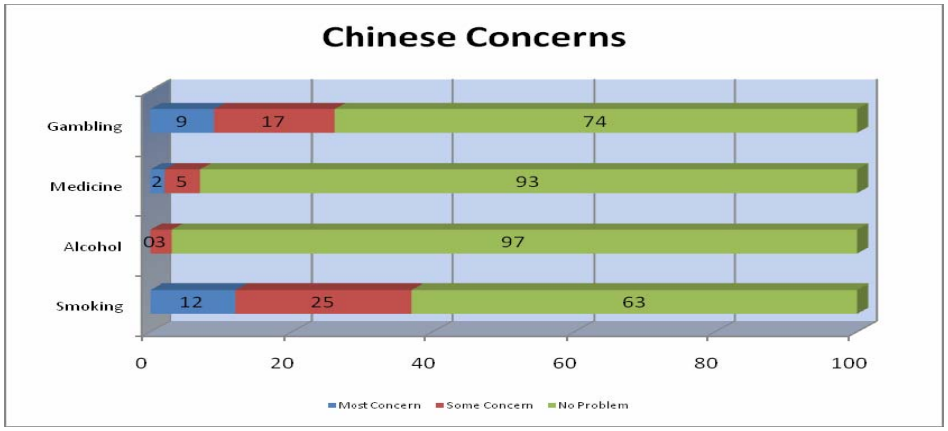

Figure 15b. Chinese health risk factors.

Smoking was an issue with 26% of Korean respondents *(*Figure 15c). Other isssues were not significant.

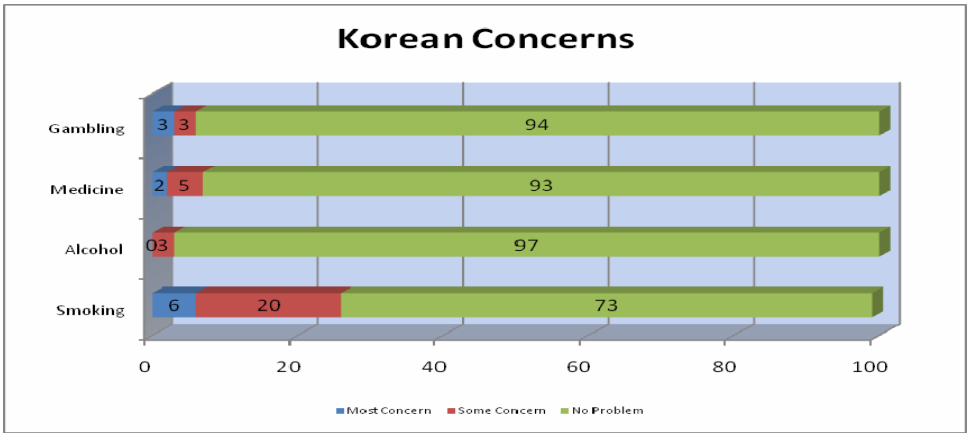

Figure 15c. Korean health risk factors.

The Japanese group reported (Figure 15d) concerns over all four of the indicators surveyed. Alcohol concerns registered the highest (28%) followed by smoking (22%), medicine (19%), and gambling (16%). With the exception of one male, all responses were from female respondents; the 25-44 age group being the most 'at risk.'

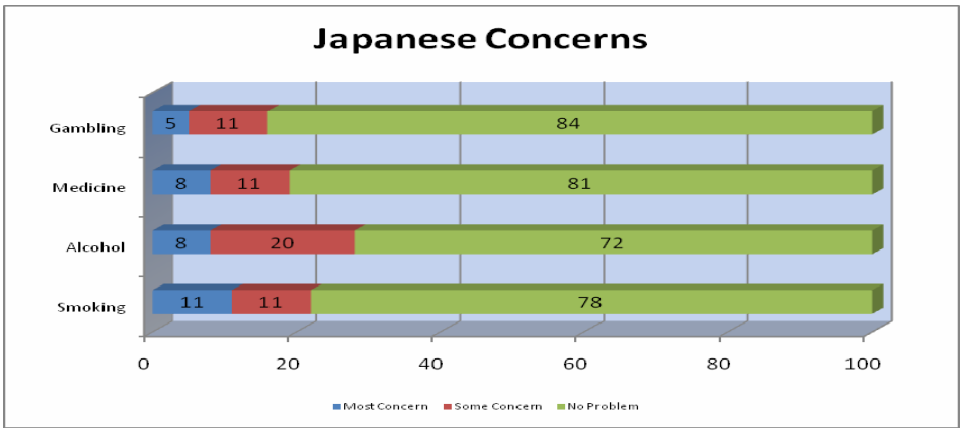

Figure 15d. Japanese health risk factors.

3.7 Support Systems and Coping Mechanisms

The manner in which respondents dealt with personal and health issues was most revealed in questions about how they coped in New Zealand (Figure 16). Of most concern was the high number of respondents (49%) who chose to return to their homeland for medical treatment. This response was mirrored in the Waitemata survey. 58% used the Public Hospital's Emergency Department, often as the first choice for medical treatment. In their home countries, they learn that the New Zealand health system is free. Some international New Zealand advertising *actually* states this.

Language was a factor in a number of responses. 24% of the participants (adding the "often" and "sometimes" category) requested an interpreter service; going with family or friends was also a factor with 47% of respondents. Usually this was due to language difficulties.

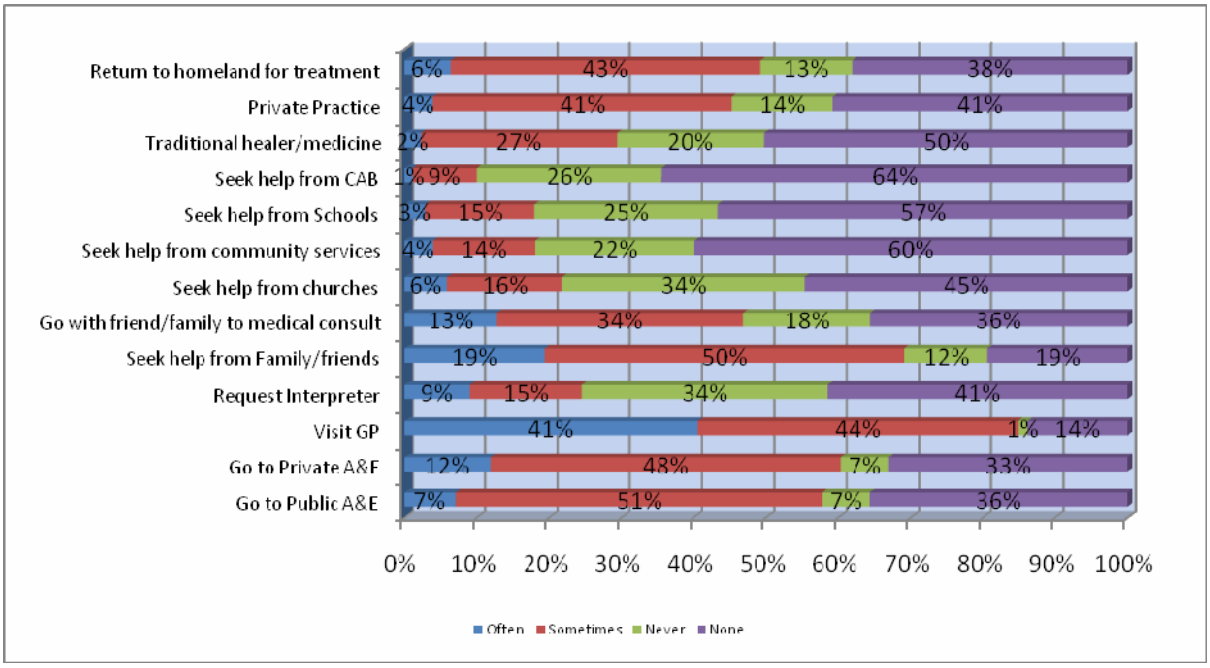

Figure 16. Coping ways.

3.8 Family Health Issues

Overall family health issues are depicted in Figure 17a. General illness (61%) was the major reason for seeking medical help.

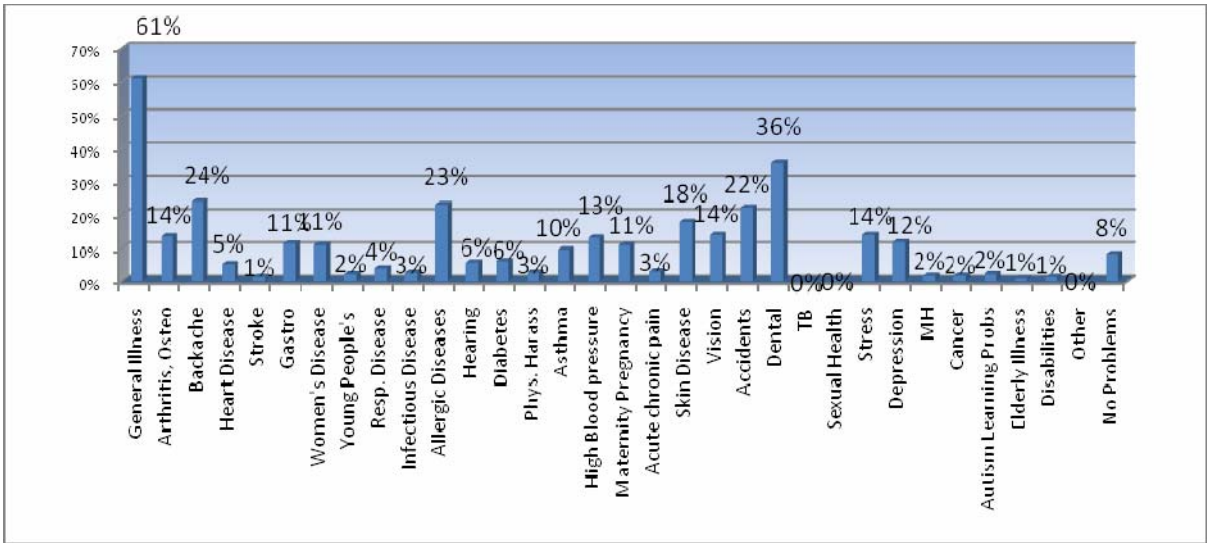

Figure 17a. Family health issues.

Excluding illnesses of a general nature, Figure 17b clearly shows the more common areas of medical concern. Dental issues were the highest with 36% of respondents reporting concerns in this area. (Chinese 29%; Korean 27%; Japanese (41%).
This was followed by backache (24%), allergic diseases (23%) and skin diseases (21%). Accidents were responsible for 22% of medical visits. In discussing backache with several focus group attendees, it may be that a significant number of these relate to osteoporosis.

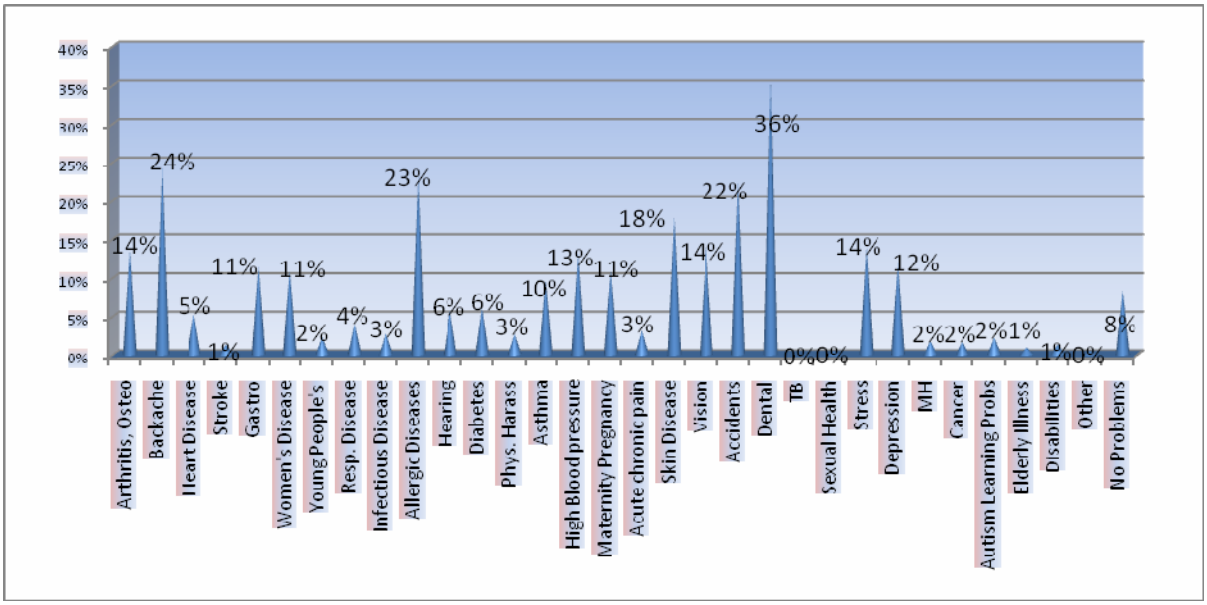

Figure 17b. Family health issues excluding general illness.

3.9 Use of Medical Sevices

79% of respondents made use of general practice services (Figure 18). This figure alone is cause for concern. It leads to an important question – what did the other 21% use for health care? 14% of respondents claimed to have never been to a GP with 37% claiming not to have been to a public hospital. This would appear to correlate with the high number of people returning to their homeland for treatment. When discussed in focus groups, it was not uncommon for individuals to have waited until a shopping list of symptoms was developed before returning home for treatment.
For both children and adults, the use of dental services figured prominently – 35% and 37% respectively.

The use of the emergency department was high at 32%. This may include those people using the ED for normal medical care.

The apparent low usage of mental health services (2%) and accessing private psychiatrists (5%) may not reflect the true level of mental health issues in the Asian communities. This may be explained in work commissioned for the Mental Health Commission (Ho, Au, Bedford & Cooper. 2002) *"Mental illness is highly stigmatising in many Asian cultures. In these societies, some forms of mental illness such as schizophrenia or organic brain disorder are conceived of as supernatural punishments for wrong-doings, and as such entail intense shame and stigma. Consequently, many Asians are reluctant to use mental health care, or would delay seeking care until disturbed members become unmanageable."*

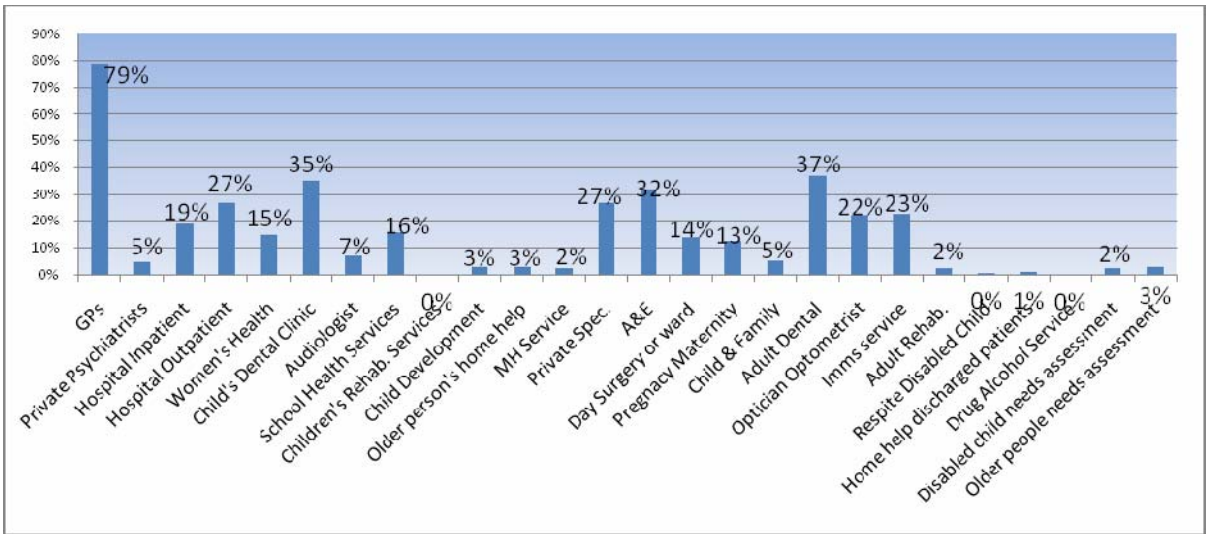

Figure 18. Use of medical services.

3.10 Satisfaction ratings of health services

The majority of these findings reflected those obtained in the Waitemata DHB report. Whilst 60% of respondents found that the attitude of medical professionals was respectful, concerns were expressed in most other areas. It would be easy to dismiss comments made about the New Zealand health system – especially those of cost, waiting times and follow up services – as similiar comments are made by *all* patients (Figure 19)

However, others – communication 52% neutral or dissatisfied; therapeutic assessment/treatment 71% neutral or dissatisfied; service options 66% neutral or dissatisfied; had their foundation in a lack of understanding of just how the New Zealand system functions.

The expectation of immigrants arriving in New Zealand is that medical services will be similar to those in their own countries. In their experience, hospital doctors are "specialists" thus bringing into question the ability of New Zealand general practitioners.

31% of respondents were happy with the interpreter service. This is an interesting comment as at the time of commencement of our survey, general practice had no formal interpretation service. Patients with English language difficulties either brought friends or family to translate or had to pay for an interpreter.

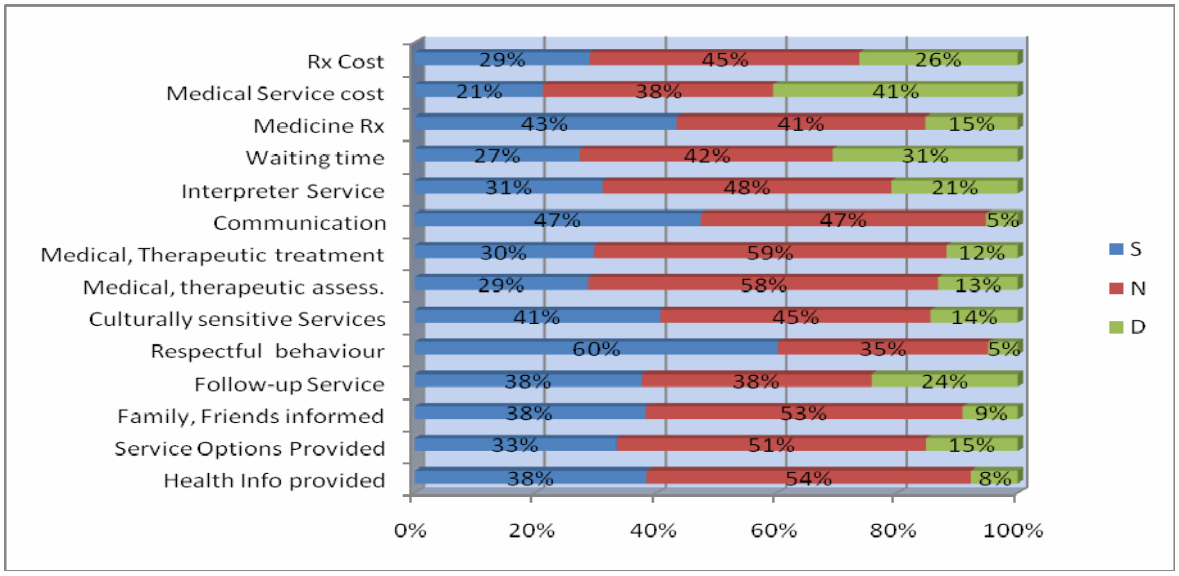

Figure 19. The quality of health services (General Practice).

The overall satisfaction rating for public hospitals was low (Figure 20). Many of the survey results can be explained by individual expectations as outlined above. Concerns did exist with the hospital interpreter service; reported from both the focus groups and written survey comments. Often waiting time was increased trying to find a suitable interpreter.

53% indicated a negative view of health information provided. An interesting factor is the large percentage (46%) reporting a neutral view of public hospital costs. (The fact that – on hospital discharge – patients are referred to a GP for which they must pay, may be being perceived as a hospital cost.)

Again medical assessment (72%) and treatment (71%) were seen as problematic. This could be seen as a direct comment on the differences (perceived and otherwise) between western and eastern (traditional) medicine.

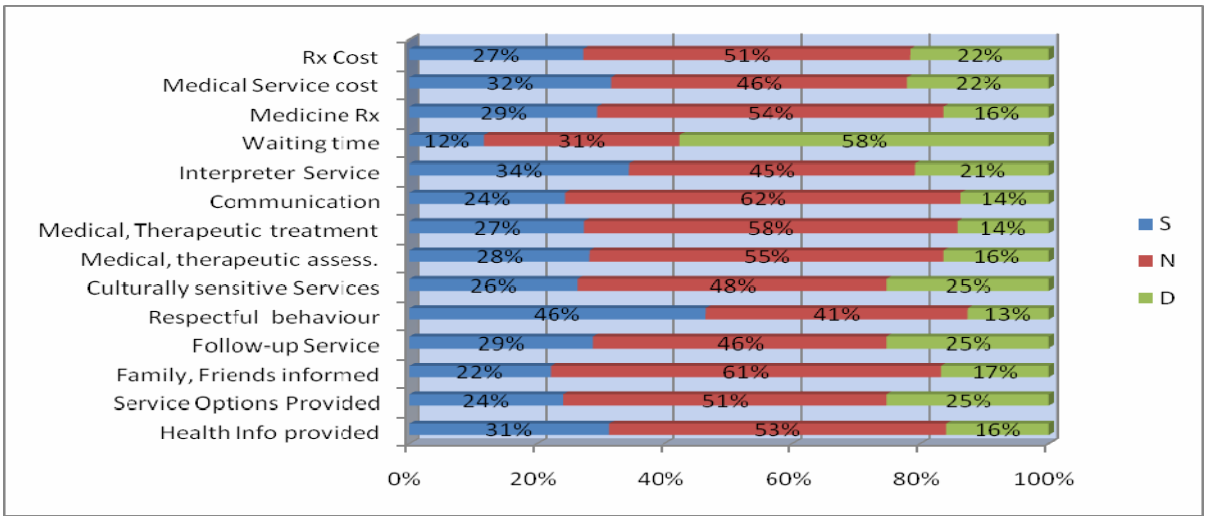

Figure 20. The quality of health services (Public hospitals).

Whilst the overall satisfaction ratings for private hospitals (Figure 21) were higher than those for the public service (with the exception of cost), it would appear than concerns existed in many of the same fields - the highest being medical assessment and treatment.

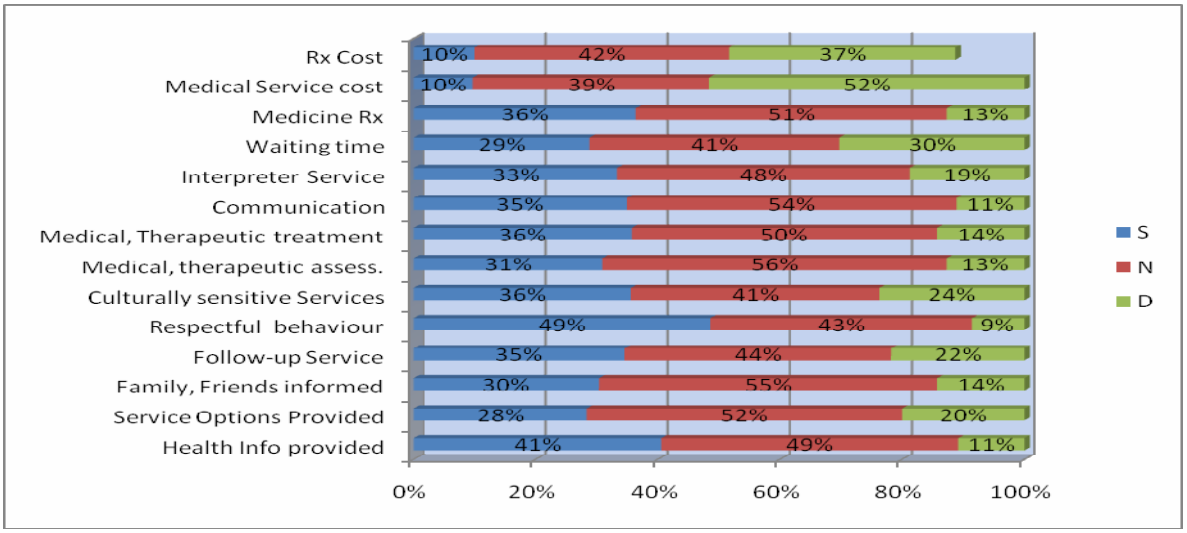

Figure 21. The quality of health services (Private hospitals).

3.11 Information Access and Service Development

The overwhelming majority of respondents (72%) suggested that a comprehensive language-specific descriptive of the New Zealand health system and the manner in which it functions would help to overcome many problems and concerns (Figure 22). Public A&E (64%), women's health (59%), children's health (50%) and dental services (49%) all polled highly.

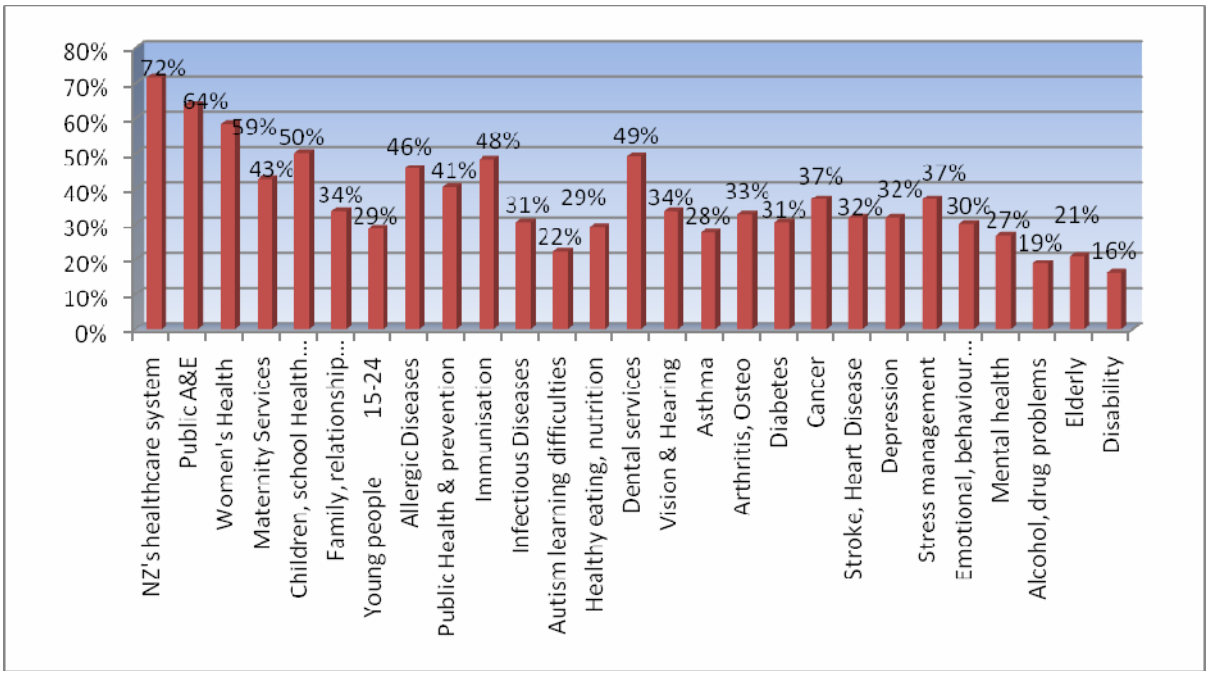

Figure 22. Language-specific availability.

Figure 23 shows that:

- 67% of respondents indicated a need for an Asian Helpline staffed by Asian-speaking professionals.
- 62% wanted to see more Asian support workers.
- 59% wanted to see more Asian professionals
- 58% wanted to see more Asian publications.

Umbrellaing over all these comments is the desire for an Asian Health Centre staffed by professionals who have the language and cultural skills to meet the need of Asian migrants. Precedence has been created in Christchurch with the development of Pacific Trust Canterbury – a one-stop medical centre for Maori and Pacific Islanders.

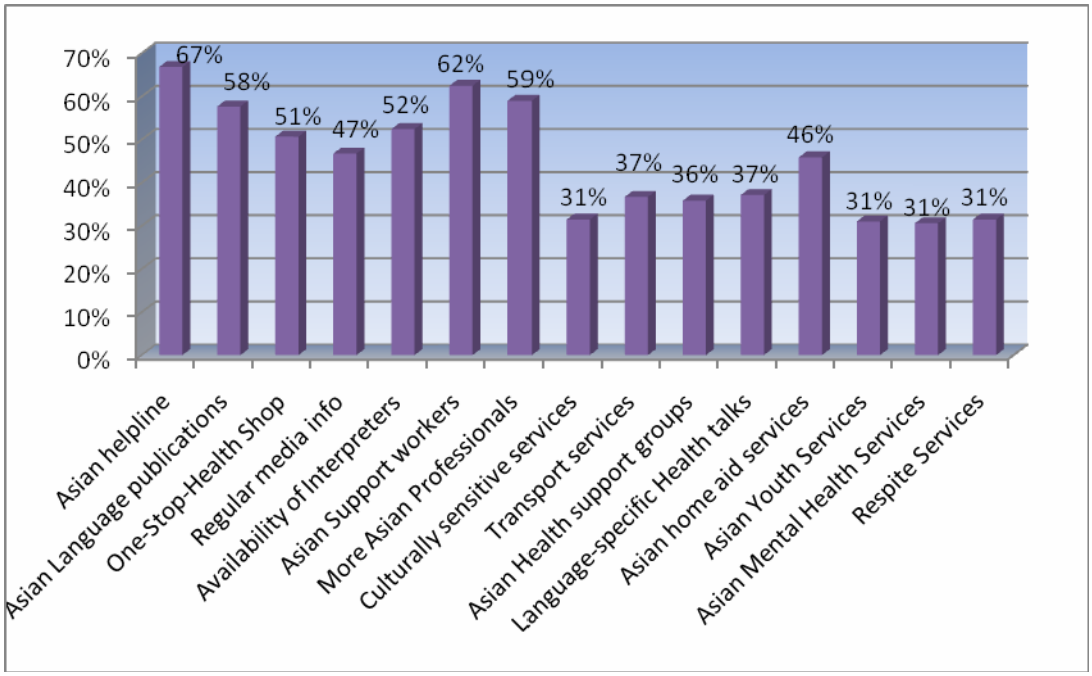

Figure 23. Suggestions for future development.

Part 2: Focus Group Results

3.12 Health Professional Focus Groups

The following are relevant comments made by health professionals (see page 9) interviewed:

Health

- Many students are going to a GP for sexual health matters instead of a university clinic. Sexual health issues are increasing. Focus group members identified the contributing factors as:
  - Lack of education in their home country
  - Male refusal to use condoms
  - Pressure on women to be sexually active
  - Lack of health promotion
  - Lack of use of sexual health clinics due to cultural embarrassment and concerns over privacy. (Medical privacy does not exist in China; hence the entire concept is alien.)
- One common comment amongst all health professionals interviewed was that many Asians have eating disorders; mainly amongst females who have a 'fear' of gaining weight. Many who are already quite slim ask for a 'diet pill' to lose fat. Much pressure is applied – mainly by Chinese males. A general belief exists that a Western diet will make them 'fat'. (The research team adds that whilst there is some truth to this, some weight gain arises from a better diet than they are used to. Lack of knowledge of healthy eating habits can also contribute to weight gain.)
- Many Asian women have a negative idea of the 'pill'. *("My mother told me it causes cancer!")* Similar comments were stated at both general practice and focus group interviews.
- An increasing number of patients are presenting with fatty liver diagnoses. (Fatty Liver is a build up of fat in the liver cells. It can be a sign that more

harmful conditions exist. Although the cause of this build up is not really understood, it is known to be associated with obesity and diabetes.) It is difficult to persuade the patient to access treatment as they do not understand the consequences.
- Mental health issues are considered by focus group members as the major concern; further broken into anxiety, adjustment, isolation, eating disorders and addiction (gambling, late night internet) (Asian Gambling Connection, 2008)
- Lack of understanding of the role of panadol – seen as a panacea and proof that New Zealand General Practitioners know little.
- Non-alcoholic steatohepatitis (NASH) is an increasing presentation leading to cirrhosis http://digestive.niddk.nih.gov/ddiseases/pubs/nash/)
- Few Asians go to hospital for dietary advice/treatment. It does not occur to them that the hospital might provide this service. Those who are aware of the service will not go in case they meet someone they know. They see a stigma attached to services such as these. Will only go to hospital when the problem becomes acute.
- At the Traditional Chinese Medicine Centre, patients are charged a $35 consultation fee plus $10/day medical costs. This is seen to be cheaper and more beneficial than Western medicine. (Some Chinese Traditional Medicine Practitioners raised the question: Why cannot the Traditional Chinese Centres be included in capitation payments?)

Health Awareness

- Overall medical awareness is lacking. Increased education is required to get health messages across. A general suspicion of the health system exists.
- Increasing number of Permanent Resident students who add pressure to health resources.
- The non-utilisation of health services is compounded if the patient does not have Permanent Residence. Assuming that they have/should have insurance is not the answer.
- Language-specific warning data on websites re self medication is needed.
- When one appointment is booked, often whole families turn up expecting to be seen at the same time for the one cost.
- An Asian Health Centre is a positive idea for initial contacts. Downside of this maybe one of increasing isolation due to even less exposure to Kiwiana.
- It is concerning to see Asian migrants adopt a Western diet with little or no exercise.
- Sexual health problems revolve around contraception; will not use the pill and contraception is avoided by many males. Pregnancy termination is used as contraception.
- Many arrive in New Zealand with a "caseful of drugs". (Antibiotic and other medicine-related.) Medical staff often do not know what the patient may be taking, thus the risk of drug interaction is high. Many immigrants will not tell medical staff that they are self-prescribing. Newly arrived students are counselled against using brought-in medicines through emphasising the potentially lethal side effects.
- Body mass index for Europeans does not apply to Asians who present with severe self-image concerns (this is mainly in the female population).

Other

- An increase in Korean families is being seen in healthcare settings. The challenge being faced by health practitioners is the language barrier.
- Extended periods of time spent on university study affects many personal relationships adding to mental health issues.
- Insurance does not cover medications unless they are prescribed by a specialist.

- Increasing population of smokers mainly among males from China, Korea and Saudi Arabia.
- Any cost is seen as a problem. An expectation exists of free health care.
- Do not like to be sent from a free hospital to a General Practitioner for follow-up care. Seen as too expensive.

Other Government Departments
According to the health professionals participating in focus group, it was noted that some WINZ staff offer "sickness benefits" for the elderly as a way of getting around the lack of financial support for new immigrants. For instance, to qualify for superannuation, immigrants at or above 65-year-old must be a New Zealand citizen or have lived in New Zealand for ten years.

3.13 Asian Participant Focus Group Comments
In addition to the topics that emerged from the focus group discussion, the following are a collection of group members' direct quotes:

- "*Western doctors don't understand our ways*"
- *"I need to be able to talk to a doctor in my language*."
- "*Why can't we go and see a specialist directly*?" Seeing a General Practitioner, to be then referred to a specialist is seen as unnecessary expense.
- "*It costs too much*."
- "*I went to see the doctor and all I got was panadol*." A common statement, indicating a lack of basic medical knowledge; an area every New Zealander grows up with. The research team notes that when a New Zealander feels flu or cold symptoms, he/she buys panadol at the supermarket. When Chinese or Koreans experience similar symptoms, they go straight to the doctor – an unnecessary visit for a New Zealander. For the Chinese in particular, a simple cold is not straight forward. The cold may be:
    - caused by cold air
    - with a sore throat
    - caused by air conditioning
    - with a temperature
    - any number of other causes

  It was explained during focus groups that each of these 'different types' of cold has a particular remedy. Panadol is seen as being ineffective because it is used for everything.
- Concern is also expressed that "free" hospital treatment is followed up by GP treatment for which payment is required.
- Many Chinese are resistant to Western medicine believing Chinese medicine is superior.

Even within cultures, medical treatment is viewed differently. For example Chinese understand that medical treatment needs to be slow to be effective. Koreans on the other hand, want quick treatment with quick resolution.

3.14 Survey Comments
The following comments were gathered from the open-ended section of the questionnaire filled in by the Asian participants:

- *A detailed booklet on the New Zealand healthcare system would be very good*
- *GPs only give a simple solution which often isn't enough to relieve the pain*
- *Two major problems for Asians needing mental health services. One is the language. Not only are they not able to explain their symptoms accordingly, a cause of the stress might actually be the stress from communication difficulty. Secondly, when using a translator, or staff from own nationaility, there is a worry about privacy in a small Asian community. Especially anything about mental health problems is very sensitive. People might stay away from getting service because of privacy*

- *Lack of understanding of the role of a GP and why one needs to be seen prior to a specialist. GP appointment times are too short*
- *Because we cannot read English properly, we get information from elsewhere. Sometimes this is the wrong information*
- *A service where the patient's language is spoken*
- *A community centre where the elderly can go*
- *A service they can ring (in their own language) if they wish to talk to someone or there is someone there who can help*
- *Because of the lack of sex education in their own country, most young women have no knowledge of how to protect themselves. Because of cultural embarrassment, they do not seek help*
- *Lack of Asian professionals*
- *Home stay people are seen not to be doing their job. Many students leave their home stay soon after arrival*
- *Sometimes prayer is seen as the only solution (*This seemed to be a strongly held belief*)*

SECTION 4: DISCUSSION

The research highlighted a significant number of issues which are deserving of discussion. Among these both language and culture were areas of major concern. Other areas of discussion included educational levels, migrant expectations and the manner in which medical treatment differs from individual home countries.

Language

Language is an ability which is difficult to measure. It is the single biggest issue facing migrants to Canterbury. Without language, the understanding of the New Zealand health system (and much else) will remain a mystery.

Should an Asian patient not understand – nor hear properly – medical instructions, he/she will often not ask for the treatment to be explained again. This is seen as a loss of face. Although many are able to speak English, comprehension is a concern. It cannot be assumed that even though a person may speak English, that person will understand what is being said; the ability to communicate not necessarily meaning an ability to comprehend. This assumption negates cultural sensitivity. Coupled with the English language must be the language of health.

New Zealanders tend to speak too quickly; generally responding to a non-native English speaker by raising his/her voice rather than slowing speech down. *Mutually* communicable language is a vital – and often little regarded – factor in the delivery of health care.

Many Korean mothers feel socially isolated in New Zealand due to poor language skills. This is compounded by the many Korean males returning to their home country for extended periods to work.

Soon after the survey was instigated, Partnership Health Canterbury rolled out the Department of Ethnic Affairs Language Line to all general practices in its jurisdiction. This is a free service to both medical staff and patients. It is hoped that this will avoid future use of family members for translation purposes.

It is a lack of understanding which contributes to many of the health concerns amongst immigrants. Currently immigrants receive a basic pamphlet (in English) on arrival, which many do not understand. The two pages devoted to health in this booklet make unfortunate assumptions:

- That immigrants understand what a family doctor or general practioner is. (In most Eastern countries no such type of doctor exists.)

- To find a general practitioner, it advises to look in the White Pages or online. In some Asian countries, people have no experience of phone books, let alone White Pages. It also assumes that the immigrant has English skills and access to phone books or a computer.
- "Phone your GP" for information about after hours care – if the English language is a problem, the suggestion is not very helpful.

Cultural Aspects

Culture plays an enormous – and often misunderstood – part in the ability to communicate. Many cultures – particularly in the East – are taught never to question anyone in authority - including medical professionals. Thus treatment regimes are accepted *without question*.

The understanding of cultural differences is important when analysing Asian research. Often answers will differ depending as to whether the question is asked orally or is part of a written questionnaire. Much of this revolves around the Asian perception of 'face'. Dr Jane Chin (Mental health, undated) explained 'face' as the "*…pride of your parents, your immediate relatives, your extended relatives, and all your dead ancestors rolled up into this brand you will forever bear on your forehead for the rest of your life. Essentially, if you don't excel …, then you will "lose face" and bring shame not just to yourself, but more importantly your parents, your relatives, your ancestors, and any being dead-or-alive that would bear the same last name as you.*"

When interviewing Asian subjects, it is important to understand this context. Although many Asian peoples may tell an interviewer what he/she feels the interviewer wishes to hear, a written questionnaire may be completed more accurately. In a similar context, the word 'no' can actually mean 'yes'. Many Chinese - for example - may express concern about smoking but will not admit to being a smoker.

For example, in the recently released New Zealand Health Survey (Ministry of Health. 2008a) the incidence of smoking amongst Asians (11.2%) is stated as being the lowest of any ethnicity. Our own survey found that 29% of Asians (*Figure 15*) were concerned about smoking. The difference lies in the manner in which questions are asked.

This is not to suggest any dishonesty on the part of the interviewee. It is more a question of saving this 'face'.

Asians cultures view interpersonal relationships quite differently from those of western cultures. However, within Asian cultures yet more differences exist. For example, Koreans and Chinese value the input of the church far more so than the Japanese. For the Chinese this is a surprising factor given the lack of presence the church is allowed in China.

Comments were made by Korean parents that "*we get depression from our children*!" The same statement could be made by any parent, but what is meant here is that when the children are depressed, mothers become depressed as they see neither answers nor support from absent husbands.

Many young Koreans wish to assimilate with New Zealanders, especially at universities. However when they begin to act in a New Zealand way, parents object, believing they are Korean and should act that way. In other words, trying to assimilate into New Zealand by acting as a New Zealander is seen as negative by their parents. This results in family arguments, resulting in health issues.

It is unfortunate that many people in the focus groups commented at the level of (at times unconscious) racism when applying for jobs. Too many potential employers

make the automatic assumption that the applicant has little English. The result is seen in the high level of Asian employment in menial occupations such as restaurant and fast food outlet staff.

It is a shame then that many opportunities to learn English are not taken up. This is particularly noticeable within the Korean group. Many of the Korean women spoken to spend little time with English speaking people. They are either with other Korean women or in the church environment where only Korean is spoken; factors recognised by participants.

Expectations
Many migrants arrive with the expectation that medical treatment is free. Why this should be so remains unclear to the research team. In China in particular:

- Medical treatment must be paid for
- No food or fluid is supplied
- Little bedding is available
- All medicines must be paid for in advance
- Costs increase with the level/expertise of the medical staff
- Most medicines are given IV either at the hospital or special clinics
- Medicines are bought from the hospital or the local pharmacy
- No prescription is required thus people treat themselves – antibiotics for a cold is common.

A 'pill' for a cold in China is more often than not an antibiotic. Giving panadol without explanation is equivalent to thumbing one's nose at the problem.

Educational Impact
Without taking anything away from an individual's achievement in their own country – the manner in which education is presented in New Zealand is quite different from many Asian countries. Adapting to our educational system leads to a multitude of problems often not recognised by New Zealand educational institutions.

For example, in New Zealand, students are encouraged to both question and take an active role in the classroom. This activity is not acceptable in many Asian classrooms. Many international students struggle academically with English, thus leaving each lesson with a level of misunderstanding.

Parental pressure is a significant feature. Many Chinese parents have given their all to send their one child overseas to study. That may cost all the savings they have. Student failure is not an option.

In 2005, over 50% of student suicides at Cornell University were Asian-Americans (Health Expert, undated). In 2005, The Independent Online (Eimer, undated) reported that "*More than a quarter of a million people a year are killing themselves - 685 a day. And 3.5 million make unsuccessful attempts. Suicide is now a primary cause of death among Chinese aged 20 to 35."* Many of these suicides are students.

The one area where the Chinese in particular appear to have problems is in the New Zealand concept of freedom. Due to the lack of structure, the lack of parental control and the openness of New Zealand society, many Chinese students overreact to this new found freedom. This often results in sexual health issues not faced in their home country. Pregnancy termination is seen as a viable means of contraception. Asian youth will also not avail themselves of free sexual health consultations due to embarrassment and trust issues. Not understanding New Zealand privacy laws, many students believe their parents will find out about their health concerns.

Korean students on the other hand face a different set of concerns. As most have migrated with one or both parents, parental control remains. On enrolling at university they meet New Zealand students who make it known they wish to socialise. These attempts are rebuffed by parents thus leading to family friction. As one Korean student stated "*Parents need counselling so that they can communicate well!"*

Patient Enrolment

The total Asian population (Table 6) reported on primary health organisation databases (April 2008) is 20,313 people. The total reported in the 2006 Census in the same area is 27,039 – a discrepancy of 6,726. Although it could not be claimed that the two sets of figures should match, a closeness should exist similar to other ethnicities.

We have confirmed anecdotal evidence gained through election campaigning during the 2007 local body elections (Personal communication: Simon and Sandra Tam) of high numbers of socially isolated Asian people who stated they rarely leave home nor are they enrolled with a general practitioner. Where are these people – many elderly – seeking medical care? This is an important finding and must be followed up.

Table 6
Wider Christchurch Population by Ethnicity Compared to the 2006 Census

POPULATION GROUPS CANTERBURY WIDE

Ethnicity	PHO	CCPHO	HKPHO	Rural PHO	Total PHOs	Census	Difference PHO:Census
European	280,423	2,314	10,280	19,434	312,451	273,744	-38,707
Maori	20,937	1,172	1,021	1,547	24,677	27,333	2,656
Pacific Nations	7,513	509	47	548	8,617	9,696	1,079
Asian	17,807	242	61	2,203	20,313	27,039	6,726
MELAA	1,852			217	2,069	2,961	892
Not Stated	19,617		46	2,069	21,732		-21,732
Other	6,234	898	1,355	612	9,099	47,991	38,892
TOTAL	**354,383**	**5,135**	**12,810**	**26,630**	**398,958**	**388,764**	**-10,194**

Note: The apparent discrepancy between 'European' and 'Other' may be explained by the large number of people stating his/her ethnicity as 'New Zealander'

Limitations

As in the Waitemata population, randomisation was not possible, nor was it considered. Our main objective was to access as many people (both professionals and non-professionals) as possible. Whilst this report might not give us results which can be generalised to the whole Christchurch population in statistical terms, it would give us a better understanding into the healthcare needs of the Asian population.

Due to limited funding, time factors had to be considered. This meant that we did not get the survey into a number of areas we considered important. Whilst we believe this would not alter the final survey results, the extra survey responses gained would have helped carry more weight with the final results.

A further area of note involves the difficulties in obtaining direct information from the target audience. This, we do not believe, is a reflection on the individuals, but more on the many Asian cultures, their values and beliefs. That these differ widely to western culture can lead to misunderstandings, which in a health environment can result in (sometimes unconscious) failure to meet need. Some Chinese, when asked to

complete the survey, stated they don't believe the 'Health Department' (sic) will do something special for the Chinese. After explaining the reasons for the survey the response was '*If the Health Department were going to do that, it would've happened long ago. Form filling is just wasting time.*' Although this comment would appear to be self-defeating, it was a widely held belief.

Whilst the attitude of some cultural societies was helpful, many others did not see the importance of the survey. Thus copies and information sent to their committees were not distributed to their members. Future research would be done at meetings where better control could be taken to ensure distribution was improved.

Throughout the research, we were mindful of the cultural aspect of "face". Many Asian people will not discuss issues such as sexual or mental health believing these reflect negatively on individuals and their families. Likewise during focus groups it was important to have the participation of both Chinese and Korean professionals to give our research "face". Many Asians will tell an interviewer what they think that interviewer wants to hear rather than what might be the 'real situation'.
Although some individuals did indicate they had family members in Christchurch, their details were not completed. This individual was still included in the end results as it was felt to be important to the end knowledge.

SECTION 5: WHAT OF THE FUTURE?

Like European, the term Asian is a ubiquitous one covering many cultures and countries. Whilst the term is not considered offensive in itself, it must be remembered that each of these cultures have their own beliefs, superstitions, values and needs. Ignoring even one of these 'differences', ignores the holistic nature of that person.

The use of the term 'Asian' has been discussed in publications such as the Waitemata DHB report and the Asian health chart book 2006 (Ministry of Health, 2006).

By the year 2020 it is expected that the Asian population of New Zealand will have reached 600,000 people. In Christchurch today, the Asian population is the second largest ethnic group behind Europeans. Asian health needs are significant. Many are not being met.

New Zealand Primary Health Strategy

Two of the six key directions of the New Zealand Primary Health Care Strategy (Ministry of Health, 2001) are:

- Work with local communities and enrolled populations
- Identify and remove health inequalities.

Further, it adds *"Primary health care services can best improve the health of the communities they serve by organising services around defined populations – rather than just responding to those individuals who actively seek care."*

The New Zealand Primary Health Care Strategy is failing in its aim of removing inequalities for *all* New Zealanders. Much of the emphasis is being placed with commitments to Maori and Pacific Island health ignoring much else.

Improved Ethnic Health Data and Policy Implementation

Although health data on the Asian population is improving, far too many published ethnic studies concentrate on Maori and Pacific Islanders to the exclusion of all else.

Despite becoming more available, definitive ethnic health studies, which cover *all* major ethnicities, tend to focus on the comparison between Maori and non-Maori. This

often becomes problematic when "non-Maori" covers the vast majority of the New Zealand population.

Many studies including Asian figures use the classifications of Maori, Pacific Islander, Asian and "European/Other". What is "European/other" – a mixture of African, Latin American and European cultures?

Both these examples contaminate their findings by comparing one cultural group against all others. Europeans have a totally different cultural and physiological makeup to Africans and Latin Americans. Comparisons are therefore not helpful.

The issue of using prioritised against total response ethnicity in evaluating clinical studies also must be discussed. How much is taken into consideration when planning potential new studies? (Ministry of Health, 2008b)

In 2003 the Asian Public Health Report (Asian Public Health Project Team, 2003) published four funding recommendations directed at the Ministry of Health and two directed at health funders in general. They further published seven policy recommendations. All of these policy/funding recommendations are yet to be implemented.

In the Ministry of Health publication '*The Public Health Workforce Development Plan*' (Ministry of Health, 2007) the word "Asian" does not appear until Objective 7 on page 49. It is imperative that a programme to increase the number of Asian health professionals is instituted.
As other examples:

- In the *Developing health promotion guide* (Ministry of Health, 2003); no mention is made of other cultural groups apart from Maori or Pacific Islanders.
- The ethnic component of The Families Commission recently released report (Families Commission, 2008) on Elder Abuse was based on interviews with three individuals (Maori, Pacific Indian and Chinese) – and one focus group of 5 people.

Language

Specifically, in the Canterbury area, neither the CDHB nor the Primary Health Organisations have basic language-specific material available on their websites. Partnership Health Canterbury is now compiling information in Chinese on the newly developed Asian Directory website (www.asiandirectory.net.nz) – a Canterbury-wide service. A Korean service will follow.
Canterbury District Health Board is currently running an extensive advertising campaign educating people about the use of the emergency department. 58% of the survey respondents use the emergency department; many of whom have limited English skills. Much of the potential audience for this campaign will not understand the import of the campaign.
Webhealth, an online community health resource has recently been launched in Canterbury. It too is only in English.
In a recent speech (6th May 2008) to Ministry of Health Staff, The Minister of Health David Cunliffe stated,

> "*The disparities in health outcomes between European, Maori, Pacifica and other migrant New Zealanders have diminished but remain unacceptably high. Our children and young people, and our senior citizens are among the most vulnerable members of our society.*"

Further,

> "*I have come to the view that greater co-ordination throughout the entire system is essential to long term sustainability. As services are becoming more complex and interdependent, planning at a district level will not be sufficient on*

its own to meet the medium to long-term needs of the system. The continued success of the DHB system requires action across the sector: amongst DHBs themselves, providers, the Ministry of Health and myself."

SECTION 6: CONCLUSION AND RECOMMENDATIONS

Increasing health funds are being allocated to both Maori and Pacific health. However the increasing number of immigrants to New Zealand face ever greater difficulties in obtaining health services. Of all the problems faced by migrant communities, language is the greatest. Coming from countries where medical systems are so totally different means new arrivals have nothing on which to base new knowledge. This leads to increasing isolation and a gravitation towards others in their own communities. Thus people become – to a certain extent – ghettoised.

This factor is seen more often in older communities, especially those who arrive under the family streams. Older people are now being brought to New Zealand by their student child (children); many against parental wishes. For the younger generation, it is seen to to be their duty to look after their parents. Some parents are brought to New Zealand as baby sitters whilst young people work.

Others may bring their parents to Christchurch and then go themselves to Dunedin or another university in the belief that the New Zealand system will look after their parents. However until parents gain permanent residence, they are not able to access health care without paying for it. Living costs of the younger generation increase accordingly. The elderly become increasingly isolated.

Our recommendations are:

Policy

1. Policy guidelines need to be developed at a national level to ensure equity of access for *all* people - no matter their ethnicity. Without these being set at national level, little enthusiasm exists at local DHB level to develop and fund such initiatives. These policies then need to be made a part of all funding decisions.
2. Improved access to the Asian Health Service www.asianhealth.govt.nz. No migrant spoken to in our survey knew of the availability of this online service. Many do not have computer access which compounds the problem. This could be linked to the Asian Directory or Partnership Health Canterbury's website.
3. The development of an improved form of communication in which all migrants are able to gain an improved insight into the New Zealand health system. Currently a Department of Immigration booklet is available to all migrants. The health portion of this publication creates confusion.

Service Development

4. The development of an Asian specific health service similar to that set up by Waitemata DHB but more akin to that developed for Pacific Trust Canterbury. This service to be staffed by Asian professionals or *those able to work in a professional capacity*.
5. The development of an "Asian Helpline" possibly through Citizens Advice Bureau. With access to the major languages, problem-solving could be made available at the end of a telephone.
6. Respite services for both adults and children are seen as a need. Those services available understand little about cultural need thus fail in their approach to Asian peoples. For example - what educational information is available to help with home care for Chinese/Asian IHC children/young people? Children with these health concerns create "loss of face" in his/her family. It comes back to

the belief that the family/parent has done something wrong in a past life to be inflicted with a child with a disability.

7. The publication of language-specific publications; the priorities being:
- An explanation of the New Zealand health system, how to access the health system, the importance of enrolment, the function of general practice and the separation between primary and secondary health care.
- Medical condition-specific language publications covering areas such as dental, allergies, dermatology, diabetes etc
- Language-specific health promotion material especially in the areas of diet and exercise.
- The creation of a 15-20 minute DVD outlining the health system, explaining access to doctors, pharmacy, dentists, specialists etc, primary vs secondary care. The basic DVD can then be overdubbed in specific languages thus reducing cost.

Workforce Development

8. An active study into the language requirements for migrants. A number of Asian health professionals now live in the Canterbury area. Some of these are retired and not actively seeking work. Others are younger but are unable to work in New Zealand due to certification. Some have been rebuffed due to the stringent language requirements by educational establishments such as Christchurch Polytechnic Institute of Technology (Three Chinese females spoken to – who had gone through New Zealand high schooling and successfully completed pre-med study – were expected to complete a year's English study before being accepted for nursing training. Two of these women moved onto other study, thus potential was lost).

9. We must increase the number of Asian professionals. Whilst this could be achieved through scholarships or easier access to training institutions, this will not overcome the immediate problem. Asian professionals are not able to work in the New Zealand system, but, they could perhaps be employed on a consultancy basis working within their own communities. Employed at an Asian Health Centre, their knowledge and language skills would be invaluable in working toward reducing existing inequalities..

Further Research

10. Due to the funding constraints on the current research project, it will be vital to carry out further indepth study. This must entail active participation of ethnic societies through face-to-face group interviews, foreign health professionals who are attempting to gain New Zealand recognition, funders (MoH, DHBs) and providers (both ethnic and non-ethnic) and above all a larger percentage of the migrant population.

In closing:

Dr Tom Marshall (Chair; Procare Network North.) is reported as commenting (New Zealand Doctor; 4 June 2008 p. 33)

> *"Recognising the Treaty and the mana of the people is the most important aspect of improving Maori health."*
>
> Is it not time we recognise the mana of all peoples, especially those new to New Zealand? By doing so, we will improve the health of all those who call New Zealand home. Then – and only then – will we be able to call the New Zealand Primary Health Care Strategy a success.

T.S Eliot wrote in his poem '*Choruses on the Rock'*:

> *"Where is the wisdom we have lost in knowledge? Where is the knowledge we have lost in information?"*

In attempting to bridge the widening gap in ethnic health inequalities, it is time to start using the knowledge we have gained to return wisdom to the frame. By using the wisdom we have gained we will achieve equality of access for all in New Zealand.
After all, this is what the New Zealand Primary Health Care Strategy is all about.

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THE AUCKLAND REGIONAL SETTLEMENT STRATEGY REFUGEE AND MIGRANT HEALTH ACTION PLAN: A REGIONAL PROJECT OF THE MINISTRY OF HEALTH, WAITEMATA, AUCKLAND AND COUNTIES MANUKAU DISTRICT HEALTH BOARDS

Annette Mortensen & Chris Wong

ABSTRACT

The Auckland Regional Settlement Strategy has taken co-ordinated and collaborative inter-sectoral approach to address health and disability issues for Asian communities in the Auckland region. These range from considering health and well-being determinants such as education, employment, housing and opportunities to improve English language skills, to the full spectrum of primary, secondary and tertiary health care services

There is recognition that settlement support for newcomers has historically been piece-meal, resulting in poorer than hoped for migrant health outcomes. Within the health sector initiatives are needed to address the most common barriers for migrants and refugees created by language and cultural difference.

The changes proposed affect the funding, planning and provision of existing health services. Improved information, access to interpreter services in primary care, workforce development, improved responsiveness from health and disability services, and a more collaborative approach to service provision across the region will be key contributions to improving access to health care for Asian populations.

Cabinet has endorsed migration as being central to the future of New Zealand society. Migration-related health issues will become increasingly important in the work plans of most, if not all providers of health and disability services.

Mortensen, A. C., & Wong. C. (2008). The Auckland Regional Settlement Strategy Refugee and Migrant Health Action Plan: A regional project of the Ministry of Health, Waitemata, Auckland and Counties Manukau District Health Boards. In S. Tse, A. Sobrun-Maharaj, S. Garg, M. E. Hoque & Y. Ratnasabapathy (Eds.), *Building healthy communities. Proceedings of the Third International Asian Health and Wellbeing Conference, September 8-9* (pp. 66-69). Auckland, New Zealand: University of Auckland.

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INTRODUCTION

What is the Auckland Regional Settlement Strategy?

There is recognition that settlement support for newcomers has historically been inadequate and ad hoc and has resulted in poorer than hoped for health and social outcomes in refugee and migrant groups in New Zealand (Department of Labour & Ministry of Social Development, 2003; Fisk, 2003; New Zealand Immigration Service, 2004). To provide a coordinated response to settlement Cabinet agreed in November 2003 to the *New Zealand Settlement Strategy*, which established a whole-of

government framework to achieve agreed settlement outcomes for migrants, refugees and their families (Department of Labour, 2004). In November 2006, Cabinet agreed to the *Auckland Regional Settlement Strategy* (ARSS) as a national pilot as the region with the largest Asian, refugee and other new migrant populations (Department of Labour and Auckland Sustainable Cities Programme, 2007). The vision of the ARSS is that:

> *"Migrants, refugees and their families have a sense of belonging through opportunities to fully participate and contribute economically and socially in the Auckland region; and by being recognised and respected as equal and valued New Zealanders".*

The strategy is a partnership between local and central government, non-governmental organisations, refugee and migrant communities and other stakeholders with an interest in settlement issues. A significant contributor to successful settlement for newcomers is accessible public services, in particular in the areas of health, education, employment and social services (United Nations High Commissioner for Refugees, 2002). The ten goals for government and local government sectors in the Auckland region are to achieve (Department of Labour and Auckland Sustainable Cities Programme, 2007):

1. Improved access to settlement related information and advice
2. Better access to employment opportunities
3. Enhance adult ESOL outcomes
4. Enhance physical and mental health outcomes
5. Enhance educational outcomes
6. Meet housing needs
7. Capacity building in local government bodies
8. Improve refugee and migrant input into central and local govt policies and service delivery
9. Increase acceptance and understanding of diversity
10. Address the settlement needs of Pacific migrants

The Auckland Regional Settlement Strategy Refugee and Migrant Health Action Plan

The ARSS refugee and migrant health action plan recognises that newcomers from diverse cultural and linguistic backgrounds face additional challenges in gaining equitable access to health and disability services (North & Lovell, 2002). The goal of the health action plan is that:

> *"Healthcare services that are accessible and responsive to the health needs of migrants and refugees and do not create health inequalities".*

How Was the ARSS Refugee and Migrant Health Action Plan Developed?

The Strategy was developed between 2004 and 2006 in consultation with refugee and migrant communities, stakeholder organisations, and service providers. The consultation process identified unmet health needs and priority areas for action in the health and disability sectors. A review of the international literature and of New Zealand health studies of migrant and refugee populations show that the culturally and linguistically diverse groups in receiving societies have (Lawrence, & Kearns, 2005; Mortensen, 2008):

- disparities in health status compared to national groups even when adjusted for income and health conditions;
- barriers to health care and disability services and;
- under-utilise the health and disability services that are available

The criteria used to determine the recommended course of action were the application

of the health disparity indicators in the Ministry of Health (2002) *Reducing inequalities in health* framework (Ministry of Health, 2002). The data analysis which informed the health action points included:

- The application of New Zealand Census 2006 data to Auckland refugee and migrant health populations
- A review of Auckland Region District Health Board Health Needs Assessments and consultation processes (Auckland District Health Board, 2002)
- New Zealand and international health studies in regard to refugee and migrant population health outcomes (Neuwelt, 2007)
- Epidemiological studies in refugee and migrant populations in New Zealand

The actions identified in the plan were chosen because of the need to improve health outcomes in refugee and migrant populations (Peace, Spoonley, Butcher, & O'Neill, 2005). The reducing inequalities framework identifies the need for action that target:

- Cultural and linguistic responsiveness
- Pathways through which these factors influence health, for example health related behaviours in refugee and migrant communities
- Health and disability services
- The impact of poor health and disability on economic and/or social well-being in refugee and migrant populations.

A steering group representing the Ministry of Health and Waitemata, Auckland and Counties Manukau District Health Boards was formed to progress the identified areas of action which are to:

- Improve ethnicity classification systems in the health sector for refugee and migrant populations
- Resource disability support needs for refugees and migrants in the Auckland region
- Provide sustainable health interpreting services to the primary health sector in the Auckland region
- Provide cultural diversity workforce development programmes
- Ensure that mental health services are responsive to refugee and migrant groups
- Develop chronic care management models for refugee and migrant population groups

For example, in South Asian populations obesity, the impact of diseases such as cardiovascular disease, cancer and type 2 diabetes can be prevented and reduced through improving nutrition and increasing physical activity, improving access to primary and secondary care services and by providing more culturally and linguistically responsive services.

CONCLUSION

For Health, the key learnings fall into two main areas. The ARSS experience demonstrates how a markedly decentralised and geographically-based health sector can work with the necessarily centralised Ministry of Health to deliver affordable and culturally competent primary health care services for refugee and migrant communities.

In addition, working across 'all-of-Government' has presented the opportunity for a joined up approach to addressing that great bulk of health determinants that lie outside of the remit of the health sector. The New Zealand Cabinet established the

ARSS with a view to sharing relevant Auckland-based learnings where appropriate across the Country; the authors suggest that the learnings from Health will be a significant contributor to this wider exercise.

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REDUCING HEALTH AND WELLBEING INEQUALITIES FOR ASIANS IN THE EAST HEALTH REGION: A REPORT TO INFORM HEALTH PROMOTION PROJECT PLANNING AND PRACTICE

Lisa Jury, Kwee Goh & Vishal Rishi

ABSTRACT

This paper presents key findings from the health & wellbeing day which identified the health needs as perceived by the Asian community. The aim of the day was to support a community empowerment process for addressing Asian health and wellbeing 'inequalities' in the East Health region, Auckland, New Zealand. This information, alongside evidence based research, was used to guide the formation and implementation of appropriate programmes to improve health outcomes for this population.

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INTRODUCTION

New Zealand Census 2006 showed that Asians were the third largest and fastest growing ethnic group. They made up 9.2% of the total population of 4,181,060. Census 2006 identified the Asian population as: Chinese 147,570, Indian 104,583, Korean 30,792, Filipinos 16,938, Japanese 11,910, Sri Lankan 8,310 and Cambodian 6,918.

One goal of the New Zealand Health Strategy (Ministry of Health, 2000) is to monitor inequalities in health amongst ethnic groups. To date little progress has been made for Asian people. The Asian Health Chart Book (2006), a nationwide study, has provided an initial barometer of the current health status of Asian New Zealanders. It serves as a baseline from which to monitor future trends.

East Health Trust Primary Health Organisation provides primary care services in the Howick, Pakuranga, Beachlands, Maraetai, Clevedon and Flat Bush areas of Auckland, to an enrolled population of 75,000, 19% of whom are Asian. As a part of Health Promotion Services for East Health Trust, a 'Reducing Inequalities' Asian Health Promotion Plan was developed. The goal is:

> *"To support the local Asian community to identify, advocate, plan and develop and action local health needs on behalf of the Asian community in the East Health region and to ensure access to Primary Health Care that meets the health needs of the Asian population"*

The aim of this project was to support a community empowerment process for addressing Asian health and wellbeing 'inequalities' in the East Health region. Key to this was identifying the health needs as perceived by the Asian community and using this information, alongside evidence based research, to guide the formation and implementation of appropriate programmes (initially the 'Go Now' projects) to improve health outcomes for this population.

METHODS

Community engagement was considered to be key to the formation and implementation of a robust health promotion plan. East Health Trust identified the importance of the engagement of the Asian community in the East Health region and appointed an Asian representative to the East Health Trust Board. Following this an Asian steering committee was established with six community leaders who represented Chinese, Indian, Korean and Japanese people. The Health Promotion Facilitator and CMDHB Community Liaison Officer supported the committee.

Penelope Hawe (1994) suggests that three distinct approaches to community engagement can be observed. The first is community interpreted as a population, for example women, men and youth (demographic). The second is community interpreted as a setting for example, schools, hospitals and workplaces (geographic). She describes the third approach as the '…capacity to work towards solutions to its own community-identified problems…' (Hawe, 1994). East Health Trust PHO used the third community engagement approach to ensure equitable access to primary health care for its Asian population.

The term 'bottom up' is one of enabling individuals and communities to identify their own problems, solutions and actions, and have active involvement in programme design, implementation and evaluation.

To achieve this 'bottom-up' approach East Health transformed from a power-over, to a power-with relationship, where the community shares and increasingly takes control of the programme. Building community capacity & empowerment via a 'bottom up' approach is frequently cited as one of the central strategies of health promotion (Laverack 2004).

The methodology for building community empowerment was influenced by the following domains:

1. Improving stakeholder participation;
2. Increasing problem assessment capacities;
3. Developing local leadership;
4. Building empowering organisational structures
5. Improving resource mobilisation;
6. Strengthening links to other organisations and people;
7. Enhancing stakeholder ability to 'ask why';
8. Increasing stakeholder control over programme management;
9. Creating an equitable relationship with outside agents.

The method for identifying need was to hold an Asian Health and Wellbeing Day where members of the general public were invited to participate in focus group workshops, complete a lifestyle questionnaire, and receive a free heath check.

The event was promoted in local English language newspapers, Asian newspapers, Asian radio, through local community groups: churches, temples, libraries, language schools and the 22 East Health Trust PHO practices by way of posters, flyers & registration forms in English, Chinese, Hindi, Korean, and Japanese.

Great emphasis was placed on encouraging the Asian community to attend and interact. A crucial factor to this was the ability to communicate with the participants in their first language. Languages involved were Chinese, Hindi, Korean, Japanese and English. Workshops were held concurrently in each of these languages and most materials were translated.

Information was gathered from 3 distinct components of the day, 3 workshops, a lifestyle questionnaire and a health check.

Participants did not have to attend all workshops, complete the Lifestyle Questionnaire or complete a health check.

Participants were invited at the beginning of Workshop one to participate in sharing their thoughts and experiences of migration to and settling in New Zealand particularly those concerning health and wellbeing. They were told the purpose of collecting this information was to inform health promotion planning for improvements to the health system and that their information is not identifiable to an individual person. The first workshop was essentially a presentation that provided information about the New Zealand Health system, particularly health services available in the East Health area. The second workshop focused on health and wellbeing issues within the New Zealand health system including language, access, affordability and cultural responsiveness. The third workshop focused on lifestyle issues since migrating to New Zealand. Topics included accidents, smoking behaviour, water safety, mental health, healthy eating, physical activity, gambling and alcohol consumption.

The lifestyle questionnaire was also given to participants at the beginning of this workshop for immediate completion. The lifestyle questionnaire was translated into five languages, English, Chinese, Hindi, Korean, and Japanese.

Lastly participants were eligible for a free physical health check, which included blood pressure, height, weight, girth, cholesterol, blood glucose, peak flow measurements and smoking history. Registered nurses carried out health checks and once completed, participants had the results interpreted by a GP (family doctor) at the event. One GP was fluent in Mandarin and Cantonese. Additionally the health check forms were translated into Chinese, Korean and Hindi for the day.

Information was collected on specific Health Check pads initially developed by Harbour PHO. These were triple layered and colour coded; a white copy for the individual, a yellow copy to give to GP and a blue copy to be kept by East Health Trust PHO. It is acknowledged that due to space and time pressure on the day, it was difficult to collect all the yellow and blue copies from participants.

MAIN FINDINGS

The demographics of the participants were approximated from the lifestyle questionnaires that were completed by 112 of the 140 participants. Most respondents (52%) in the sample were aged 45-64 years, followed by (26%) aged 25-44 years. There were slightly more females (62) than males (49). Questionnaires were self-administered and in some cases not all questions were completed resulting in varying "total" numbers of respondents from question to question.

The sample population ethnicity showing that Chinese is the largest represented group (59%) is consistent with the East Health enrolled population ethnicity data (July 2006) where Chinese comprise over 50% of those identifying as Asian. The percentage of Indian population on the day was 11% compared to 12% of the Indian East Health enrolled Asian population. Similar comparison of the Korean and Japanese sample population to the enrolled population was not possible due to differences in

categorisation i.e. Korean and Japanese would identify themselves as "other Asian" in the East Health demographic data.

A recent immigrant refers to people who were born overseas and have been a resident in New Zealand for less than 10 years (Mental Health Commission, 2003). In this sample, where 109 participants answered the question, 68 (62%) had been in New Zealand under 10 years and 41 (38%) had been in New Zealand more than 10 years. Of the 68 participants who had been in New Zealand for less than 10 years 46 (68%) had been here for five years or less.

The health promotion facilitator identified the following components of healthy lifestyle during the set up of this project. The findings below were collected from responses to the self administered lifestyle survey and by comments made by individual participants in facilitated discussions in Workshop 3.

Mental Health

All ethnic groups reported stress as having a major impact on living a healthy lifestyle in New Zealand. Much of this was related to finding appropriate work and settling the family. Mental health is a major issue for the Asian population following migration to New Zealand. Many participants reported a significant number of symptoms that can be associated with depression and feelings of social isolation. Of concern was the finding that 72% of participants would not seek help for mental health due to the language barrier or the associated stigma.

61 of 112 (54%) respondents reported at least one of the following mental health symptoms following migration to New Zealand (Figure 1). Increased loneliness and social isolation were the most common symptoms that affected respondents. This was followed equally by tearfulness, lack of sleep and irritability. A smaller percent increased their use of drugs and alcohol. These symptoms can be indicative of depression as identified in the DSM IV (Diagnostic and Statistical Manual of Mental Disorders – version four).

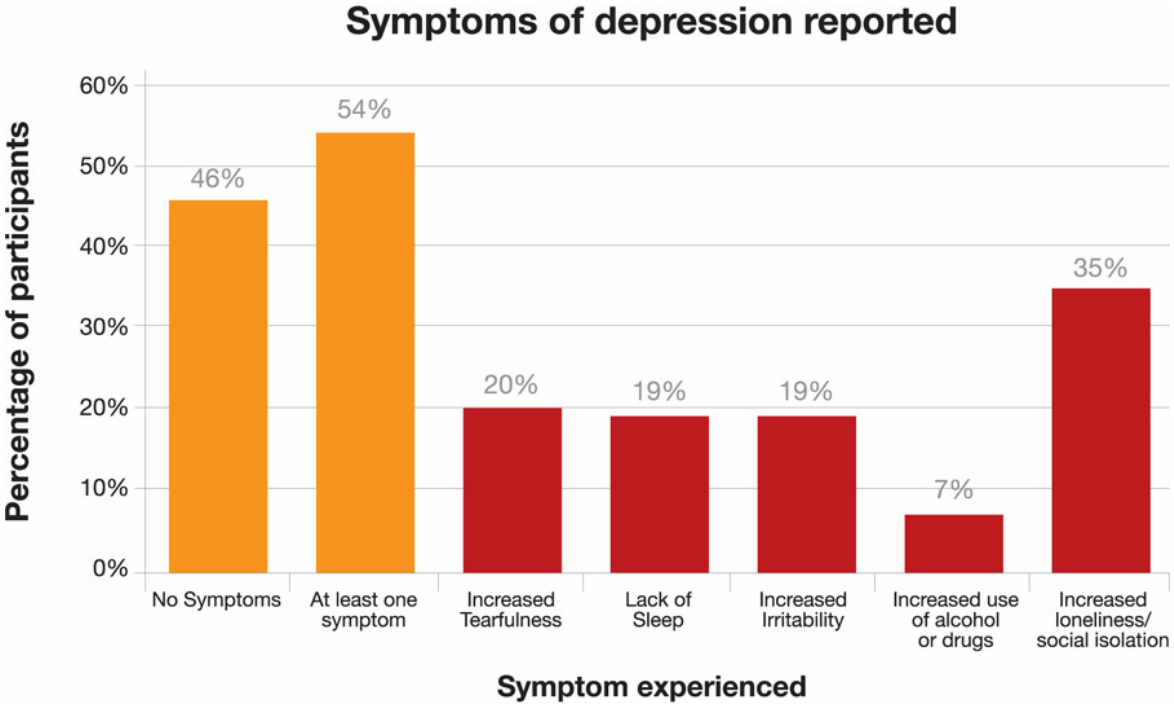

Figure 1. Symptoms of depression reported by participants.

Physical Activity

The workshop results depicted a significant change in lifestyle for Asian immigrants. They felt that eating habits and exercise behaviours have changed since migration to New Zealand. Although some felt they lived a healthier lifestyle here, in terms of healthy eating and physical activity, the results of individual health assessments showed a high percentage (63%) of participants to be overweight or obese. More than half, 52% of respondents did not meet recommended levels of physical activity for health benefit, at least 30 minutes a day (Figure 2).

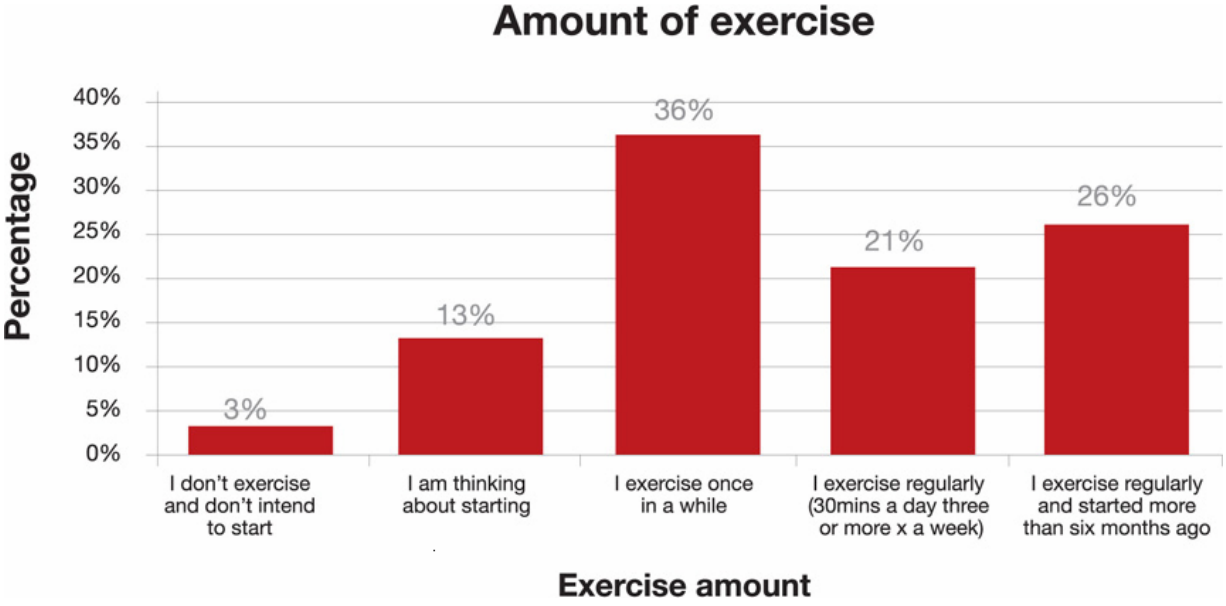

Figure 2. Amount of exercise reported by participants.

Healthy Eating

The Ministry of Health recommends that at least 3 servings of vegetables and 2 servings of fruit should be eaten daily. Eating habits have changed for most participants because of the unavailability or expense of many traditional foods. In general there is less variety in vegetables and fish. However produce is thought to be fresh and low in pesticides though some participants have reservations and always wash their vegetables. Most felt that their access and consumption of unhealthy foods has increased.

Figure 3 shows that 54% of participants did not meet the recommended consumption of vegetables and 60% did not meet the recommended fruit consumption. Only 55% ate healthy meals at least 5 times a week.

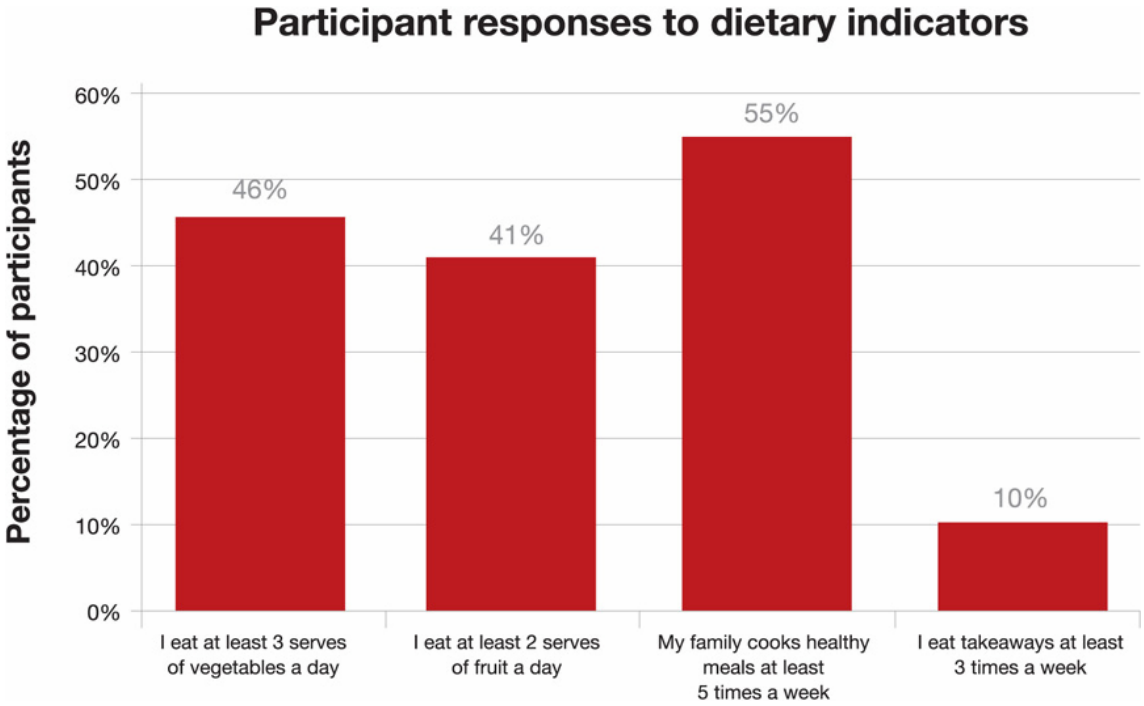

Figure 3. Dietary indicators reported by participants.

Accidents

Of the 111 responses to the lifestyle questionnaire 72 (65%) respondents (or a family member) had not had a serious accident in New Zealand. The remaining 39 (35%) reported one or more accidents resulting in 82 accidents in total to the group. Of these 82 accidents, the majority (25%) were road accidents followed by falls (22%), burns (8%) and water accidents (2%). The remaining 18% were reported in a miscellaneous category. Workshop group discussions suggest that the limited knowledge of the health system extends to a lack of understanding of ACC services.

Water Safety

Fifty percent of questionnaire respondents (n=111) took part in activities in the water i.e. fishing or swimming, but 23% of these people cannot swim. Only 20% reported water activities as part of their normal lifestyle. In total 53% of participants indicated that they could swim, of these only 50% could swim 100m or more. All groups felt a great need to learn about water safety but they did not know where to access this type of information. Of particular interest was education on sea conditions, tidal changes and weather reports.

A variety of different language media was considered important in improving water safety knowledge to non-English speakers, community newspapers, radio and television. It was felt that safety advertisements on television and safety signs at beaches should be in other languages. It was also felt that compulsory courses and tests for boat owners would be useful.

One participant commented….

"I think it is dangerous having no driving tests for boating traffic and boating safety at sea."

Smoking

Contrary to the popular belief that Asians have a high smoking rate, only 3% of 105 respondents indicated they were smokers, and of these, all had considered quitting at some time. Only 17% reported that a family member smoked. It should be noted that the participants of this day may be more aware or concerned about their health

and thus less likely to smoke. Although few participants recorded themselves or a family member as smokers many recorded being exposed to secondhand smoke at work, followed by in the car, closely followed by in the home. The exposure of the 25% of the respondents to workplace smoking is of interest given the smokefree workplace legislation (Figure 4). Further research into these workplaces would be of use as 40% of participants said smoking or exposure to secondhand smoke did have an effect on their health.

Figure 4. Exposure to second hand smoke reported by participants.

Gambling

7% of 100 respondents reported a family member being affected by gambling since being in New Zealand. Under-reporting of gambling is likely due to the stigma attached to gambling issues. Participants felt that it was very easy and tempting to gamble in New Zealand and that there seemed to be a high amount of advertising for gambling on television and other media. An exception was the Cantonese-speaking group who felt there were fewer gambling choices in New Zealand. Participants also mentioned many examples of problem gamblers amongst friends and family and felt the harms caused by problem gambling in New Zealand are significantly serious and destructive, "ruining almost everything, including finance, relationships, and work performance, mental and physical health".

Alcohol Intake

The high percentage of non-drinkers (54.5%) and those who drink alcohol 1-2 times a week (37.5%) may reflect a biased population, participants of this day may be more aware or concerned about their health and thus less likely to drink alcohol. Under-reporting of drinking is possible due to the stigma of alcoholism. Genetic alcohol intolerance may also be a factor.

OBJECTIVE HEALTH INDICATORS (PHYSICAL HEALTH CHECK) RESULTS

98 physical health checks were completed. Measurements were made of blood pressure, blood glucose, assessment of overweight & obesity; body mass index and waist circumference, smoking status, peak flow and cholesterol were collected. Note: Not all participants completed all sections of the health check as they were each responsible for attending the relevant health stations themselves.

Blood Pressure

Blood pressure measurements for 82 participants were recorded. 50% were male and 50% female. The total percentage of participants recorded as having high blood pressure (>140/90) is 33% of which 59.3% were male and 40.7% were female. "High blood pressure (hypertension) affects nearly one in five New Zealanders" (New Zealand Guideline Group, 2003). The prevalence of high blood pressure amongst our participants appears to be much higher than in the general New Zealand population. Sample bias is likely as those presenting for health checks may in fact be those more likely to have legitimate concerns about their health.

Blood Glucose

97 random blood glucose checks were completed. Interpretation of blood glucose results is limited due to the non-fasting state of some participants. For this reason only results over 9.0mmol/l can be interpreted as needing further testing for diabetes and those above 11.0mmol/l interpreted as demonstrating Type 2 diabetes. Of note 13% of participants had blood glucose levels above 9.0, an indication for further testing for Type 2 diabetes. 6% of participants were recorded as having diabetes, levels over 11mmol/l. The highest recording on the day was 28.0mmol/l.

Assessment of Overweight and Obesity

An individual's absolute risk of obesity-related disease should be assessed by determining the degree of overweight or obesity based on Body Mass Index (BMI), the degree of abdominal obesity based on waist circumference (WC), and the presence of other risk factors.

Body Mass Index Results

82 BMI's were recorded for the Asian participants. 63.4% of participants were either overweight or obese (Figure 5). These results have a direct relationship to the following waist circumference results. 2.4% were underweight and are of concern at the other end of the scale.

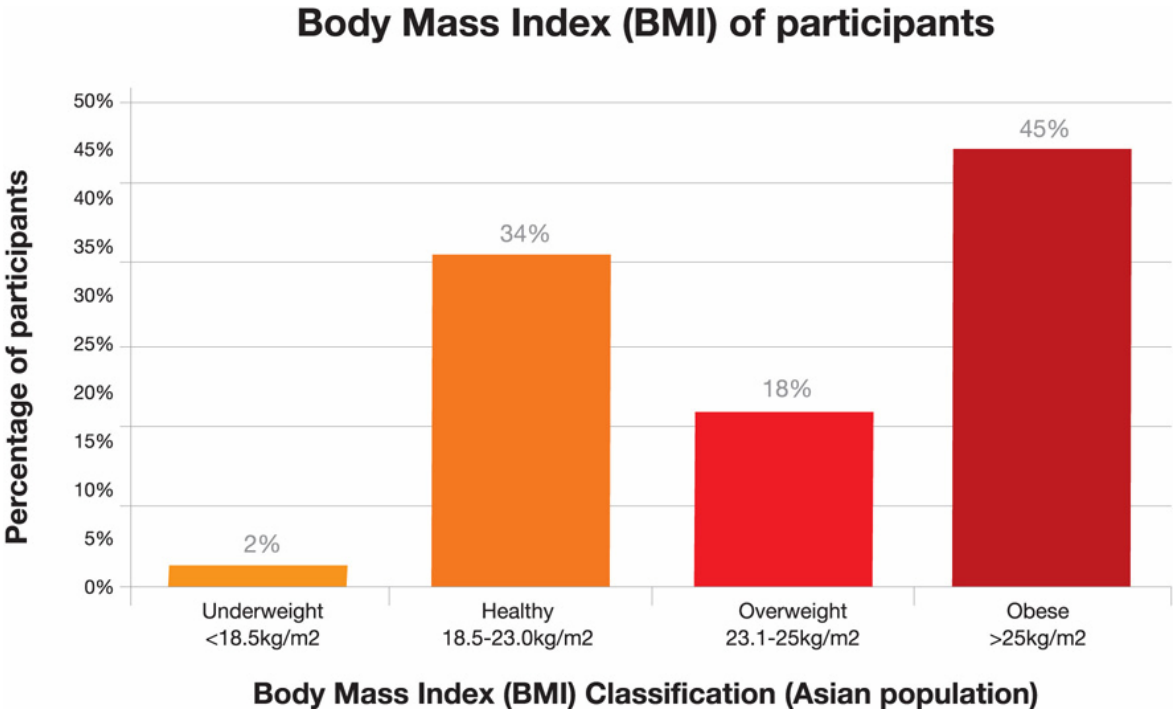

Figure 5. Body Mass Index measures for participants.

Waist Circumference Results

82 waist circumferences were recorded for the Asian participants. 60% of the

participants have a higher than recommended waist circumference of <90cm for Asian men and <80cm for Asian women. This is an indicator for obesity and risk factor for diabetes. 68% of women and 51% of men were recorded as having higher than recommended waist circumference.

Smoking Status
Smoking status was determined in 2 separate ways, above in the lifestyle questionnaire (105 respondents) and here within the health check form. 97.6% of respondents recorded themselves as non smokers with only 2.4% of participants being smokers, all of whom were males. Note: 15.3% of participants did not answer this question.

Peak Flow
The majority of participants had a reasonable peak expiratory flow rate, with only 15 to 20% having a peak expiratory flow rate of less than 100 L/min predicted. Unfortunately we had no record of whether the participant had asthma or not.

Cardiovascular Risk
Cardiovascular risk was calculated for 82 respondents. Cardiovascular risk calculation has been based on total cholesterol rather than the total cholesterol: HDL-cholesterol values as only facilities to measure total cholesterol were available. Although it appears that only 6.1% of the participants had a risk of a cardiovascular event in the next five years of more than 15%, it was noted during the calculations that a number of the participants had one risk factor that was high, such as a high blood pressure or blood glucose, balanced by the other risk factors being low such as low cholesterol and non-smoking.

DISCUSSION

Mental health is a major issue for the Asian population following migration to New Zealand. 'Migration-stress' prior to acculturation into the host society is well documented (Adkins, 1999). The major stressors identified by this group in the workshops were the language barrier, difficulties finding appropriate employment and subsequent financial concern, a lack of family support and issues of personal safety. Many participants reported a significant number of depressive symptoms and feelings of social isolation.

Asian participants who experienced difficulty communicating effectively with the host population reported lower levels of regular access to primary health care. Key concerns were a lack of understanding of the health system, a lack of effective communication with medical staff, which resulted in feelings of poor service and a reluctance to present again. These difficulties are accentuated in the field of mental health and effects both adults and young people. 72% of participants would not seek help due to the language barrier or the stigma associated with mental health problems. Participants felt that health related issues could be addressed with health care workers who spoke their language or where this is not possible staff who are culturally aware. Written information in different languages would also be helpful.

Participants appeared to be generally health conscious and interested in preventative health. Although it may be argued that the sample is biased towards this conclusion, many traditional Asian health systems are based on prevention and early intervention.

Obesity is becoming as much of a growing concern for the Asian population as it is for the Maori and Pacific communities. "Obesity is a risk factor for many chronic disease including type 2 diabetes, heart disease, hypertension and stroke, gallstones and some cancers" (Ministry of Health, 2007). The workshop results depicted a significant change in lifestyle for Asian immigrants. Eating habits and exercise behaviours have

changed since migration to New Zealand. Although some felt they lived a healthier lifestyle here, in terms of healthy eating and physical activity, the results of individual health assessments showed a high percentage (63%) of participants to be overweight or obese.

Although a limited number of participants recorded accidents involving water-based activities (possibly inexperience leads to 'prudent avoidance'), all workshop groups identified water safety as an area of concern and one which more knowledge was requested.

The exposure of 25% of the respondents to workplace smoking is of interest given the smokefree workplace legislation. Further research into these workplaces would be of use as 40% of participants said smoking or exposure to secondhand smoke did have an effect on their health.

The limitations of this project are due to its design as a 'grassroots' community project rather than as a robust research project. Participation by the local population is key and limits the extrapolation of these findings beyond the direct scope of this project. Sample selection bias i.e. the sample was self-selected and therefore non-random, with those using or interested in the health system being more likely to attend. This may be advantageous for opinion seeking in workshop groups but limits the extrapolation of health check data and lifestyle questionnaire responses to the whole Asian community.

This study indicates that there are a number of important lifestyle issues impacting on Asian health and wellbeing shows that increased emphasis is required for this, the fastest growing migrant population to New Zealand.

RECOMMENDATIONS

- Recognise the diversity of the Asian population and differences in ethnicity, religion, English language proficiency and settlement history.
- Increase accessibility of primary care to the Asian population in the Counties Manukau and East Health region.
- Consider the unique mental health needs of the Asian population upon migration to New Zealand.
- Development of culturally aware and knowledgeable workforce to provide services to the Asian population.
- Promote physical activity and healthy eating behaviours among the adult Asian population, with particular emphasis on the Indian females who indicated low levels of physical activity and high levels of obesity.
- Improve water safety knowledge and practices of the adult Asian population who participate in water activities, i.e. (swimming & fishing).

East Health Trust and Injury Free Counties Manukau recognise the importance of community leading initiatives to benefit health and wellbeing for the Asian population. The Go Now fund is to support community "grassroots" initiatives that encourage participation in healthy lifestyles and injury prevention activities and meet the priority action areas. A funding allocation policy was developed and funding of up to $5000 per initiative has been given to seven community organisations. Continued success will depend on the engagement of Asian community leaders in the implementation of the "Go Now" projects. These essential components should enable communities to have a greater influence over actions that bring about social and political change.

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BRIEF REPORT: HEALTH NEEDS ASSESSMENT FOR ASIAN PEOPLE IN COUNTIES MANUKAU

Geeta Gala

ABSTRACT

The Asian population is diverse, rapidly increasing and make up the third largest ethnic group in Counties Manukau, after Europeans and Pacific. The aim of this work was to produce a selective health needs assessment of the Asian population, including the differences and inequalities in health status between the different Asian ethnic groups living in CM at level 2 ethnicity. This would inform Counties Manukau District Health Board of the priority areas for intervention and service design to improve Asian health and reduce any inequalities. Data sources included Census; The National Minimum Dataset; The New Zealand Health Survey; and the Lets Beat Diabetes Survey, amongst others. Mostly 'total response' ethnicity classification was used except for the demography data. Selection of indicators was to inform about the health of the Asian people. The ethnic groups included were Chinese, Indian, 'Other Asian', 'All Asian' and European. There was limited data available at level 2 ethnicity for the Asian people. There were many inequalities between 'All Asian' and European populations. Amongst the Asian ethnic groups there were similarities and differences. Major differences were seen in health outcomes and health service utilisation between the Chinese and Indian ethnic groups, with 'other Asians' generally intermediate. Monitoring of health at level 2 ethnicity was necessary to avoid obscuring of some diseases in certain ethnic groups.

Gala, G. (2008). Brief report: Health Needs Assessment for Asian people in Counties Manukau. In S. Tse, A. Sobrun-Maharaj, S. Garg, M. E. Hoque & Y. Ratnasabapathy (Eds.), *Building healthy communities. Proceedings of the Third International Asian Health and Wellbeing Conference, September 8-9* (pp. 81-84). Auckland, New Zealand: University of Auckland.

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BACKGROUND

Asians are the fastest growing ethnic group in New Zealand and make up almost 8.5% of the total population. This figure is expected to reach 15% of the national population by 2020 (Statistics New Zealand, 2005). The Asian population is diverse and increasing in the Counties Manukau District Health Board (CMDHB) area. They make up the third largest ethnic group (18.2%) after Europeans and Pacific in CMDHB.

The New Zealand Health Strategy (Ministry of Health, 2000) requires District Health Boards (DHB) to conduct Health Needs Assessment (HNA) of their local communities to reduce inequalities in health between ethnic groups and develop frameworks for implementing the national priorities. Health Needs Assessment is a systematic method for reviewing the health issues facing a population, leading to agreed priorities and resource allocation that will improve health and reduce inequalities (Cavanagh & Chadwick, 2005). This HNA would inform CMDHB of the priority areas for intervention and service design to improve Asian health and reduce any inequalities.

The definition of 'Asian' used in this report is based on the categories used in the census, developed by Statistics New Zealand in 1996 (Statistics New Zealand, 1996). This group is made up of people with origins in the Asian continent from Afghanistan in the west to Japan in the east and from China in the north to Indonesia in the south. This is similar to the definition used by the Asian Health Chart Book 2006 (Ministry of Health, 2006). It excludes people originating from the Middle East (including Iran and Iraq), Central Asia (except Afghanistan) and Asian Russia. This definition of 'Asian' is unique to New Zealand and differs from many western countries such as the United Kingdom or Australia (Rasanathan, Craig & Perkins, 2006).

Ethnicity is the ethnic group or groups that people identify with or feel they belong to. Ethnicity is a measure of cultural affiliation, as opposed to race, ancestry, nationality or citizenship (Ministry of Health, 2004). Ethnicity is self perceived and people can belong to more than one ethnic group. The Statistics New Zealand Ethnicity Classification is a hierarchical structure with four levels. Chinese, Indian, and Other Asian are the Asian categories at level 2 codes. All Asian ethnic groups can be aggregated under them.

Aim

The aim of this work was to produce a selective health needs assessment of the Asian population, including the differences and inequalities in health status between the different Asian ethnic groups living in Counties Manukau at level 2 ethnicity.

METHODS

Data in this report were collated from multiple sources, including the New Zealand Health Information Service, National Minimum Dataset, New Zealand Health Survey 2002-2003, Census 2006, and Lets Beat Diabetes Survey 2007. Most data was aggregated for 3 years (2004 -2006) and 'total response' ethnicity classification was used except for the demography data. The ethnic groups included were Chinese, Indian, 'Other Asian' and European. In some instances, comparisons have been made with the Maori and Pacific ethnic groups.

SUMMARY OF KEY FINDINGS

The Asian people in CMDHB have increased significantly over the last decade; over 18% of the total Counties Manukau (CM) population indicate some Asian ethnicity. Approximately 83,000 people living in CM in 2006 had some Asian ethnicity ('total response' ethnicity), comprising 33,000 Indians, 32,000 Chinese and 18,000 'Other Asians'. Over 20% of all Asians in New Zealand live in CM. The total Asian population in CM is projected to grow by more than 90% over the next 20 years.

The Asian population is relatively young with a bimodal distribution; 41% being under 24 year's age and 33% between 30-49 years age. Three quarters of the Asian people live in Howick, Pakuranga, Manukau and Papatoetoe suburbs of CM. Approximately 65% moved into CM from other regions of New Zealand and from overseas. Asian people are highly educated but with slightly lower incomes and higher unemployment rates compared to Europeans. They are evenly distributed across the deprivation deciles overall, but there were inequalities in socio-economic determinants among the different Asian ethnic groups.

The Asian population as a whole fared better than Europeans on many indicators including: life expectancy, avoidable mortality and hospitalisation, child health and women's health indicators. No differences were shown in some indicators and they fared worse in indicators such as diabetes, cardiovascular disease (CVD), risk and protective factors (obesity, physical activity, and vegetable consumption), and health

utilisation (primary care, cancer screening and Chronic Care Management [CCM] programmes in CM).

There was immense diversity of health status within the Asian population. Major differences were found in health outcomes, risk factors and health service utilisation among Asian ethnic groups. Indians did worse than Chinese on many indicators, which would result in the problem of 'averaging' if the broad category 'Asian' was considered. 'Other Asians' were generally intermediate between Indian and Chinese, but it was difficult to comment on this group because of small numbers. Further, this ethnic group comprised of several small diverse communities and the pitfall of 'averaging' could not be avoided in this group.

The main areas of concern for Indians were high rates of newborns with low birth weight (LBW), obesity, diabetes (type 2), and cardiovascular disease. They had high adult and child potentially avoidable hospitalisation (PAH) rates for many conditions; high surgical intervention rates; low prevalence of accessing primary care despite high Primary Health Organisation (PHO) enrolment; increased prevalence of risk factors such as high cholesterol, blood pressure and obesity; decreased prevalence of protective factors such as physical activity and vegetable consumption; lower average age at first and all deliveries, high percentage of assisted deliveries including caesareans, high percentage of deliveries complicated by pre-eclampsia and diabetes; and high termination of pregnancy rates in private setting.

The Chinese population in general fared better than Europeans on many health indicators: life expectancy, avoidable mortality and hospitalisation, surgical intervention rates, child and women's health. Low primary care utilisation, low physical activity, particularly in women, low uptake of cervical and breast screening, gestational diabetes, and high rates of termination of pregnancy in private setting were the key issues identified in Chinese population.

Although the Asian population as a whole fared better than Europeans in many health indicators, there were many inequalities between the Indian ethnic group and Europeans. No major differences were discerned for most of the health indicators analysed, between CM and 'All NZ' for both Asians and Europeans.

LIMITATIONS

Due to limitation of time and availability of data at level 2 ethnicity, many health indicators such as cancer, mental illness, accidents, oral health and infectious disease were not included. The 'Other Asian' comprised of several small diverse communities and the problem of averaging cannot be avoided for this group. The duration of residence was not considered which will limit our understanding of the impacts of migration, acculturation and settlement on health status.

CONCLUSION

The Asian population has been the fastest growing ethnic group in CM and tremendous diversity exists with respect to health status, health risk and health service utilisation among different Asian ethnic groups.

The Asian population as a whole fared better than Europeans on many health indicators, particularly, life expectancy and avoidable mortality. However, there were many inequalities between Indians and Europeans. Indians had high utilisation of secondary health services, particularly in relation to diabetes and CVD but low utilisation of preventive and primary health services. Despite the low utilisation of health services, like primary care and cancer screening by the Chinese, their health was generally better than Indians and Europeans.

The inequalities between the Chinese and Indian population were often large, resulting in 'averaging' of the results when the 'Asian' broad category was considered. Recognising these differences and monitoring the health of Asian people at level 2 ethnicity would assist in identifying and improving their health needs.

For the full Report, please visit:
http://www.cmdhb.org.nz/About_CMDHB/Planning/Health-Status/Asian-Health/AsianHealthNeedsAssessment.pdf

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INITIAL CONSULTATION FOR ASIAN, REFUGEE AND MIGRANT MENTAL HEALTH AND ADDICTION RESEARCH PRIORITIES

Janet Chen & Jenny Long

ABSTRACT

Commissioned by the Ministry of Health; Te Pou worked with key stakeholders to identify mental health and addiction research priorities for Asian, Refugee and Migrant population groups. Thirty-two research questions were identified based on a literature review and brainstorming sessions. Forty-four community stakeholders were asked to select five of these questions which they believe most warrant funding and implementation. Additional questions and barriers to research and service provision were discussed. Further processes of literature review and service user consultation have been used to develop the selected priorities and incorporate additional questions into separate mental health and addiction research agendas for Asian and for refugee and migrant communities.

Chen, J., & Long, J. (2008). Initial consultation for Asian, refugee and migrant mental health and addiction research priorities. In S. Tse, A. Sobrun-Maharaj, S. Garg, M. E. Hoque & Y. Ratnasabapathy (Eds.), *Building healthy communities. Proceedings of the Third International Asian Health and Wellbeing Conference, September 8-9* (pp. 85-87). Auckland, New Zealand: University of Auckland.

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BACKGROUND AND OBJECTIVES

Te Kōkiri: The Mental Health and Addiction Action Plan 2006-2015 identified the development of specific population mental health and addiction research agendas as a key action to support improved service responsiveness to these groups (Minister of Health, 2006). Commissioned by the Ministry of Health; Te Pou worked with key stakeholders (to identify mental health and addiction research priorities for Asian, refugee and migrant population groups in New Zealand. Key stakeholders included the Ministry of Health, District Health Boards, Primary Health Organisations, government and non-government agencies and health, social support and immigration service providers, Asian, refugee and migrant community representatives and service users, as well as academic/research centres.

METHOD

This poster reports on Phase I and Phase II of the research agenda development. Phase III is currently underway.

Phase I

A literature review and brainstorming and consultation with sector and population group representatives was conducted. These processes resulted in the development of thirty-two potential research questions.

Example of the Phase I research question:

What are the most effective ways to promote mental wellbeing in Asian, refugee and migrant populations? How cost-effective are these methods?

Supplementary questions: What are the roles of religious group, community group and complementary health? How effective is the use of social marketing? What are the best models of community development to promote mental health and wellbeing in these populations?

Phase II

Key community stakeholders were then consulted in four New Zealand centres (Auckland, Hamilton, Wellington and Christchurch) in May 2008 (Figure 1 & 2). Forty four stakeholders provided feedback on the research priorities task.

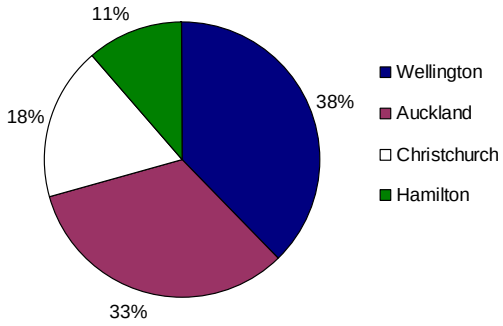

Figure 1. Feedback by region.

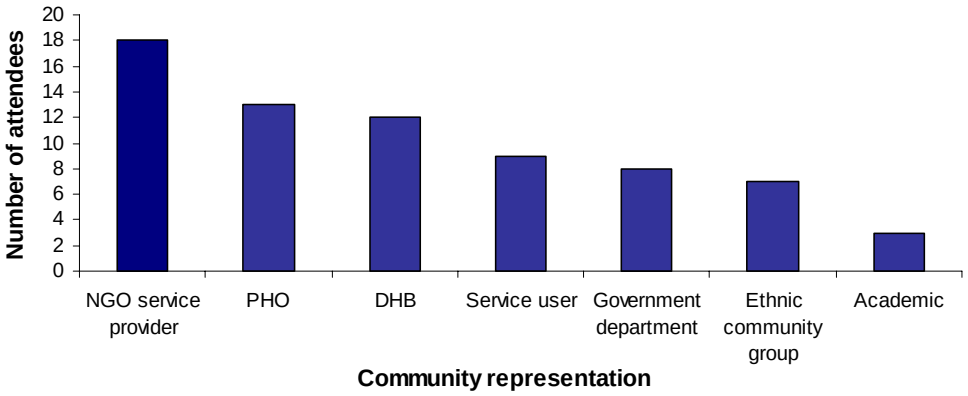

Figure 2. Feedback by community/service representation.

RESULTS

Stakeholders were asked to select five questions that most warrant funding and implementation. Questions most frequently identified in the top five priorities are listed in Table 1. Issues relating to research and the mental health and addiction sector were discussed, and additional research questions were suggested.

Table 1
Research Priorities for Asian, Refugee and Migrant Populations
(1 =Most frequently occurred in the top-five selection)

Topic of research	Population group		
	Asian	Refugee	Migrant
Effective promotion of mental health and wellbeing	1	2	1
Prevalence of mental illness and addiction	2	4	2
Workforce issues, culture responsiveness and sustainability	3	-	5
Best-practice models of treatment	-	1	-
Help-seeking behaviour and critical decision points in primary healthcare access	4	3	4
Collection and sharing of ethnicity and mental health and addictions related data for Migrant populations	-	5	3
Available mental health and addiction services particularly for infants, children, adolescents and their families	5	-	-

Please note that the topics listed in the table are summaries of the research questions.

DISCUSSION

The definitions and overlaps between the three population groups made the agenda development and prioritisation by community members a complex task.

Separate agendas are currently being developed for Asian populations and refugee and migrant populations.The next phase involves checking questions for feasibility and coverage in existing research and a further round of consultation with key stakeholders, in particular service users.

The final list of mental health and addiction research agendas can be used by agencies, including the Ministry of Health, to inform research funding allocations and by students and research bodies looking for questions with practical impact for these population groups. Strategic alliances and funding partnerships between academic, government (including DHBs and PHOs) and NGO agencies could be used to make the most of limited resources for Asian, refugee and migrant research.

Te Pou hopes to continue to encourage and facilitate research with ethnic and migrant communities and coordinate research publication and information-sharing.

More information on the project is available from: www.tepou.co.nz

BUILDING HEALTHY COMMUNITIES: IN ACTIONS

REBUILDING YOUNG REFUGEE'S LIVES: AN OLYMPIC MOVEMENT SPORT FOR LIFE PROGRAMME

Craig Mills & Rachel Thorner

ABSTRACT

Annually, under New Zealand's Refugee Quota Programme 750 Refugees seek resettlement in New Zealand. Accompanying settlement in a culturally different country is a raft of well-documented issues such as social exclusion, cultural discrimination and poor mental and physical health.

The Olympic Movement is an educational movement for youth worldwide. Under the Olympic Charter, its role is to promote the Life Principals of the Olympic Ideal through educational programmes including the Olympic Games, for the purpose of building a peaceful and better world.

Addressing the personal development needs of young refugees in New Zealand, the New Zealand Olympic Committee partnered with the Auckland District Health Board, Refugee and Migrant Services, Refugees as Survivors, WaterSafe Auckland and Swimming New Zealand to provide a week-long Olympic Movement *Sport for Life* Swimming and Water Safety Programme.

The overall goal of this *Sport for Life* programme was to use sport to facilitate young refugee's personal development around the following life principles and to assist their integration into New Zealand society;

- The balanced development of the body, will and mind
- The joy of effort
- Respect for fundamental ethical principals including friendship, respect for others,
- Striving to excel within the spirit of fairness

The programme also helped address the over representation of new settler communities in Auckland's drowning deaths by providing them with free swimming and water safety lessons. Thirty-seven percent of Auckland's population is born overseas and therefore has not had the opportunity to develop a water safety culture specific to Auckland's numerous aquatic environments. A subsequent goal was to give refugee children an opportunity to learn basic water safety and swimming skills to increase their confidence and safety in these aquatic environments.

Mills, C., & Thorner, R. (2008). Rebuilding young refugee's lives: An Olympic movement sport for life programme. In S. Tse, A. Sobrun-Maharaj, S. Garg, M. E. Hoque & Y. Ratnasabapathy (Eds.), *Building healthy communities. Proceedings of the Third International Asian Health and Wellbeing Conference, September 8-9* (pp. 89-100). Auckland, New Zealand: University of Auckland.

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INTRODUCTION

Annually under New Zealand's Refugee Quota Programme, 750 Refugee's seek resettlement in New Zealand. Accompanying settlement in a culturally different country is a raft of well-documented issues such as social exclusion, cultural discrimination and poor mental and physical health.

Exacerbating the poor mental and physical health suffered by refugees is a lack of regular physical activity. Physical inactivity and obesity are directly linked to a plethora

of life-threatening medical conditions including cardiovascular disease, various cancers and Type II diabetes (World Health Organisation, 2003). Physical inactivity is also highly associated with mental health illness and disorders such as depression, anxiety, stress and feelings of hopelessness and a lack of personal control (Fox, 2000). Immigrants and refugees, particularly women and those who do not speak English at home, are less physically active than people born in their new host country aggravating the possibility of poor physical and mental health outcomes within this population (Tzimas, 1997; Bauman, 2000).

Whilst the important health and wellbeing benefits of participation in sport and recreation are well documented, sport and recreation also has the potential to smooth the dislocating process of resettlement by facilitating community connections (Cortis, Sawrikae & Muir, 2006). Sport and recreation also provides a forum for participants to express and promote diversity; celebrate, maintain, revive and affirm cultural differences and enhance intercultural relations (Coakley, 2001; Taylor, 2002; Hanlon and Coleman, 2006).

The Olympic Movement is an educational movement for youth worldwide. Under the Olympic Charter, its role is to promote Olympism through educational programmes, including the Olympic Games, for the purpose of building a peaceful and better world. The Olympic Charter states that "the practice of sport is a human right. Every individual must have the possibility of practicing sport, without discrimination of any kind an in the Olympic Spirit, which requires mutual understanding with a spirit of friendship, solidarity and fairplay" (International Olympic Committee, 2007, p11) The Olympic *Sport for Life* programme promotes Olympism by providing opportunities for people to enjoy the life-long practice of sport at all levels and promotes the principles of Olympism including;

- The balanced development of the mind, body and character
- The joy of effort
- Respect for universal ethics with a focus on tolerance, friendship, non-discrimination and respect for other
- Striving to excel in the spirit of fairness

Sport and recreation are key leisure activities in New Zealand, and are an integral component of our national identity, national culture and social life. Almost three quarters (68%) of children in New Zealand are physically active for greater than 2.5 hours per week and almost all (92%) children enjoy participating in sport and active leisure some time throughout the year. Swimming is the most popular active leisure activity for youth, with its popularity surpassing rugby union, soccer and netball (SPARC Facts, 2001).

With more than 11,000 kilometres of coastline, numerous rivers and lakes, and a plethora of public community aquatic facilities, it is hardly surprising swimming and aquatic activity is so popular in New Zealand (Moran, 2003). Further stressing the importance of aquatic recreation in the 'Kiwi Lifestyle' the aquatic environment is identified as the second most important site for public leisure and recreation (Russell & Wilson, 1991).

Unfortunately New Zealand's affinity with active leisure in aquatic environments also has negative consequences in the form of death by drowning. On average, there are 130 drowning deaths per year making death by drowning the third leading cause of unintentional injury death in New Zealand (Langley, Warner, Smith & Wright, 2000). Whilst the drowning rate is declining, New Zealand still has one of the highest per capita drowning rates in the world with our drowning rates more than double those of Australia (Mackie, 1999; Langley et al, 2000), nearly three times that of Canada

(Canadian Red Cross Society, 1998) and more than four times that of the United Kingdom (Royal Society for the Prevention of Accidents, 2001).

New Zealand's demographic landscape is in a significant period of change. Between 1991 and 2001, the number of people born overseas living in New Zealand increased 33% in comparison to a 3% increase in the New Zealand-born population (Statistics New Zealand, 2003). Current figures show that 37% of Auckland's population is born overseas, with significant increases occurring within peoples from Northeast Africa, sub-Saharan Africa, North Africa – Middle East and Southern – Central Asia (Statistics New Zealand, 2003). Accompanying this significant increase in overseas born residents in New Zealand has been an over-representation of new settlers and refugees in New Zealand's drowning statistics. While inherent to many New Zealanders is a water safety consciousness developed through formal educational institutions, parental education and practical experience in aquatic environments, many refugees lack the basic water safety knowledge to keep themselves safe and out of danger. Many refugee's to New Zealand come from land-locked countries and from countries with little or no educational water safety initiatives. The lack of water safety education and practical experience puts refugees at an increased risk when visiting New Zealand's vastly unique and powerful aquatic environments. Exacerbating the danger posed to refugees in New Zealand waters is a desire to adopt a 'Kiwi Lifestyle' and participate in aquatic recreation and activities, as well as the Islam faith encouraging parents to teach their children swimming (Islamic Women's Association of Queensland, 2003).

Addressing the need for young refugee children to learn basic water safety and swimming skills to increase their confidence and safety in New Zealand's environments, a week long swimming and water safety holiday programme was delievered in the first week of the April 2008 school holidays.

METHOD

Programme Establishment

Learn to swim programmes have consistently been advocated for new settler and refugee communities despite the many barriers (see below) associated with physical activity and recreation. After several months of dialogue between the New Zealand Olympic Committee and new settler and refugee organisations (Refugee and Migrant Services, Refugee's as Survivors and Auckland Regional Public Health Service) the decision was made to organize a learn to swim and water safety programme catering specifically for refugee children.

Through further discussions WaterSafe Auckland Inc., Swimming New Zealand and the Dean Greenwood Swim School came on board to facilitate the swimming and water safety aspects of the programme. Red Cross New Zealand was also invited onto the project team to promote the life skill of First Aid.

Although the programme was a *Sport for Life* initiative, it was also based around the International Olympic Committee and United National Cooperation Agreement with the United Nations High Commission for Refugees – an agreement that places sport at the service of humanity.

Programme Model

It was identified early on in the programme planning that a number of barriers to physical activity and recreation would need to be addressed in order for the programme to be successful. These barriers included:

Cultural Values: Many refugee's to New Zealand come from Islamic/Muslim backgrounds where the dress code requires women to dress modestly and cover their hair in public places, making participation in mixed gender environments unfeasible.

Cost: Many forms of physical activity, including swimming have inherent costs associated with them. It was identified that the cost of purchasing swimming costumes, goggles and swimming caps may be prohibitive to many of the intended participants.

Transport: Gaining access to travel to and from leisure facilities is often difficult for refugee families as many do not hold NZ driver's licenses, or there is a lack of public transport available.

To ensure all cultural considerations were taken into account, consultation with refugee support groups and valued members of the refugee community was ongoing until the delivery of the programme. Addressing the cultural considerations, and taking into account the previously identified barriers a five day swimming and water safety programme that would cater for 100 participants was developed (see Figures 1 and 2 for a sample daily programme).

Key features of the programme included:

Transport:
Two buses where provided for the children to transport them to and from the aquatic facility each day. Each bus had three pick up and drop off points, and travelled through Auckland's two highest populated refugee community locations, West Auckland and Central Auckland.

Cultural Values:
Due to the cultural beliefs of many of the participants, the programme was arranged such that there was a segregation of males and females. This allowed female participants to take part in the 'learn to swim' pool sessions without the presence of males therefore adhering to their cultural beliefs and values.

All of the swimming instructors were also advised of the cultural beliefs of the different ethnicities attending the programme by the refugee and migrant associations in the programme working group. This meant that the swimming instructors were aware of cultural taboos such as touching participants head's.

The importance of having culturally appropriate food was also recognized and various ethnic groups within the community provided meals for the participants each day which included Halal and vegetarian options.

Learn to Swim Pool Lessons:
The programme provided participants with ten one hour long swimming lessons delievered by highly qualified and experienced staff. Due to the limited previous swimming experience of the participants, the lessons concentrated largely on water confidence, water familiarisation and water safety techniques as well as introducing participants to basic swimming skills such as floating, kicking and breathing.

Water Safety Classroom Sessions:
Keeping safe in, on and around water relies heavily on both practical skills as well the individual's knowledge about the environmental and weather conditions, safe behaviours and associated risks. To reinforce the water safety skills learnt in the pool environment, four classroom based sessions were delivered to the participants. The classroom sessions used a combination of critical thinking task skills, as well as identifying hazards and learning about the unique characteristics of New Zealand's aquatic environments. Topics included in these lessons included, home and neighbourhood water safety, beach safety, boating and rock fishing safety, and safety in and around rivers, waterholes and estuaries. To further reinforce the messages in

the classroom, participants were given resources relevant to the topic, of which several were translated into their native language.

First Aid Classroom Sessions:
First aid was also recognized as an important life skill for the participants to learn and accordingly four classroom based sessions were delivered by the New Zealand Red Cross structured around their People Savers Certificate. Topics covered in the classes included identifying dangers, dialing emergency response services, cardiopulmonary resuscitation, fractures and burns.

Physical Activity:
Physical activity and sport sessions were introduced to allow interaction in a competitive environment and to introduce the principal of fair play. As well as developing basic sport skills, participants were encouraged to contribute to the team environment and display positive attitudes when participating.

Clothing:
During the enrolment process participants were able to indicate if they needed swimming togs for the programme. The majority of participants indicated the needed for swimming togs so the New Zealand Olympic Committee donated swimming togs and rash shirts for these participants. A Somali women's group also provided full length swimming togs for female participants to ensure their participation in the swimming lessons remained culturally appropriate. Funding was also used to purchase swimming goggles, as well as swimming caps for the female participants.

Cost:
Through funding available through the New Zealand Olympic Committee, the programme was completely free for all the participants.

Sample Programme: Monday 21st April			
Males		**Females**	
9: 30 – 10:30	Water Safety Classroom Session	9:30 – 10:30	Learn to Swim Pool Session
10: 30 – 11:30	Learn to Swim Pool Session	10:30 – 11:00	Morning Tea
11:30 – 12:00	Morning Tea	11:00 – 12:00	Water Safety Classroom Session
12:00 – 12:45	Physical Activity/Recreation – Soccer	12:00 – 12:45	Lunch
12:45 – 1:30	Lunch	12:45 – 1:30	Physical Activity/Recreation – Netball
1:30 – 2:30	Learn to Swim Pool Session	1:30 – 2:30	Water Safety Classroom Session
2:30 – 3:30	Water Safety Classroom Session	2:30 – 3:30	Learn to Swim Pool Session

Figure 1. Sample programme for Monday.

Sample Programme: Wednesday 23st April			
Males		**Females**	
9: 30 – 10:30	First Aid Classroom Session	9:30 – 10:30	First Aid Pool Session
10: 30 – 11:30	Learn to Swim Pool Session	10:30 – 11:00	Morning Tea
11:30 – 12:00	Morning Tea	11:00 – 12:00	Water Safety Classroom Session
12:00 – 12:45	Physical Activity/Recreation – Basketball	12:00 – 12:45	Lunch
12:45 – 1:30	Lunch	12:45 – 1:30	Physical Activity/Recreation – Soccer
1:30 – 2:30	Learn to Swim Pool Session	1:30 – 2:30	Water Safety Classroom Session
2:30 – 3:30	First Aid Classroom Session	2:30 – 3:30	First Aid Pool Session

Figure 2. Sample programme for Wednesday.

RESULTS

Participants

There was a total of 94 participants (*n* = 59 males; *n* = 34 females) for the week long programme. The average age of the participants was 11.28 years, with participants ages ranging from 5 years to 18 years. Figure 3 shows the age breakdown of the participants enrolled in the programme.

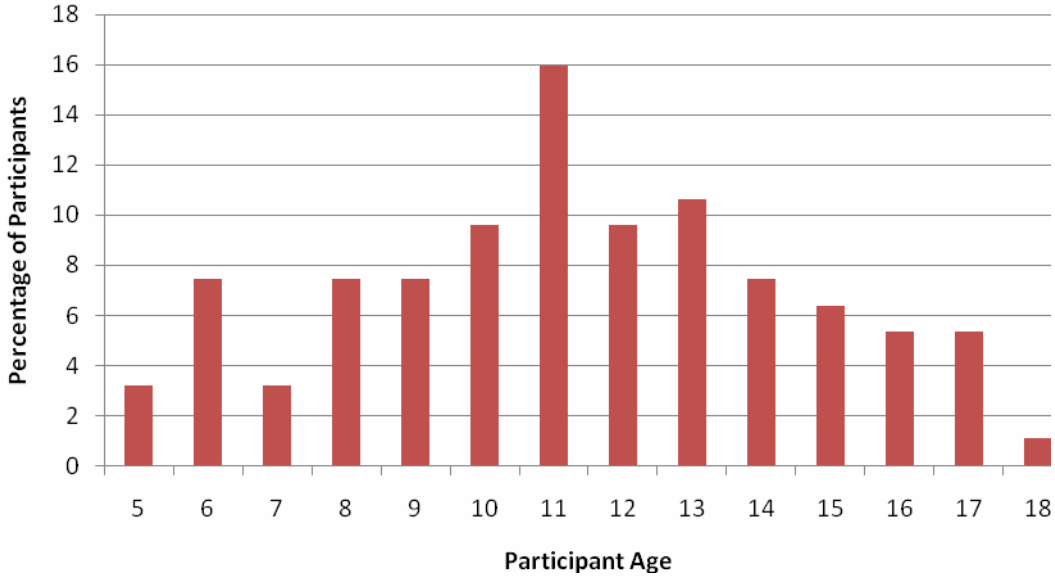

Figure 3. Breakdown of participant ages.

Participants were also asked which ethnic group they identify with. The largest self-identified ethnic group in this programme was Somali (*n* = 42; 44.7%), followed by Burmese (*n* = 31; 33%). Table 1. shows the ethnicity of the participants in the programme.

Table 1
Self-Identified Ethnicity of Participants

Ethnic Group	***n***	**%**
Somali	42	44.7%
Burmese	31	33%
Afghani	9	9.6%
Burundi	6	6.4%
Congolese	3	3.2%
Other (Not Specified)	2	2.1%
Egyptian	1	1.1%

Swimming Ability

Participants were asked prior to the programme to rate their perceived swimming ability. Cumulatively, 91.4% of the participants indicated that they could not swim over 25 metres. Table 2 shows a further breakdown of the perceived swimming ability of the participants in the programme.

Table 2
Perceived Swimming Ability of Participants

	Males %	Females %	Cumulative Percentage

Beginner	52.5%	77.1%	61.7%
Can Swim A Little	35.6%	17.1%	28.7%
Can Swim Over 25m	11.9%	2.9%	8.5%

At the conclusion of the programme, participants were asked to rate how their swimming skills had progressed as a result of the swimming lessons. 92% of participants rated that they had exceeded their expectations in progressing their swimming skills (see Table 3).

Table 3
Participants Views on Whether the Programme Improved Their Swimming Skills

	Did Not Meet My Needs	Neutral	Exceeded Expectation
Swimming Progression	2%	4%	92%

Swimming Skills Learnt
Participants were also asked what new swimming skills they had learnt as a result of the programme. Figure 4 shows that diving and entries were the most commonly cited swimming skill learnt (60%) with wearing a lifejacket (26%) the most commonly cited water safety skill learnt.

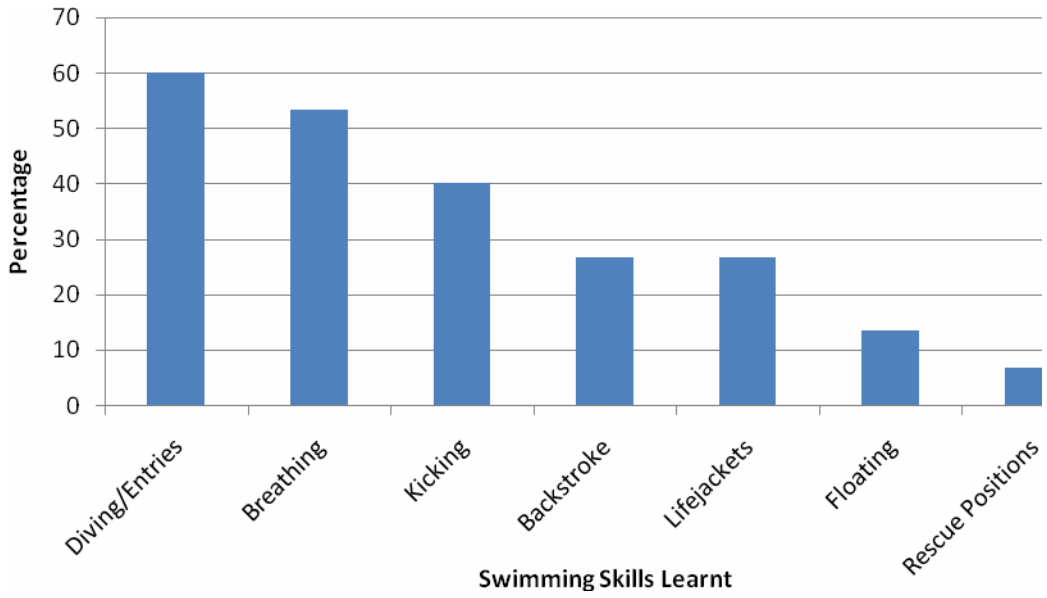

Figure 4. Swimming skills learnt by participants.

Future Safety and Participation in Aquatic Environments
The perceived future safety of each participant was also assessed with 100% of respondents reporting that they thought they would be safer in the water as a result of the programme. Participants were asked to comment on why they believed they would be safer in the water with common responses being; *"Because I feel confident to swim now", "before I didn't know to swim between the flags",* and *"because I will wear a lifejacket".*

Participants were asked whether as a result of the programme they would swim more often. 86.7% of respondents reported they would swim more often from now on. Common reasons why participants would now swim more often were *"So that I can improve my swimming", "because its cool and I love it",* and *"because I'm more confident".* 13.3% reported they

wouldn't swim more often. The most cited reason for not continuing on swimming was because "*we don't have a pool and have to pay for swimming".*

Water Safety Knowledge

Table 4 shows the participants views in regard to the increase in their water safety knowledge. Table 4 shows that 96% of participants believed that programme increased their water safety knowledge beyond their expectations.

Table 4
Participants Increase in Water Safety Knowledge

	Did Not Meet My Needs	Neutral	Exceeded Expectations
Increase in water safety knowledge	2%	2%	96%

Participants were asked to recall two water safety messages they had learnt as a result of the programme. Figure 3 shows that the most recalled water safety message was to swim between the flags (66.7%), followed by swimming with a buddy/partner (60%).

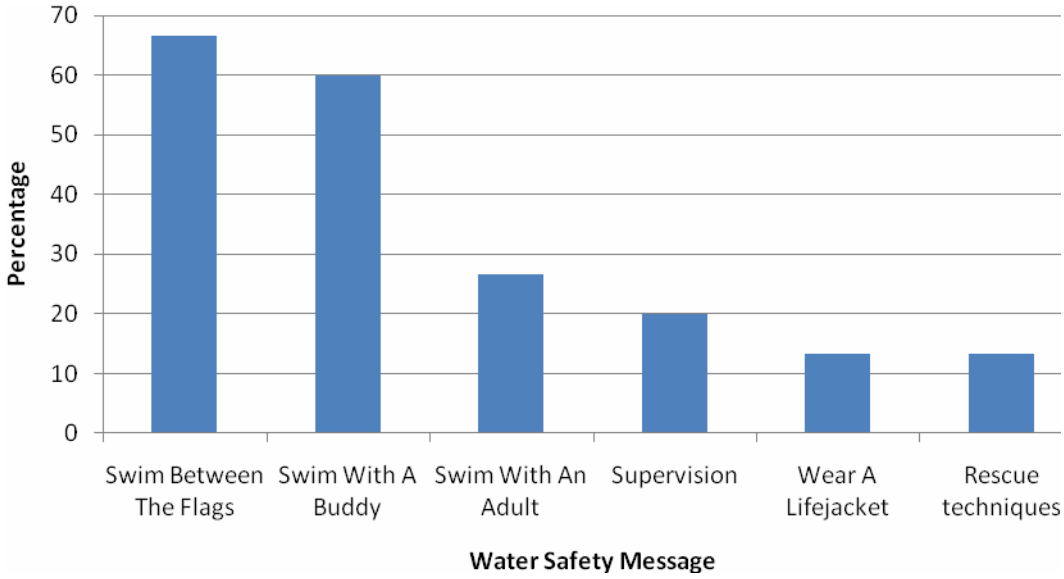

Figure 5. Water safety messages recalled by participants.

First Aid Knowledge

At the conclusion of the programme participants recorded their views in regard to the increase in their first aid knowledge. Table 5 shows that 94% of respondents exceeded their expectations in increasing their first aid knowledge.

Table 5
Participants Increase in First Aid Knowledge

	Did Not Meet My Needs	Neutral	Exceeded Expectations
Increase in first aid knowledge	3%	3%	94%

Participants were asked to recall two first aid messages they had learnt as a result of the programme. Table 6 shows that the most recalled first aid messages were to dial 111 in an emergency (60%), followed by aspects of cardiopulmonary resuscitation (60%).
Table 6
Participants Recall of First Aid Messages Learnt

	Dial 111 in an emergency	Aspects of CPR	Fracture Management	Burns Management
First aid messages recalled	60%	60%	13.3%	6.7%

DISCUSSION

The Olympic Movement *Sport for Life* Swimming and Water Safety Programme was delivered in an attempt to address the need for young refugee children to learn basic water safety and swimming skills to increase their confidence and safety in New Zealand's aquatic environments.

The findings indicate that prior to this programme, many young refugee children lacked any previous formal swimming instruction and lacked a general water safety awareness to keep themselves safe in New Zealand's aquatic environments. Almost all (91.5%) participants indicated that before the programme they could not swim more than 25 metres, well below the goal set by Water Safety New Zealand for every twelve year old to be able to swim 200 metres confidently and competently. While a measure was not taken at the conclusion of the programme as to the distance the children could now swim, the fact 92% exceeded their expectations in improving their swimming skills is encouraging.

Also encouraging is the new found appreciation for the participants of the importance of learning to swim with the majority (86.7%) of respondents expressing that they would swim more often as a result of the programme. Regular participation will increase the participants confidence and swimming ability, making them more likely to keep themselves safe in aquatic environments. However, the cost of entry to a community swimming pool is still viewed as to prohibitive to many refugee families, and the lack of culturally appropriate female swimming lessons for Muslim/Islamic women is a major barrier in ensuring this population inherits the swimming and water safety skills to keep themselves safe.

In addition to the encouraging progress made in the swimming pool, is the participants acquisition of key water safety messages to keep themselves safe in, on and around water. Every participant (100%) believed they would be safer in the water because *"we were taught how to be safe"* and *"because I learnt how to swim".* It is encouraging that participants realize the importance of adhering to key water safety messages, such as swimming between the flags, as a means of keeping themselves safe in the water. Whilst the most commonly recalled water safety message was to swim between the flags, it is alarmingly to think that many young refugee children may not recognize what the red and yellow surf lifesaving flags represent. This lack of understanding of the meaning of the flags was indicated by a comment

from a participant saying *"before I didn't know to swim between the flags".* As indicated earlier, the cost of swimming at a community aquatic facility is prohibitive to many refugee families, so the free beaches surrounding Auckland may be the aquatic environment of choice. If children are not aware of the importance of swimming between the flags, they are in greater danger of drowning due to the many strong rips and currents present at Auckland's most popular beaches.

The acquisition of basic first aid skills and knowledge is also another key result from this programme. Almost all (94%) exceeded their expectations in increasing their knowledge in this vitally important life skill. The recall of key messages such as dialing 111 in an emergency is an important point to note, given many refugee families often fail to call 111 during Police and medical emergencies due to fear of getting themselves in trouble (Phuang, 2008, personal communication).

Overall, the results suggest that this programme has been extremely worthwhile in giving young refugee children the opportunity to learn basic swimming and water safety skills. They also suggest that the young children have a greater knowledge of how to keep themselves safe in, on and around water and wish to continue to develop their swimming skills through participation in regular swimming. It is evident that a programme is this nature is highly valued, and the importance of learning to swim is recognized within the refugee community, however it appears the cost associated are too prohibitive for many families. It is the challenge of water safety organisations and refugee and migrant organisations to advocate strongly for and to provide learn to swim programmes at a cost accessible for this growing community.

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OLDER PERSONS IN PONDOK AND COMMUNITY: KEEPING POSITIVE AND HEALTHY THE KELANTANESE WAY

Haliza Mohd Riji & Shamsuddin Ahmad

ABSTRACT

The older persons are commonly portrayed as frail, dependent and having little interest in the social and economic activities. A qualitative study among older men and women in two settings in Kelantan, Malaysia was done with the purpose of understanding their perceptions about aging and life satisfaction. Through in-depth interviews among those who live in *Pondok* (lit. a hut) and community it was found that aging is perceived as a natural life's process. Life can still be filled with contentment through routines in spiritual and social activities. Being in the *Pondok* provides its older inhabitants with the close proximity to group prayers, hence the importance for them to keep well and healthy. Older women in the community feel they lead a good life despite being alone or having to live with chronic diseases. Older men find strength to live on because their wives have positive attitudes. Culturally, Kelantan is known as a state where the women are active in business and social activities, and the men are skilled craftsmen. Of importance in the study is the finding that life satisfaction is not synonymous with positive aging. The two concepts are rather cloudy – it is more the researcher's interpretation of what should be called positive or healthy aging.

Mohd Riji. H. & Ahmad. S. (2008). Older Persons in Pondok and community: Keeping positive and healthy the Kelantanese way. In S. Tse, A. Sobrun-Maharaj, S. Garg, M. E. Hoque & Y. Ratnasabapathy (Eds.), *Building healthy communities. Proceedings of the Third International Asian Health and Wellbeing Conference, September 8-9* (pp. 101-109). Auckland, New Zealand: University of Auckland.

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INTRODUCTION

Given that aging is a biological and physiological process, its manifestations are reflected in the reduction of normal bodily functions (Goldsmith, 2006). Older persons are commonly associated with less physical strength, hence their inability to perform difficult and heavy tasks. The onset of chronic disease can disrupt their daily routines, and they may need someone to help them fulfill their basic needs. Psychologically, they are seen to withdraw from social activities. These are partial scenarios of the total reality of older persons in society. As the proportions of older people keep growing, the aged in society continue to either live as passive or active members of their community. One of the major concerns with the elderly in the developing countries is the state of their mental health (Levkoff et al., 1995). Life satisfaction, a subjective domain, is part component of the person's quality of life. For older people, and similarly for other age groups, it can be determined by how their life are being affected by factors such as own health, religion, social contacts, family relationship and friends, home environment (Corner et al, 2004).

Background Information

The State of Kelantan, which is situated to the northeast of Peninsular Malaysia, is unique compared to the rest. Its population is predominantly Malay (95%) with a small percentage (5%) of people originating from Thailand. It maintains much of the traditional activities such as batik printing, silver and copper tooling, songket weaving, and fishing. On the streets old men ride the *beca* (tricycles) for commuters, and in the wet markets middle and old aged women take center stage as vegetable and food traders. On Fridays older men and women are seen at mosques and houses for the weekly afternoon prayer and religious classes. The *Pondok* (lit. hut) is where many of the aged choose to spend their remaining years to be better off spiritually. There are as many as 10 *Pondok* in a district. The capital, Kota Bharu, is situated near the mouth of Sungai Kelantan and is inhabited by about 450,000 people, the majority of which are Malays. Labeled the Islamic City, it flourishes in the trading of handcrafts and home-made foodstuffs.

Given its largely traditional way of life and geographical attractions, the state is popular among tourists. The people appear to be generally in good health and active. Raymond and Rosemary Firth's studies in early 20th century are evidence of men's and women's involvement in economic and social activities. Nevertheless, studies on the quality of life of Kelantanese are limited in number. The various studies by Dhillon et al (2005;2006) on sexual functioning among postmenopausal women revealed a decrease in sexual activity. The phenomenon could partly be contributed to ageing and reflective of objective and subjective quality of life. In view of this, a qualitative study on aging and life satisfaction was conducted in Kelantan, Malaysia with the purpose of understanding how older persons view their life process. Of relevance the study aimed to find out how older persons in *Pondok* and the community live their later life. The orientation of study is toward positive aging or healthy aging.

METHODOLOGY

The study adopted a phenomenological approach considering that it was concerned with the issue of aging as biological and physiological process. The aim in phenomenological research is to understand how people make sense of their social world, i.e. to find out 'the constructs' they use in everyday life (Ritchie & Lewis, 2003: 11). It would then be possible to explore how older persons relate to their aging. Current attitudes toward aging are changing – from viewing the aged as weak and dependent to ones that fulfills their lives with meaningful activities. Through in-depth interviews with individuals it was possible to discover their meanings of aging and the satisfaction they relate to past and present life. The data was substantially narratives. Several focus group discussions (FGDs) were also held with selective groups – men and women retirees. All interviews were conducted in Kelantanese dialect and Bahasa Malaysia.

Using known contacts from previous studies in Kelantan, six residents of *Pondok* and eight older persons in the community were chosen for the study. Except for one, all *Pondok* respondents were women, while two of the community respondents were men. The FGD respondents (four men and 3 women) were chosen from a known retired teacher.

No attempt was made at determining their objective life. Instead, the focus on meaning of aging and life satisfaction was linked to aspects of physical conditions, living arrangement, family and friendship relations, marital status and relations, social activities, happiness. For *Pondok* residents, permission to conduct the in-depth interviews was obtained from the principal caretaker. As for the community respondents, only their personal consents were obtained.

In approaching the issues on aging and life satisfaction, no structured interview schedules were used. Instead, each respondent was met with an explanation of the researcher's status and the purpose of the interview. The interviewee was first asked to describe (i) their

personal and family status (ii) everyday activities (iii) present life satisfaction. The next phase of the interview involved directing and probing the interviewee on issues relating to aging, and more particularly on their life satisfaction and well-being. The interviews were tape-recorded, and note taking was done to capture the respondent's behavioral characteristics as well as the setting. Each interview was transcribed by a research assistant and was analysed by the researchers. Pictures of them also were taken.

FINDINGS

Age of Respondents
Of the six women *Pondok* respondents, one was 86 years, three were between 70-75 years, and two were in their sixties (65-66). The one male respondent was 70 years old. In comparison, the oldest in the community was a 100-year old man. Two men aged 67 and 70 years respectively. The youngest of the women respondents aged 58. Three women aged between 61 – 63 years.

Of the retired men in the focus group interview, one was above 70 years. The others were 65, 66 and 67 years. The women group comprised one who was 58 years, and two who exceeded their 65 years.

Health Status
According to the respondents, they usually were in good health despite old-age sickness as joint pains and recurrent coughs. Some said that they had diabetes and hypertension but they would go the hospital or the pharmacy for medications. No attempt was made to look at their health or medical cards.

The FGD group members provided a self-rated health status as 'healthy with usual old age problems'. Every one appeared well and in high spirit to partake in the discussion.

Marital Status
Except for a woman respondent who lived with her husband in a small house in the *Pondok* vicinity, the others were widows. The oldest male in the community was a widower while the other men lived with their wives.

All men and women FGD respondents were still married and were living together at the time of interview.

Living Arrangement
Single residents of *Pondok* lived in self-maintained hostels. Depending on the size of room, between 6–8 persons could be accommodated. Husband-wife residents could occupy small houses where bathroom and kitchen facilities were available. Those in the community were found to live alone or with either their spouse and family members.

Social Mobility
Being in the *Pondok* was flexible in the sense that residents could choose to live there for several years and then they could return to their own homes and go back to the *Pondok* for some months or years. While in the *Pondok* they could go out to visit their family members for a while. Most regarded the *Pondok* as their last living quarters, hoping to die as devout Muslims. Visitors were allowed but not to share the accommodation longer than a week.

Family Characteristics
Data on the respondents' earlier life portrayed them as active and positive individuals. Faced with difficulties of poverty and the hardships in growing up in large size family led them to find alternatives. None of the women had more than ten years of formal schooling. By the age of twenty they were married to men preferred by their parents. By the age of 40 they

had 5 – 7 children whom they raised without the help of family members. One respondent, however, did not have any children despite being pregnant twice. She subsequently adopted two of her husband's nephew and niece. All respondents said that they had frequent support from their family members, particularly in times of sickness and other family matters. Remarrying the second husband occurred when the first spouse died. Interests in petty business were always generated by family activities, such as operating small business in foodstuffs or clothes in the local markets.

Although men were better in terms of their occupations, none attained tertiary level. One of them secured a teaching job and stayed on until retirement. He married a teacher, divorced her and remarried a shop proprietor. As for the other two, they maintained their families with the earning they got through agricultural activities such as planting of fruit trees, and working as paid workers in land opening. They encouraged their wives to do some business, such as selling of sarong and Kelantanese foodstuffs.

Evidently, men and women FGD respondents were in receipt of a monthly pension. In addition they obtained other income derived from their business activities and contributions from working children.

Meaning of Aging

Getting Old, Older, Already Old

Women in *Pondok* was quick with the remarks 'I'm old. We're already old.' Culturally, the use of 'mak' (mother) would denote that someone is elderly. An old woman, according to respondents, would usually be in the age range of 50 and above. She would already have grown up children and if she were above 60 she would have grandchildren.

> *"Why…I must be old. I have many grandchildren, uttered HA".*

> *"I have ten children and thirty grandchildren. So, I'm already old, said SS proudly".*

'Getting old' is used to mean that one must be getting older. When one chose to live in the *Pondok* one then realized that one is gradually becoming older and older. Getting old is associated with getting nearer to death. One must look forward to preparing oneself with spiritual knowledge and be contented with what is given. Of utmost importance for *Pondok* residents is to realize that the main purpose to be there is to dutifully perform the 5 times a day prayer plus the optional ones. Culturally and emotionally, the *Pondok* resembles Mecca, where in the center is the Holy Kaaba, and surrounding it are thousands of homes. At five times a day after the azan (call for prayer) all go there to follow the imam (leader in prayer).

Being a resident of a *Pondok* meant that one is old – old in terms of biological age and in terms of social status, one ought to spend more time learning about religious. The *Pondok* is the place for acquiring the knowledge and improving religious practice. But when comparing to someone much older (86 year old HA), an older woman said 'Oh, she's older…what else can she do? She can't do much here. But there's always someone to cook and take care of her. We all would help her with cooking.'

A woman's life is considered appears to be divided into three phases – young, middle age, and late age. In referring to her age, RS who said she was 75 had this to say:

> *"I'm just waiting for death. I was admitted to the hospital recently for fever – high fever. I was in for 26 days. I was half alive, half dead. At this age I am at the end of life".*

Men retirees' responses reflect a general perception that the public associate retiring with age 55 years and the retirees get into the 'old age' group. The men group are more comfortable with 'we are old, we are seniors!'. The women submit to the aging process as one that 'one

has to go through – like it or not!'. The difference between aging and getting to be old lies with 'how you deal with the process'.

Can aging be delayed?
Respondents' perception of longevity is much influenced by the Islamic belief that one's life is predestined. No one knows how long one would live and whether one can be happy. Asking for a longer life would mean asking for something uncertain – would it be good or bad?

> *"I've heard that some women want to be young again. Not me, not us here (Pondok residents). What can you do? No, no…aging cannot be delayed. If you're old, you're old".*

Aging, as all respondents believed, is something that everyone has to accept. No matter how one perceived it to be one had to be ready with its symptoms.

> *"Me, I'm old – can't do anything to it. My eyesight is getting poor, and my knees are not strong as they used to be (HA)".*

> *"The only thing left to do is to keep well. That's important – otherwise we cannot pray upright (MD)".*

Keeping Positive and Healthy
The following responses provide glimpses of the respondent's attitudes and ways of coping with their aging body.

One way to keep going active and healthy is to get busy. In her young days MM became a member of a local association. She was very happy to take part in the association's cooking and handicraft activities. She had the opportunity to learn the art of cooking Thai cuisine in South Thailand. Today she is sickly, but that does not stop her from imparting her knowledge to anyone who wants to start a homemade foodstuff for household consumption and sale. Diagnosed with a serious kidney problem during her last medical check-up, she has given up hope that one day she gets her health again. She has tried both modern and alternative therapies. Isolation, according to her, would only speed up her illness.

> *"I can't ask my son to stay with me all the time. He and his wife got to leave me the whole day. They bring their daughter along to the office. So I'm left alone in this big house. What I do ask them is to drop me at my friend's house on their way out, and on their way back home pick me up from there. There in my friend's house, there are four of us old women. They know my condition, I know them. We talk and share the day's activities".*

Keeping positive by doing the household chores till late morning is the routine that AS has set herself to do. At the age of 67 she does work according to her physical strength. She cannot overexert herself as she got a heart problem and asthma. On Friday and Saturday morning she skips much of the housework because she needs time to attend religious classes at the nearby mosques. She walks to both places. Friends do invite her to ride in their cars, but she preferred to walk the paths. This, to her, is the physical activity she needs to keep her in good health.

> *"The walking makes me feel good. I sweat a lot. But I use an umbrella and Walk under the shade of trees. I don't feel the distance as my friends walk with me to the balaisah (prayer house)".*

Some afternoons she spends time clearing the house compound and attends to the vegetable plots.

> *"I like to grow my own vegetables. They are fresh and healthy. Those in Market vegetables contain much poisonous substance. I grow and cook my vegetables, so I can be healthy".*

PN has never been passive since retiring from a construction job in Singapore. His early experience in padi-growing has equipped him with the knowledge and skill in agricultural activities. Instead of working on padi land, he turned to fruit orchards. Working in the padi fields requires more physical energy, as the plants require year-round activities. There is so much to be done in the orchards; the happiest times are during the fruit season. Gathering the fruits and selling them direct to the dealers or bringing them to the market occupy all the weekdays and weekends for him and his wife. There are also fresh vegetables that he collects for sale to the same market. His source of encouragement is his wife. He has never seen her idle throughout their married years. Adopting her positive attitude – always smiling, and doing something no matter how small, had given him the strength to concentrate with the fruit orchards.

This 75-year-old woman (RS) has been to three *Pondok.* The first two were for short durations. She was advised by relatives not to stay permanently at the *Pondok.* She could go there and return to her children whenever she felt like it. She agreed to this arrangement as she thought she could see to their welfare. After her husband's death three years ago and since then all her last child got married, she decided to live in the *Pondok* for as long as she lived. In the *Pondok*, there is everything – bed, water, electricity, and kitchen. But especially friends are all the time there to give the support and cheer.

MW is known to be well always. She is a part-time masseuse. At weekends she leaves the *Pondok* for homes where someone would be waiting for a total or part body massage. She does not do it for commercial purpose, but for social service. She keeps well by taking herbal preparations in the form of concoctions. She believes in the goodness of plant shoots and roots and would advise others to take them regularly.

Life Satisfaction

For *Pondok* residents, being in the *Pondok* vicinity provided all the satisfaction of life. It is like a destination. MM has suffered frequent episodes of asthma and since her husband's demise her feeling of joining the *Pondok* became stronger. She hoped that she would finally settle down at the *Pondok.* But meanwhile she felt contented with the attention given to her by his married adopted son.

Familial social support is very much a contributory factor in life satisfaction. AA has seven children. They are all married. Though she stays alone she gets satisfaction because her youngest son visits her everyday – if not twice a day, at least once when he returns from work nearby. During school holidays her grandchildren spend time with her, helping with some household chores and keeping the compounds clean.

To SS her life satisfaction is derived from knowing that every one of her children attained secondary and tertiary education. More importantly they have learnt and practiced the Islamic religious knowledge. These would ensure that they would live well now and in the next world. As a mother of ten children, she thanked God for her well-being and dedication to bring up her children successfully.

Aging and life satisfaction can be interrelated or they can mean different things. For ZZ, a retired teacher who subsequently started a small restaurant with his wife, aging was more of a transition of experience – from being a professional in a learning institution, and at the point of retirement, when he reached the age of 55 he became a 'young' person again because he then became an entrepreneur. There was little satisfaction previously, but since remarrying the second wife, life was more satisfying.

DISCUSSION

The purpose of the study was to explore the meaning of aging and its association with life satisfaction among the elderly in Kelantan. Through in-depth face-to-face interviews and focus group discussions it has been possible to categorise several key concepts, themes and sub-themes. Several 'constructs' could be distinguished for the individual respondents and the groups.

Construct One: Past Activity and Positive Aging

Aging among individuals in the community is seen to be part of their early life experience within the context of the family and social environment. When the major responsibilities of upbringing and educating their children have been lessened and their age increased, becoming older is seen to be a natural course of event. Aging is to become aware of the present conditions and to accept whatever limitations there are.

Construct Two: Spiritual Potentials and Healthy Aging

Pondok inhabitants choose to end their later life through spiritual learning and within the physical and social domain provided by the *Pondok* enclave they thus regard aging as blessed and desired. So long as they can participate in the daily prayers and religious classes, aging is slow-flowing but a 'healthy' state.

Construct Three: Between Opportunities and Challenges and Successful Aging

Aging among retirees has to do with life satisfaction that arise from the opportunities of having their economic and social activities realized before and after they reach the age of 55 years. When income and family relationships do not pose as grave challenges and when potentials can be exploited, aging can be termed as 'successfully and meaningfully achieved'.

CONCLUSIONS

Aging as conceptualized in developed countries tend to connote that the elderly go through their later years without succumbing to the despair of chronic illness, able to maintain physical and cognitive abilities, and getting the freedom to do what one wishes. As succinctly stated by Hagberg (2006), the issues relating to the positive aspects of aging are diverse, yet are essentially concerns about the older persons quality of life. This study's findings illustrate that it is more meaningful to age well and feeling happy about it given the various contributing factors. Having a disease is burdensome, yet this can be compensated with the familial support and sharing similar experience with other older persons in the *Pondok* and community.

Being in the *Pondok* and the community offer the older persons with the freedom of being part of their family and placing them within the social context. Traditional values surround the individuals whether they live alone or in groups. Less of regrets for past life are shown. Rather, the remaining life is to be filled with meaningful activities, and these are derived from the spiritual and psychological fulfillment attained through physical, social and religious activities. While on the one positive aging is related to life satisfaction, they are not synonymous. The two concepts are rather cloudy – it is more of the researcher's interpretation of what should be called positive or healthy aging. More data is needed to clarify these. There is also need to consider both the objective and subjective dimensions affecting the older persons well being (Haliza & Syed Tajuddin, 2007).

The terms 'positive aging', 'healthy aging', and 'successful' aging are constructs based on western views that aging be filled with useful activities, the ability to cope with diseases and disability and the opportunity to live quality life. Of primary importance is to increase capital investment to improve older people's health (Healthy Ageing, 2007). Views from traditional communities do not run parallel to them but are relevant in the understanding of the deeper meaning of life satisfaction for older persons. Longer life may not be something desirable. A fulfilled life is what seems to be more appropriate.

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Asian Smokefree Communities (ASC) A language and culture specific service combining smokefree promotion and smoking cessation in a family-oriented community based setting

Lis Cowling, Sue Lim & Janice van Mil

ABSTRACT

The World Health Organisation (WHO, 2008) states Tobacco is the single most preventable cause of death in the world today. In 2008, tobacco will kill more than 5 million people globally, which is equivalent to the populations of both New Zealand (4,264,150[1]) and Fiji (918,675[2])

Reducing harm caused by tobacco is one of the 10 health targets of the Ministry of Health, and DHBs are expected to reach the same target. Research and community consultation findings tell us that Asian migrants and refugees have difficulties accessing mainstream services due to language and cultural barriers. Specific cessation or smokefree promotions services for Asian people were not available even though cardiovascular disease and smoking are major health issues.

The Asian Smokefree Communities service was specifically designed and developed to deliver a cultural and language appropriate service to address the service gap. The service model was also designed to test the effectiveness of a combined smokefree and smoking cessation intervention with this ethnic population

The aim is to reduce the exposure to second-hand smoke and increase the effectiveness of smoking cessation in the Asian population of WDHB, and ultimately improve access and reduce inequalities.

This service is a first of its kind in New Zealand and has won many awards recognising its innovation. It has achieved high success rates and the pilot service has received sustainable funding to expand across Waitemata region.

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[1] Statistics New Zealand, 2006
[2] US State Department Country Notes 2007

INTRODUCTION

The Asian Smokefree Communities (ASC) pilot is a language and culture specific service that combines smokefree promotion and smoking cessation in a family-oriented community based setting.

The ASC service was launched on 28 April 2006. It provides a free home visiting service for Asian peoples who:

- Smoke or have a smoker in the family
- Wish to live smokefree – work, home, car
- Live on the North Shore and/or enrolled with Harbour PHO doctors

ASC services include:

1. Assisting clients and families to create a smokefree environment
2. Supporting smokers to go smokefree through quit smoking advice, nicotine replacement therapy, counselling, phone support, home visits and resource information

Aims of the Pilot Project

The project seeks to:

1. Reduce exposure to second-hand smoke in the Asian population
2. Reduce smoking in the Asian population
3. Reduce health inequalities by improving Asian peoples' access to smokefree and cessation services

Key Objectives

1. To increase the number of smokefree cars/home environments in Asian families
2. To increase the effectiveness of quit attempts in Asians who smoke
3. To ascertain the appropriateness of the ASC service model for smokefree promotion and smoking cessation for the Asian population

"The Big ASC" won first place in the oral presentation category of the Waitemata District Health Board's Annual Clinical Quality Awards on 17 November 2006, six months after the rollout of its services. With the success shown by the results of the one and three month Evaluation, ASC was entered into the Ministry of Health, 2007 New Zealand Health Innovation Awards. The programme was highly commended in the Excellence in Primary Health Care Category.

RATIONALE FOR ASIAN SMOKEFREE COMMUNITIES AND SERVICE ALIGNMENTS

Local

Waitemata District Health Board Strategic Plan 2005-2010 mentions:

- Tobacco Control identified as priority population health activity for the prevention of cardiovascular disease in the district
- Reducing Inequalities as priority to create health services that are accessible, culturally appropriate and safe to meet the healthcare needs of the population, including Asian people, migrants and refugees

Gap Analysis Report entitled, "Establishment of Comprehensive Co-ordinated Smoking Cessation Services in Waitemata District" (Whittaker & Thompson, 2005) states:

- Asian people are the fastest growing population in the WDHB (census 2001).
- Based on the 1996 Census smoking rate and the 2001 Census figures, it was estimated that there were 3,500-4000 Asian smokers out of 65,000-90,000 smokers in the Waitemata district

- Specific cessation or smokefree promotion services for Asian people were not available even though cardiovascular disease and smoking are major health issues
- Language difficulties and cultural differences are known barriers to accessing existing mainstream smoking cessation services.

Regional

Within the Asian Public Health Project Report (Ministry of Health, 2003), it is recommended that:

- Reducing language and cultural barriers through the provision of interpreters, recruitment of more Asian health professionals, development of more culturally-sensitive services, enhancing mainstream services, targeting of resources and ensuring that service development involves Asian communities through partnerships and other mechanisms
- Improving access to health services by Asian communities

National

New Zealand Health Action Plan (Ministry of Health, 2001) indicates:

- Smoking is the major cause of lung cancer and a range of other cancers in New Zealand
- Smoking and exposure to second-hand smoke are known to cause lung cancer, heart attacks and strokes

New Zealand Cancer Control Strategy (Ministry of Health, 2003)

- Goals are to reduce the incidence and impact of cancer and to reduce inequalities in health care access.

Primary Health Care Strategy (Ministry of Health, 2001)

- The role of primary health care services is to focus on better health for the population and to work actively to reduce health inequalities between different groups.

Similarly in the Clearing the Smoke: A five-year plan for tobacco control in New Zealand 2004–2009 (Ministry of Health, 2004), the objectives include

- Promote smoking cessation
- Prevent harm to non-smokers from second-hand smoke
- Improve infrastructional support and coordination for tobacco control activities

COLLABORATIVE PARTNERSHIP

ASC was established as a tripartite collaborative partnership between Auckland Regional Public Health Service (ARPHS), Harbour Primary Health Organisation (HPHO) and Waitemata District Health Board's Asian Health Support Services (AHSS) and Health Gain Team (HGT) – it is the first of its kind in New Zealand, involving primary, secondary and public health.
The project was led by a Steering Group with representatives from WDHB (HGT and AHSS), ARPHS and HPHO. This governance group developed the vision, objectives, management and service development framework (including Terms of Reference), and service model.

Health promotion principles were initially applied for the service development, which were subsequently evolved into an 8 Cs framework.

The roles of the three organisations were formalised in a multiparty agreement formulated by the Steering Group and signed by the Chief Executive Officers of all three parties. This signalled commitment from all three organisations.
The Steering Group met fortnightly/monthly as required. It was responsible for:

- Securing funding
- Community consultations
- Negotiating multi-party agreement
- Developing project plan, monitoring key deliverables, timelines

- Resource and database development
- Workforce development (recruitment and training)
- Service management and promotion
- Facilitating information dissemination to key stakeholders
- Mitigating risks as identified
- Evaluation plan, report and planning for the future

STAKEHOLDERS

The needs and expectations of internal stakeholders were identified and agreed upon at the first Steering Group meeting. The needs and expectations of the external stakeholders were determined via a literature review and community consultations. The findings led to the development of the family-oriented, culture appropriate and language specific model of service. The "8 Cs" Service Development principles were applied throughout the project to address the needs and expectations of both internal and external stakeholders.

<table>
<tr><th>Stakeholders</th><th>Needs and expectations</th><th>How were these addressed</th></tr>
<tr><td rowspan="7">Asian Community

Supporting organisations/ agencies</td><td>Language, culture appropriate service</td><td rowspan="3">Culturally responsive approach
Community engagement
Capacity building</td></tr>
<tr><td>Language, culture appropriate information</td></tr>
<tr><td>Community/Family support</td></tr>
<tr><td>Access to service</td><td rowspan="3">Community based outreach</td></tr>
<tr><td>Convenience</td></tr>
<tr><td>Low Cost</td></tr>
<tr><td>Effective intervention</td><td>Combination of smoking cessation and smokefree promotion
Collecting of client information</td></tr>
<tr><td>Support diverse populations</td><td>Communication support</td></tr>
<tr><td>Internal</td><td>• Fulfil organisations' obligations to address health inequalities and align with key health strategies
• Addressing health inequalities and achieving positive health outcomes for the growing Asian population using an intersectoral approach.</td><td>Collaborative partnership
+ the other 8 Cs as above</td></tr>
</table>

The model of service was developed on the basis of continual local and regional community consultations from initial gap analysis, resource and service development and service delivery.

Local and national smokefree and quit networks e.g. the Health Sponsorship Council, The Quit Group, the National Heart Foundation and other organisations were engaged for funding, resource development and training support.

METHODOLOGY

Step 1: ARPHS explored potential solutions through a literature review. AHSS consulted with community leaders through focus groups. HPHO investigated service delivery feasibility and consulted with general practices with larger Asian client numbers.

Step 2: The Steering Group (SG) identified feasibility issues and potential solutions at the commencement of the project.

Step 3: The SG determined and weighted the level of expected benefits from various aspects, such as:

- Burden of disease: its impact on population, economic impact and target population
- Health gain: response rate, incremental health gain, anticipated impact, early intervention
- Access: regional equity, geographical equity, timeliness,
- Appropriateness: organisational goals; appropriate setting/level of service; best clinical practice; reduces demand for services; partnerships and collaborations
- Organisational impact: innovation; impact on workload, capacity building

Step 4: The SG identified potential risks using a risk assessment framework to gauge probability and impact and to identify strategy.

Step 5: The SG developed an evaluation plan with clear objectives and measurable outcomes during the service development and implementation phases. It includes specific process and impact measures. Ethical approval was obtained to carry out a formal external evaluation to determine the following benefits from the project:

1. The effectiveness of the ASC service on smoking in cessation clients
2. The effectiveness of the ASC service on exposure to second-hand smoke in homes and cars of clients
3. The acceptability of the ASC service to clients
4. The factors critical to ASC's success or otherwise.

EVALUATION AND RESULTS

For the overall project, the Steering Group:

- Monitored the project progress against the project plan, milestones and specified deliverables, using a monthly reporting template
- Developed a special database to track service referrals, client information, appointment activity and smokefree and cessation outcomes for Steering Group
- Reviewed service outputs; coordinators' issues and client feedback and made improvements to ensure continuous quality improvements

For the external evaluation process, the Steering Group:

- Developed a work plan for the external evaluator
- Monitored progress of the evaluation process against the work-plan, milestones and deliverables

Referral Source

All Koreans referred themselves. Chinese people were referring themselves or were referred by others such as their wives or other service users (28.6%). The significant uptake from self referrals reflects on the accessibility of the language and culturally appropriate service, and the huge efforts from community promotion activities.

ASC Cessation Clients: Demographics and Health (Total Clients = 93)

Gender	**Male**	**83**	**89.2%**
	Female	10	10.8%

Ethnicity	**Korean**	**49**	**52.7%**
	Chinese	39	41.9%
	European/other	4	4.3%
	Other Asian	1	1.2%
Age	20-29	10	10.8%
	30-39	14	15.1%
	40-49	**37**	**39.8%**
	50 -59	14	15.1%
	60+	7	7.5%
	Not stated	11	11.8%
Years in New Zealand	<1 year	7	7.5%
	1-5 years	**35**	**37.6%**
	6-10 years	22	23.7%
	>10 years	19	20.4%
	Not stated	10	10.8%
Medical conditions	Diabetes	10	10.8%
	Hypertension	6	6.5%
	Hyperlipidaemia	2	2.2%
	Asthma	1	1.1%
	Reflux	1	1.1%
	Sleeping disturbance	1	1.1%
	Nil	35	37.6%
	Not stated	**42**	**45.2%**

ASC cessation clients: Smokers' characteristics (Total Clients = 93)

Age first started smoking	<15	9	9.7%
	16-20	**46**	**49.4%**
	21-25	19	20.4%
	26-30	4	4.3%
	>31	3	3.2%
	Not stated	12	12.9%
Cigarettes per day	1-10	20	21.5%
	11-20	**44**	**47.3%**
	21-30	13	14.0%
	31-40	2	2.2%
	Not stated	14	15.1%
Time to first cigarette	**< 5 minutes**	**52**	**55.9%**
	5-9 minutes	2	2.2%
	10-30 minutes	7	7.5%
	> 30 minutes	20	21.5%
	Not stated	12	12.9%
Reasons for quitting*	**Health**	**72**	**77.4%**
	Family	24	25.8%
	Financial	13	14.0%
	Social	3	3.2%
	Religious	2	2.2%
	Not stated	12	12.9%
Previous quit attempt	**Yes**	**66**	**71.0%**

	No	19	20.4%
	Not stated	8	8.6%
Quit methods tried (self-reported methods)	**Self**	**45**	**48.4%**
	NRT patches and gum	17	18.3%
	NRT inhaler, microtab, other	3	3.2%
	Herbal	3	3.2%
	Not stated/no attempt	27	29.0%
Quit fail reasons (self-reported methods)	Cravings	27	29.0%
	Stress	15	16.1%
	Habit	11	11.8%
	Severe withdrawal	5	5.3%
	Exposure	4	4.3%
	Other	6	6.5%
	Not stated/no attempt	**27**	**29.0%**

Key Objective One
To increase the number of smokefree cars /home environments in Asian families.

The analysis of the impact of ASC on smokefree environments was based on the household data-set from the ASC database for the period from 1st May 2006 to 21st December 2006 (Figure 1). Eight-seven households received ASC smokefree environments service. Sixteen were not smokefree inside their homes at baseline (18.4%). Almost two-thirds of the households reported smoking in cars at baseline (63.2%).

Rules in house BEFORE ASC	Yes No Not stated	63 (72.4%) 16 (18.4%) 8 (9.2%)	**Rules in house AFTER ASC**	**All homes (100%) were smokefree after the intervention,** an increase of 18.4% from pre-intervention levels.
Rules in car BEFORE ASC	Yes No Not stated	21 (24.1%) 55 (63.2%) 11 (12.5)	**Rules in car AFTER ASC**	**All but two households had smokefree cars after the intervention,** an increase of 60.9%.

Figure 1. Smokefree rules in house and car (n= 87 Clients).

Key Objective Two
To increase the effectiveness of quit attempts in Asians who smoke

135 mainly male migrants, with Korean or Chinese as their first language, and a high level of dependency on tobacco, approached ASC in its first 7 months. Many (27) were out of area and unable to receive service. Nine people used the smokefree environments only option for service.

Results of quit rates (All cessation clients as a denominator, Figure 2): Of the 93 ASC cessation clients who had access to some form of intervention, the self-reported quit rate

(continuous abstinence) was 72.0% at one month, 53.8% at three months and 40.9% at six months. Point prevalence quit rates would have been even higher, as many relapsed clients have since set second quit dates and remained quit for at least one month. These high quit rates (although self-reported and short-term) were supported by the high motivation levels of the clients and coordinators, demonstrated by a particularly low "did not attend" rate and a high level of follow-up contacts.

The 11 people who were "not ready to quit" received varying levels of service. Two set quit dates after 21 November (the cut-off date for the denominator). Two received some visits and phone calls. Seven contacted ASC and then determined with coordinators they were not ready to quit.

One month post-quit date (n=93)		
Quit	67	72.0% of n
Relapsed	14	
Lost to follow up	1	
Not ready to quit	11	

Three months post-quit date (n=93)		
Quit	50	53.8% of n
Relapsed	29	
Lost to follow up	3	
Not ready to quit	11	

Six months post-quit date (n=93)		
Quit	38	40.9% of n
Relapsed	41	
Lost to follow up	3	
Not ready to quit	11	

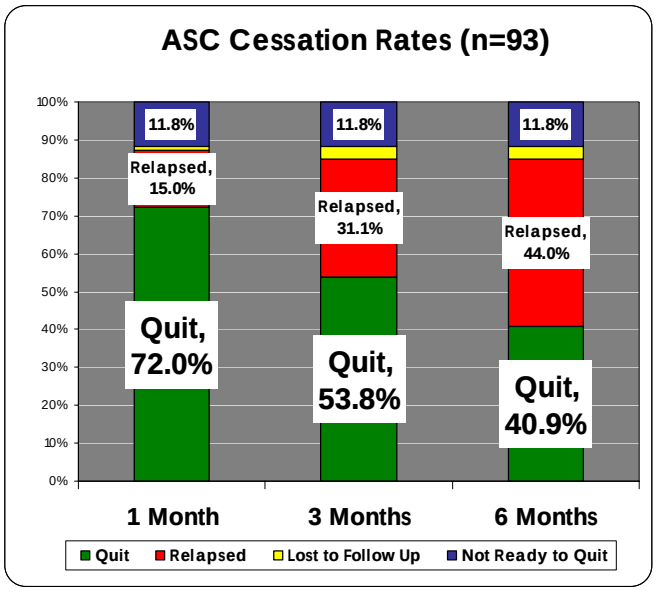


Figure 2. All ASC cessation clients: Self-reported quit rates one month and three months after quit date *using a 7 day point prevalence (complete abstinence for 7 days prior to contact).*

Nine of the 29 relapsed clients (31%) had set second quit dates. All of these had been quit for one month or more from their second quit date, and four had been smokefree for 3 months or more, therefore point prevalence quit rates would be higher than the continuous abstinence rates presented here.

A Cochrane meta-analysis of Nicotine Replacement Therapy (NRT) studies found that 17% of smokers allocated to receive NRT had successfully quit compared to 10% of the control group (The Cochrane Collaboration Review, 2007, some measures used 7-day point prevalence method). Furthermore the Evaluation of the Quitline NRT Programme showed that 30% quit rate at 6 months and 18% at 12 months using a 2-day point prevalence (i.e. abstinence for 2-day prior to contact).

The Evaluation of ASC (2007) measured the quit rate of those who received full intervention. The result showed 82% at one month, 62% at three months and 51.6% at six months, using a 7 day point prevalence.

Key Objective Three
To ascertain the appropriateness of the ASC service model for smokefree promotion and smoking cessation for the Asian population

Clients were satisfied with factors associated with language and culture, such as talking to coordinators (88.9%) and family involvement in treatment (79.4%). Access barriers were addressed since clients reported high satisfaction levels with their choice of appointment venue (88.9%) and appointment attendance was high (96.5%). The community-focused culturally specific service promotion was successful. Sixty-four percent said they had heard about ASC from family and friends or a community group (see Figure 3).

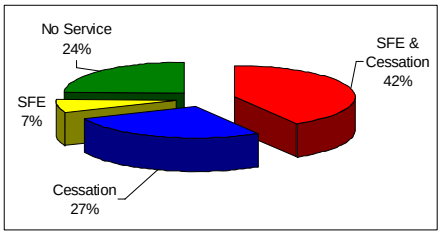
Almost all (92.1%) clients said they would recommend the ASC service to family or friend.

ASC Referrals: Gender and Ethnicity (Total Clients = 135)

Ethnicity	Female	Male	Not stated	Total	% of Total
Korean	13	58		**71**	**52.6%**
Chinese	6	39	4	**49**	**36.3%**
European/other	4	4	1	**9**	**6.7%**
Other Asian		2	1	**3**	**2.2%**
Not stated		2	1	**3**	**2.2%**
Total	**23 (17.1%)**	**105 (77.7%)**	**7 (5.2%)**	**135**	

ASC Referrals: Service and Intervention Type (Total Clients = 135)

Service: Cessation (n=93)	SFE and cessation	56		
	Cessation	37	**93**	**68.9%**
Service: Smokefree environments only		9	**9**	**6.7%**
No service (n=33)	Out of area	27		
	Pending appointment	4		
	Incorrectly referred	1		
	Unable to contact	1	**33**	**24.4%**



ASC Cessation Clients: Service Use (Total appointments = 806)

Appointment type			
Phone, email		561	**561 (69.6%)**
Face-to-face	Individual	196 (83.1%)	

Do Not Attend Rate
1.1%

	Family	37 (15.7%)	**236 (29.2%)**
	Group	3 (1.3%)	
	Cancelled	**4**	**9 (1.1%)**
	Did not attend	**5**	

Figure 3. Highlights of services utilisation.

Service Activity and Effectiveness Results
The Steering Group has led many activities to generate client referrals, raised the profile of Asian health issues in New Zealand, developed a service model for Asian peoples, and facilitated sharing with all cultures. The activities included media publicity, meetings and promotions with community groups and health professionals, and mail-outs to Asian community members.

Service Utilisation Data
Cessation clients had an average of 8.7 contacts (of any kind) each.

SUMMARY OF ACHIEVEMENTS: 8 CS FRAMEWORK

The factors critical to the success of the ASC model were good governance, cultural sensitivity, and community leadership and engagement. Cultural sensitivity and community engagement flowed through ASC from the Steering Group to service promotion and delivery.

The Service Development Framework "8 Cs" were multi-dimensional and allowed people to see how the components of ASC fit together. One of the dimensions was the important meaning of number "8" to Chinese people. **"8" means prosperity**.

1. **Community engagement** *to assist in developing a culturally specific approach*
   Self referrals make up the majority of the referrals received showing that the community is behind this initiative. The DNA "Did Not Attend" rate for the 852 appointments was 9 (1.1%). Of those 9 appointments, 4 were cancelled ahead of time.
2. **Collaborative partnership** *between primary health, public health, Asian health and the health gain team*
   The partnership brings to the table different skill sets and resource sharing opportunities.
3. **Combination of smoking cessation and smokefree promotion** *as a package of intervention for clients*
   The combination of the interventions was a *unique, efficient,* cost effective way of presenting two synergistic interventions to the client, especially for clients who have difficulty accessing service. The following client story illustrates the points above:
   > *Chinese Woman, aged 55 – Living with five smokers, one of whom was her son, noticed she was coughing and often short of breath from second-hand smoke. She consulted ASC to help her achieve a smokefree environment. Smokefree policy was introduced and after five months of home visits, four of the smokers, including her son, are smokefree, her symptoms have disappeared and her home is now healthier and cleaner.*
4. **Culturally responsive** *approach including family-oriented services with translated resources*
5. **Communication support** *with Asian language speaking staff or interpreters*
   Clients considered talking to coordinators in their own language and having family involvement in treatment very useful. Access barriers were also addressed as a result of the provision of interpreters to support 30 Asian languages/dialects. The community-focused culturally specific service promotion was successful.

6. **Community based** *service and outreach*
   The community-based approach has proven to be an effective way of delivering services to Asian migrants who are not familiar with the health system, especially for those with transport difficulties. The home visits allowed coordinators to understand clients' needs more, and provided an opportunity to promote smokefree environments.

7. **Capacity building** *of the Asian workforce*
   The development of the two Asian staff skills and knowledge to perform their role effectively has been proven successful not only from the results, but from the coordinators' perspective.

8. **Collecting of client information** *to support monitoring and evaluation to inform future planning*
   The creation of a database has proven to be an excellent tool for the systematic tracking, reporting and monitoring of information.

CONTINUAL QUALITY IMPROVEMENT

Steering Group reviewed progress throughout the project implementation phase and made specific changes for continuous quality improvement. The following improvements were made:

- Database modifications:
  - Added additional alerts and prompts to improve client follow-up at specific intervals
  - Added a Fagerstrom score system to ascertain severity of nicotine dependence
  - Improved relapse tracking and added more reports
- Access criteria:
  - Modified the criteria to accept non-Asian clients who lived in same households
- Workforce training: provided client cessation relapse management training for coordinators
- Resource development: incorporated 3 languages into one ASC flyer
- ASC Guidelines: agreed measures for smokefree and cessation success
- Process improvement: Tracking of clients at specific intervals (1 month, 3 months, 6 months, 9 months, 12 months) to measure quit status at these specified times for future evaluation

External evaluator reviewed process and impact outcomes. Recommendations include:

- ASC pilot project be continued and expanded
- Standardised follow-up of outcomes
- Evaluation of long-term quit rates at 6 months and 12 months
- Use of ASC model to address needs of Asian smokers and families across New Zealand
  - Workforce development
  - Steering Group to retain governance role
  - Improve database
  - Cultural responsiveness of the service
  - Further translation of resources
  - Use of ASC model for other Asian health issues

POST EVALUATION

Post the evaluation, the Asian Smokefree Communities project received sustainable funding for five years to 2012.

In May 2008, responding to the expressed needs of the ethnic community, the service has

been expanded both geographically and ethnically with the appointment of an Indian and a Burmese Coordinator to compliment the existing team, across the Waitemata District.

Findings from the evaluation and lessons learnt from the development of this service have been useful for the development of other Asian-specific services in Waitemata, and have also been beneficial for other DHBs and other immigrant populations. The 8 C's have provided a comprehensive framework for developing and delivering successful community based services when applied to other health promotion programmes.

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ENGAGING CHINESE IMMIGRANT COMMUNITIES TO COUNTER THE STIGMA AND DISCRIMINATION ASSOCIATED WITH MENTAL ILLNESS: KAI XIN XING DONG PROJECT

Nicki Jackson, Ivan Yeo & David Lee

ABSTRACT

This paper demonstrates how we developed a Chinese media project to counter stigma and discrimination associated with mental illness in Chinese immigrant communities in Auckland, New Zealand. In addition this paper also give an brief overview of Chinese Culture, Chinese perceptions of mental illness, the stigma and discrimination that often confronts people with mental illness and some of the problems faced by Chinese immigrants in New Zealand. Methodology which used on phase one and two to address issues above with feedback from focus groups. In conclusion, the focus groups believe that the Chinese Like Minds Media Project – *Kai Xin Xing Dong* has been able to counter stigma and discrimination in Chinese communities. This is by applying culturally congruence media campagins and working intersectorally with Asian Mental Health Services as well as actively engaging with Chinese communities in Auckland. Further recommendations were suggested by the Chinese Advisory group which will be implemented in Phase Three.

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BACKGROUND

In 1996, the *Like Minds, Like Mine* campaign was initiated in New Zealand to counter the stigma and discrimination associated with mental illness (Vaughan & Hansen, 2004). The strengths-based approach involves people with experience of mental illness in all phases of the campaign. Operational, to date, for ten years, national tracking surveys have consistently demonstrated a high national awareness of the campaign and an associated reduction in stigma to those who experience mental illness (Whitfield & Wyllie).

However, mainstream programmes may not reach all segments of the target population (Airhihenbuwa, 1999). Statistics New Zealand (2006) shows that after New Zealand Europeans and Māori, the Asian ethnic group, at 9.5%, comprises the third largest population group in New Zealand, and among that Asian sector, Chinese is the dominant ethnic group. Although Chinese communities are spread throughout New Zealand, the majority (66%) live in the Auckland metropolitan region.

In 2003, *Like Minds, Like Mine* consulted on the 2003-05 *Like Minds* National Plan, and the Ministry of Health (2003) reported that comments received in submissions on this plan identified the lack of inclusion of Asian audiences as ethnic groups needing specific

communication approaches via *Like Minds*. To address the needs of this community, it is important that culturally congruent programmes are planned and delivered from within the Chinese community (Kreuter et al., 2002; Pasick et al., 1996). The plan was to first complete some market research on what Chinese groups currently thought and felt, and how they behaved around the topic of mental illness, this research was being completed in by Phoenix Research, *"Like Minds, Like Mine" Target Groups*, Qualitative Research, August 2005.

Following consideration of the research findings, further discussion and planning took place with Chinese representatives around what some *Like Minds*-type interventions could be, and as a result of this, the Mental Health Foundation of New Zealand was contracted in 2006-07 to work in the Auckland region with a network of Chinese mental health consumers and supporters to implement a Chinese Like Minds Media Project, *Kai Xin Xing Dong*.

Objective

The objective of *Kai Xin Xing Dong* was to develop a culturally appropriate programme to counter stigma and discrimination and raise awareness of mental health issues in Auckland Chinese communities. The programme comprised social marketing and consumer training, and was supported by a representative community advisory group and local community agencies. It was, however, important that all messages conveyed during the project were aligned with the national *Like Minds, Like Mine* campaign. The project utilise suitable communication media that will reach the widest population in Auckland Chinese communities, to educate the Auckland Chinese communities about mental illness and to develop and distribute educational resources. Further, it is to assist people from Auckland Chinese communities with experience of mental illness to communicate with others about their experience, and to include people with experience of mental illness in all aspects of the project's development, delivery and ongoing evaluation into all the project's outcomes (Jackson, 2008).

Feedback on the effectiveness of the *Kai Xin Xing Dong* project showed the service to be successful, and working in a cultural- and language-specific way in particular has significantly contributed to this successful outcome.

Chinese Culture

The three dominant traditions in Chinese culture are Confucianism, Taoism and Buddhism, and Chinese culture is still influenced by one or more of these traditions.

Confucianism is an ethical system concerned with individual conduct through family and interpersonal relationships. In Confucianism, five relationships are seen as essential to maintain social harmony: sovereign and subject; parent and child; older and younger brothers; husband and wife; and relationships between friends (Ino, 2004).

Taoism and Buddhism are the two dominant religions in Chinese history and are still practised. Taoism sees the human being as a passive creature with no power or control over the existing environment. It places value on nature over the individual and emphasise is placed on the "flow", Taoism suggests that our destinies are predetermined by a "higher power". There acceptance of our destiny is the key to success (Ino, 2004; Sheng yen, 1992; Yip, 2004).

Buddhist doctrine talks about the four noble truths: life is suffering; suffering originates from unfulfilled or inappropriate desires; desire originates from ignorance and illusion; and the road to salvation lies in enlightenment. Buddhism sees life as a road of suffering. The only way to end suffering is to give up oneself and to cultivate compassion for others. To achieve enlightenment is to discipline your mind by meditation. Buddhism also places emphasis on the personal qualities of character that one has developed in this life: loyalty, respect,

compassion, self-control and ancestor worship. Being faithful to these qualities will result in a better next life (Ino, 2004).

Political doctrine also influences perceptions of mental illness. For example, during the Cultural Revolution in China people who suffered from mental illness were perceived as having wrong political thinking and thus in need of re-education. According to traditional Chinese medicine, mental illness is caused by an imbalance of the internal organs, and its principle treatment is in correcting psychosomatic and physiological functions of the body (Chang & Kleinman, 2002).

Stigma and Discrimination

The stigma and discrimination that often confronts people with mental illness influences the way that Chinese people seek help. In societies such as China and Hong Kong, people with experience of mental illness are stigmatised and devalued; they have been chained up, locked in their homes and in some cases arrested and charged with crimes. In extreme cases, people with mental illness are thought to be possessed by demons; indeed such misconceptions about mental illness are common. Mental illness may be attributed to the wrong-doing of an ancestor, the family of a person with experience of mental illness may be seen as cursed, friends and relatives may discriminate against the family, and mental illness can be perceived as a transmitted disease, resulting in discrimination against entire families (Serdarevic & Chronister, 2005). In Chinese culture, it is inappropriate for people to admit failure, to be shamed and especially to experience mental illness or admit to having a mental illness (Li et al., 1999). There is a strong cultural disposition not to disclose problems in life. And Chinese people have a particular fear of being labelled as lazy (Lee et al., 2001).

If a person consults a psychiatrist, there is a concern that the whole family may be perceived by the Chinese community as mentally ill, and this may discourage the person from seeking help from a psychiatrist. However, the initial fear of stigma and discrimination that may result from a family member seeking help from a mental health practitioner can change after they have consulted a psychiatrist. Consequently, people with experience of mental illness and their families may be grateful for the unexpected care they receive from mental health practitioners (Lee et al.., 2001; Wynaden, at al., 2005).

> *"Stigma is a major obstacle preventing Asians from using mainstream mental health services. Public education is one way to promote the appropriate use of mental health services by Asians. Because language use a major barrier confronting Asian people, translations of culturally appropriate materials are necessary to increase understanding of mental disorders and mental health problems, to help counter traditionally held feelings of shame and guilt about mental illness in the family, and to promote earlier help seeking, ethnic press, radio and other valued agencies in ethnic communities, should be used to disseminate information"* (Lin et al., 1978, 1982).

Chinese Immigrants

Chinese immigrants are more vulnerable to depression due to the loss of status, language and lost of support networks in new country (Ho et al., 2002 & Tam et al., 2004).

It is common for immigrants to attribute the cause of their depression to loss of status because their qualifications and professional credentials are not recognised in their new country. This can be exacerbated if the only available work for a new immigrant is considered by them to be menial or beneath their ability or qualifications. A new immigrant may feel that they have let down their family, and they may question their decision to come to the new country (Ho et al., 2002; Tam et al., 2004). Another major source of stress in immigrants is the language barrier. Children become the helpers of the family because they tend to pick up the new language more quickly. Financial difficulty, loneliness and isolation from the community can also contribute to mental illness (Lo & Fung, 2003; Philipe et al., 2002 &).

METHODS

To put New Zealand Chinese into context, Chinese, according to Statistics New Zealand (2006), are described as one of the three Asian categories. In the paper, when referring to Chinese, it is solely based on the race instead of either ethnicity nor nationality. As a result, when it refers to Chinese, it could be Chinese from Hong Kong, Malaysia, Vietnam, Cambodia, Singapore, Taiwan, mainland China, New Zealand and so on.

The target group of this project is Chinese who are aged 16 and above, and who access Chinese media, such as newspapers, radio or TV. DeSouza and Garrett (2005) indicated that the majority of Chinese in New Zealand speak Mandarin, and the common languages that are used are either Mandarin or Cantonese.

First Phase

A Chinese writer and editor and *Kai Xin Xing Dong* coordinator were contracted to run this project, and the first phase ran for six months. The media campaign was run for three months through two Chinese newspapers based in Auckland, *The Chinese Herald* and *The Chinese Express*. Both newspapers are free and are placed in major Chinese supermarkets, food courts or Chinese-run businesses. Each of these newspaper stories used 500 words to exemplify personal experience of mental illness. Stories were based on real personal experiences, contributed by people who had experience of mental illness. Each of the stories included two Chinese language free telephone counselling service numbers, Chinese Lifeline and The Problem Gambling Foundation's Asian service. However, names and genders were changed to protect the rights and privacy of the contributing individuals. During this time, the coordinator was carrying out community liaison to get Asian/Chinese Health/Mental Health services to make known this project. A focus group followed after the media campaign. This project was done in conjunction with the support of and constant input from *Bo Ai She* (a Chinese consumer self-help group) from a consumers' perspective (Yeo, 2006).

Second Phase

The second phase began in 2007 for a six-month period (April– October) and had a much bigger emphasis on a media campaign. The project was looking at Chinese newspapers, radio, community liaison, focus group, *Speaking Your Mind* (Community Voice – Speakers Bureau) training and developing Chinese like Minds brochure. The second phase of media campaign, lasting three months, was carried out by using Chinese newspaper media which included *The Chinese Messenger*, *The Chinese Mirror* and *The Chinese Herald*. The first two are circulated in Auckland, Wellington, Christchurch and Dunedin, and the later is solely based in Auckland. The stories used 1000 words to allow more detail of personal experiences to be shared with readers. Besides this, there was a three-month radio talk show on Chinese Radio BBC 90.6 FM. This was a success, and was carried out for a further three months based on the radio show's popularity (Yeo, 2007)

Speaking Your Mind training has been a big part of a mainstream community approach to counter stigma and discrimination, and this was the first to be carried out in the Chinese community based on Chinese language. This was delivered in conjunction with the Regional Consumer Network and the Mental Health Foundation with the participation of members of *Bo Ai She*. Again, this was a huge success in itself. A Chinese *Like Minds* brochure was developed to counter stigma and discrimination among Chinese people who experienced mental illness, and a slogan was developed to be part of this campaign. This idea was borrowed from the mainstream *Like Minds* media campaign, such as "know me before you judge me". In Chinese, it is a slogan which emphasises a collective approach: "I too have a loving and caring heart and hope you have a loving and caring heart toward me, too". In Chinese, *Xin* means "heart", which also conveys a deeper meaning of human caring and generosity (Yeo, 2007).

RESULTS

By the end of the second phase, a focus group evaluation was held in Affinity Service, *Bo Ai She* and with Advisory group feedback. There were twenty-two participants in the focus group, the majority of whom were from mainland China, and they were either people who had experience of mental illness or someone who had a family member who had experience of mental illness. The most popular and frequently used media by Chinese people are Chinese newspapers, Chinese cable TV, Chinese radio and Chinese Internet, and this again has been consistent with the information provided by the *Asian Communication Media House* (ACOM) in New Zealand. Fifteen of the participants found out about the project either from the radio or newspapers, or through a friend, a counsellor or a colleague attending the conference with *Bo Ai She*: however, seven had never heard about this project before. In general, the participants felt that this project had been able to provide valuable information regarding increased knowledge of mental health, and a change in attitude from family members and neighbours. In the end, the participants were asked to share their thoughts about this project:

> *"Do as much promotion as possible; provide updates and information to different mental health organisations/services; and focus on discrimination only … there was an expression of gratitude for receiving help and support from mental health services".*
>
> *"Because of this project they have felt more hopeful and hopefully more involved in this project … it is a good project, and I enjoyed the participation in this project".*

Further recommendations by the focus group includes:

- inviting health practitioners to discuss why it is important to counter stigma and discrimination against people who experience mental illness,
- the hope and need to educate employers and people who experience mental illness around their rights. There is still a lot of stigma and discrimination happening among Chinese Communities.
- a strong hope to further this project.

The Advisory group of *Kai Xin Xing Dong* has been in existence since late 2005. The members of advisory group have been identified as people who work closely one-on-one with Chinese people who experience mental illness, or who work closely with the Chinese community in general. There is also strong leadership and input from Chinese consumers, and this includes the coordinator and members from *Bo Ai She*.

There were further recommendations by the advisory group before the end of the second phase, and the key recommendations include:

- further training and up skilling of Chinese people who experience mental illness in order that they themselves can facilitate workshops within Chinese communities.
- producing a resource booklet of stories from the Chinese articles provided by people who experience mental illness,
- using Chinese radio media to further promote and disseminate the information.
- carrying on with the community liaison, especially with Chinese churches or temples.
- carrying out an attitude change survey in order to better measure the effect of any further *KXXD* promotion within the community.

The content of promotional materials range from newspaper articles through radio talk shows to brochures, and these examine and explain the Chinese understanding of health and mental health as well as the rationale behind countering stigma and discrimination associated with people who experience mental illness. Concepts such as the Māori health model, *Te Whare Tapa Wha*, is being introduced to Chinese communities. This is a holistic approach which

looks at a person from a social, psychological, interpersonal and family perspective, and which is closely related to the Chinese collective approach. The human rights issues and information produced by the *World Health Organisation* (WHO) were the source of the information to make this project and further increased its affordability. In order to paint a bigger picture, the article also included the history of the *Like Minds, Like Mine* campaign as well as the Mason Report which resulted in a huge structure of mental health services also being introduced (Yeo, 2007).

DISCUSSION

Many mental health NGOs and government secondary mental health services were initiated before this project began, and despite the best efforts of those involved to ensure the sustenance of this project, it could never function alone or in isolation. Services such as the *Problem Gambling Foundation Asian Service*, *Chinese Lifeline*, *SF (Supporting Family) Auckland*, *Chinese Mental Health Consultant Service*, *Asian service* at WDHB (Waitemata DHB), *Affinity Asian Service*, *BoAiShe* and *Yan Oi Sei* have all played a crucial part in ensuring the successes of this project by sharing resources. Without these mental health services having been made available for Chinese communities, this would only have increased the burden on mainstream services. Therefore, working closely with outsiders and partners, and using an inter-sectoral approach has been invaluable to Chinese communities.

The application of a cultural congruence approach in tandem with sound social marketing strategies has been the key ingredient in effectively countering stigma and discrimination associated with Chinese people who experience mental illness in Auckland's Chinese communities during phases one and two (Jackson, 2008).The beliefs which have been strongly held in Chinese communities, such as Taoism, Buddhism and Confucianism, have enormous implications for the view of mental illness. In addition, the collective approach with its emphasis on interpersonal relationships, hierarchy and kinship would not be in line with a western bio-medical model which has a strong emphasis on an individual approach. With its fundamental Chinese values, therefore, *Kai Xin Xing Dong* raises awareness by using a collective approach with key messages of looking after each other and connecting with the communities (Jackson, 2008).

The support from the Ministry of Health, the Mental Health Foundation and the consumer self-help group *Bo Ai She* deserve much credit for applying an effective approach to engaging with Chinese communities, and this in turn also helps to raise the awareness of those three organisations in Chinese communities. By choosing media which relate to Chinese communities, such as local Chinese newspapers or Chinese radio, and applying Chinese symbolic metaphors, i.e. using the lotus in the *Kai Xin Xing Dong* brochure in the Chinese New Zealand context, this gives meaning and relevance to Auckland Chinese communities (Ferketich, et al.; Wynadem, et al., 2005).

The systematic approach of the *Like Minds, Like Mine* history and the concepts behind this project in the newspaper articles and radio talk shows helped share information with Chinese communities and reinforced the strong rationale behind the implementation of *Kai Xin Xing Dong* in order to counter stigma and discrimination associated with people who experience mental illness.

Like Minds, Like Mine national Plan 2007 – 2013 valuing the specific population groups, such as Pacific and Asian have given the value to the project of *Kai Xin Xing Dong*.

CONCLUSION

Mental health issues among Chinese communities and the associated elements of stigma and discrimination or denial are best addressed by members of those communities addressing the

issue themselves and raising awareness in a culturally congruent fashion rather than outsiders attempting to apply a western-style remedy. Information is the key, and this should be delivered through sources where Chinese communities can easily access it. This is what the *Kai Xin Xing Dong* project has done, and the hope is that the experience of success so far will continue to empower members of those Chinese communities to continue the work (Jackson, 2008).

ACKNOWLEDGEMENTS

This paper report on the first and second phases of the *Kai Xin Xing Dong* project. Kai Xin Xing Dong acknowledges the funding and support received from the Ministry of Health. The authors and advisory group acknowledge the invaluable participation and support of Bo Ai She, Chinese Lifeline and Problem Gambling Foundation of New Zealand.

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ASIAN CERVICAL CANCER SCREENING AND THE COMMUNICATION STRATEGY FOR THE NATIONAL CERVICAL SCREENING PROGRAMME

Ruth Davy

ABSTRACT

The National Cervical Screening Unit (NSU) launched a major communication campaign for the National Cervical Screening Programme (NCSP) in September 2008. Cervical cancer is the second most common cancer in women worldwide and the eighth most common in New Zealand. The main aim of the strategy is to increase cervical screening coverage rates (a smear in the last 3 years) to 75% in all ethnic groups. In October 2007 NCSP hysterectomy-adjusted coverage by ethnicity showed that Maori coverage rate is 47.9%, Pacific 47.6%, other 81.9% and Asian the lowest at 44.3% (NSU, October, 2007). The average is 71%.

The culture of Chinese is to seek advice when ill rather than practice preventative medicine. Other barriers are cost, transport, language, fear of health care system and lack of knowledge (Betty Ling, Asian Women's Health Symposium 2005

WONS performed a client audit on their Medtech recall system in 2005 for the Asian Women's Health Symposium. Outcomes demonstrated that Korean and Chinese women have as high an incidence of high grade cervical abnormalities as WONS' Maori client base.

The communication campaign designed by the NSU promoted primarily Maori and Pacific cervical screening. The availability of ethnic specific data for coverage rates strongly supported the efforts of WONS, DHBs and other related organisations to increase promotion to the Asian populations.

In March 2008 a local media campaign for the Asian community was launched utilising predominantly print media. The official launch was held at a Chinese Women's Health day in Epsom on March 1st. Results of the campaign to date will be presented at the conference.

Davy, R. (2008). Asian cervical cancer screening and the communication strategy for the National Cervical Screening Programme. In S. Tse, A. Sobrun-Maharaj, S. Garg, M. E. Hoque & Y. Ratnasabapathy (Eds.), *Building healthy communities. Proceedings of the Third International Asian Health and Wellbeing Conference, September 8-9* (pp. 130-133). Auckland, New Zealand: University of Auckland.

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BACKGROUND

The National Cervical Screening Unit (NSU) launched a major communication campaign for the National Cervical Screening Programme (NCSP) in September 2008. Cervical cancer is the second most common cancer in women worldwide and the eighth most common in New Zealand. The main aim of the strategy is to increase cervical screening coverage rates (a smear in the last 3 years) to 75% in all ethnic groups. In October 2007 NCSP hysterectomy-adjusted coverage by ethnicity showed that Maori coverage rate is 47.9%, Pacific 47.6%,

other 81.9% and Asian the lowest at 44.3% (National Screening Unit, 2007). The average is 71%.

Anecdotally we know that Hong Kong/Taiwanese women are over screened and tend to come to New Zealand expecting to have yearly smears. The Indian community have a strong medical association, however new migrants are not screened as they do not want to go to male doctors. There can be sexual abuse issues which is another deterrent to screening. The Korean community are well aware of screening issues however language barriers and a lack of Korean speaking health professionals are key issues for the community.

Chinese women from mainland China have very little experience of screening. There is no organised population health programme in China. Women have a range of treatments for cervical erosions or abnormal looking cervices. Work places and women in major cities may have access to women's clinics with laboratory services. However they may also may only have had a visual inspection. Ultrasound scans are also commonly used for screening purposes rather than cervical smears to detect gynaecological abnormalities. It is not uncommon for women to "line up" in waiting rooms to be seen. Privacy does not register highly in this system. Medical services tend to be accessed by "condition". You see an eye specialist for you eyes, smear tests with women's health clinics. The idea of a general practitioner is foreign to the Chinese community. Chinese herbal and traditional remedies are often used for vaginal infections and women's health conditions before seeking screening when abnormal symptoms are present which may indicate cervical disease.

In USA it has been found that overseas-born Asians do not utilise cervical or breast screening as frequently as mainstream populations (Stong et al., cited in Asian Public Health Project Team, 2003). Unfamiliarity with western culture and the biomedical concepts of prevention, the perception that gynaecological examinations are embarrassing and the lack of English proficiency are thought to have contributed to low levels of screening (Carey Jackson et al., cited in Asian Public Health Project team, 2003).

WONS audit of Asian women on their patient management system found that human papilloma virus and high grade abnormalities on cervical screening were particularly high for Chinese women (WONS, 2005). Research presented indicated that 56% of students aged 16 to 24 years are sexually active (WONS, 2005). Sex before marriage is still frowned upon within the culture. Education on sexuality issues for parents and young adults over 16 years is so poor that basic knowledge of their bodies is even lacking. Younger students are accessing education in the school system well even though educators have difficulty in interacting with this culture due to shyness. The Asian sex industry is very active in the Auckland region with 300 plus Asian sex workers practicing in massage parlours, Chinese health centres and hair dressing salons. Difficulty accessing women in the industry due to language barriers and fear of "government" organisations is common. Residency issues also places a barrier to accessing services. The use of sex workers by Asian men is not uncommon. The "concubine" culture is still acceptable practice. Women who have husbands who return to China for work are very aware that they require health checks for sexually transmitted infections. However health is seen as a low priority compared to education and employment. Lack of access to language appropriate services, transport issues and poor knowledge of screening services add to the barriers.

DISCUSSION

National Cervical Screening Communication Strategy, impact on screening coverage (G. Bethune [National Screening Unit], 2008)

There is a clear and direct link between the campaign and the number of women going for smear tests. Coverage increased by 6% for Pacific women, 3% for Maori (figures for Maori are to January only) and 3% for Asian women in just 6 months

These are significant increases given the relatively short time period and the fact that more than 1 million women are enrolled in the Programme (Figure 1).

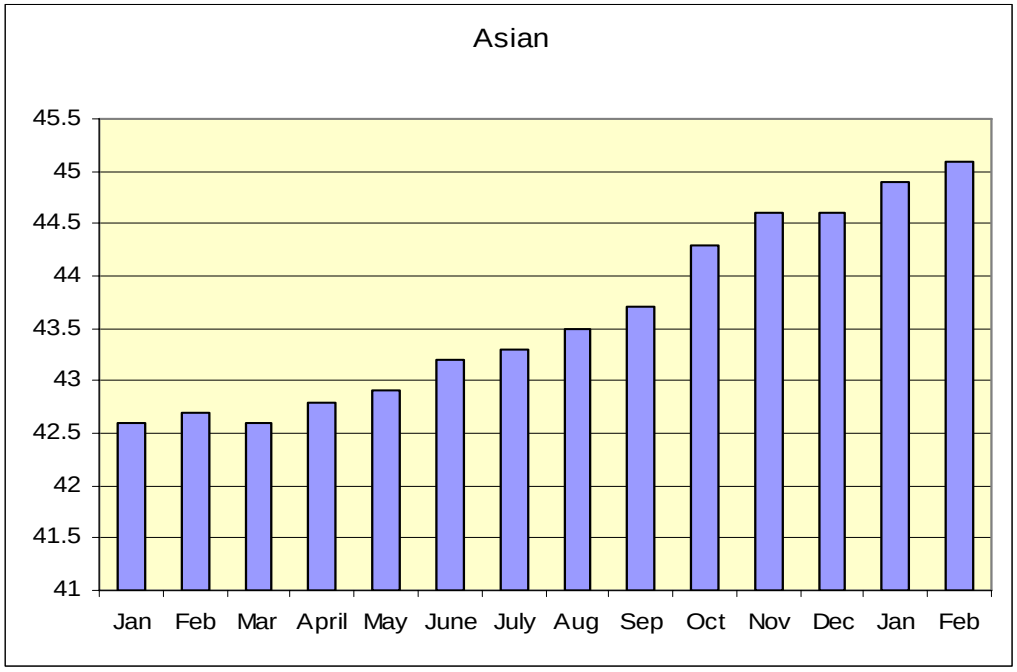

Figure 1. NCSP coverage for Asian New Zealand women in percentage of the total potential enrolled population (20-69 years old inclusive) between Jan 2007 and February 2008.

Asian Cervical Screening Communication Strategy

In March 2008 the Asian component of the national communication strategy was launched by the Chinese Women's Wellness Community Group and WONS. Significant media coverage occurred including Asian Down-Under profiling the event. Local media covered the event through press releases. The NCSP placed advertisements in Chinese, Korean and India media. These were produced after consultation with focus groups facilitated by WONS. To date WONS has had little increase in their calls for cervical smear tests as a result of the ethnic specific media. Asian health promoters working with WONS believe that Asian women need direct access to language appropriate services. NCSP 0800 number may be deter women from calling. Phone numbers now include direct access to WONS Asian health promoters.

It has been proposed that the following occur commencing July 2008:

- Press releases targeting key messages for Asian women on cervical screening
- Highlighting the reasons for cervical screening and what a test involves
- Local Asian women talking about their experiences with cervical screening
- Profiling the Hong Kong singer who died at age 40 years from cervical cancer

CONCLUSION

The National Cervical Screening Communication Strategy has to date been effective at increasing the coverage rate for Asian women nationally. Ethnic specific media is being utilised and the outcomes will be available at the 2008 Asian Health & Wellness Conference. In order to reduce inequalities for cervical screening cultural competency is essential. Cultural competence is more than just cultural safety. It includes advocating for reduction in inequalities, clinical and linguistic cultural competency and organisation cultural competency (De Souza, 2008.). The NCSP, as from July 2008, acknowledges Asian women as high priority women. This will mean increased access for Primary Health Care Organisations to funding

through Auckland District Health Boards for free cervical smears. WONS will be able to increase Asian services and support for cervical screening. Recall letters with key messages in Chinese and Korean languages are now available through WONS.

Although the media campaign has seen a significant increase in coverage rates to date, there is a long way to go before Asian women have equal access and outcomes for cervical screening.

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PRELIMINARY EVALUAION: GAMBLE FREE DAY, A PUBLIC HEALTH PROJECT TO MINIMISE GAMBLING HARM AMONG ASIAN COMMUNITIES

John Wong

ABSTRACT

There has been a rapid increase in Asian immigration to New Zealand. Asian ethnic groups grew the fastest, increasing from 238,176 in 2001 to reach 354,552 in 2006 (an increase of almost 50 percent). The number of people identifying with the Asian ethnic groups has doubled since 1996, when it was 173,502. It is just behind Pakeha (European) and Maori (the indigenous people in New Zealand). In 2006 the Asian population constituted 9.2% of the New Zealand population (Statistics New Zealand, 2006).

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Most Asian people (70% to 80%) are born outside New Zealand. There are indications that this population has complex and multiple needs, including immigration and trauma-related stress, isolation and loneliness, boredom, language barriers, employment, housing and finance. These factors make this group particularly vulnerable to social dislocation and subsequent social problems such as gambling or domestic violence.

Asian problem gambling is seen as being a social rather than an individual problem compounded by difficulties with post-migration adjustment. Face-to-face and telephone counselling interventions are important, however, contemporary public health perspectives are also very useful and are not limited to the biological and behavioural dimensions, but can also address access to social and healthcare services related to gambling and health.

This paper is to review a number of "Gamble Free Day" (GFD) projects that the Asian Problem Gambling Services carried out for the 2007 GFD with the public health approach. That includes identifying option of projects that are welcomed and willingly participated by the Asian communities and at the same time raising the awareness of gambling harms. It includes challenges with limited man-power and resources in raising awareness locally and nationally. This paper also reports evaluations from different group of participants that involved the GFD projects, which is very informative.

Wong, J. (2008). Preliminary evaluation: Gamble free day, a public health project to minimise gambling harm among Asian communities. In S. Tse, A. Sobrun-Maharaj, S. Garg, M. E. Hoque & Y. Ratnasabapathy (Eds.), *Building healthy communities. Proceedings of the Third International Asian Health and Wellbeing Conference, September 8-9* (pp. 134-137). Auckland, New Zealand: University of Auckland.

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INTRODUCTION

Problem gambling remains one of the major concerns in New Zealand Chinese or Asian communities in general.

"With Asians constituting 10 per cent of the New Zealand population, 80 per cent of whom are overseas-born, John (*present author*) describes these ethnic groups as vulnerable and easy targets for the gambling industry. Many people are just social gamblers, playing card games with friends and family during festivals. However, they can be tempted by an environment saturated with gambling venues and casinos to step over the line and become problem gamblers. *It does not help when many migrants have to cope with adjustment issues such as employment and the inability to integrate into a new society.* Gambling venues can be seen as providing an escape from problems, isolation, loneliness or boredom. For international students, it is the new-found freedom without parental control and the easy access to cash that drives them to seek excitement in gambling. Some of the figures provided by John are startling and clearly point to problem gambling as a growing epidemic in the Asian communities. Asians make up 8 per cent of new clients to Gambling Helpline, and 6 per cent of face-to-face counselling problem gamblers are of Asian descent. There is an upsurge in the number of new callers to the Asian Gambling Hotline, the majority of whom are males seeking help for themselves. Sadly, for every individual wrestling with a gambling problem, at least ten other people– colleagues, friends and family– can be affected. While many Asian gamblers suffer in silence, because of shame or the stigma attached to this problem, the gambling industry has continued to thrive, boosting its annual turnover from $6.1 billion in 1998 to $13.7 billion in 2006" (Problem Gambling Foundation, undated, italic added).

Gamble Free Day (GFD) is an annual event since 2005, a concept to promote the awareness of harms caused by excessive form of gambling. It is a national event taking place throughout the country run by the Foundation and other relevant problem gambling or social services. In 2007, the event was a huge success. This article focuses on what the Asian Services of the Foundation had organised on the GFD on the 1st September 2007 and the evaluation results of the event.

GAMBLE FREE DAY- 1ST SEPTEMBER 2007, PRELIMINARY EVALUATION

- **A musical play** was performed in Auckland, Hamilton, Christchurch, Wellington, Dunedin, describing the challenges and issues faced by international students studying in New Zealand; one of the problems is related to problem gambling.
  RESULTS:
  - Attended by 1,800 people nationwide, it was well received, very professional performance and it echoed strongly with students' experience of residing and studying in New Zealand. The Auckland night was opened by the mayor and Ms Pansy Wong, the National Member of Parliament.

- **Song competition** was run around the GFD. The idea behind it was to promote the awareness of problem gambling in the community through another community-based activity. Through the songs, the writers shared their settlement experiences or making adjustment to New Zealand lifestyle together with their composed tune. One of the key messages was there were other meaningful activities or life goals than spending hours in gambling activities; subsequently ruining our family life and relationships.
  RESULTS:
  - received over 300 songs submitted for the competitions, the results were announced in Auckland before the play started; the event was supported and sponsored by Skykiwi.

- **Restaurant dining discount campaign** was run in Auckland. There is anecdotal evidence suggesting the food industry is hit very hard by gambling problems (Tse, Wong, Kwok, Li, & Chan, 2006). The "restaurant dining discount" event seeks to increase both the general public and the food industry level of awareness of problem gambling. The event involved few important elements:

1. Restaurants were invited to provide a 15% discount to customers who have a voucher issued by the Foundation
2. During the visit, the restaurant owners and employees had the opportunity to learn more about problem gambling regardless if they agreed to take part in the event or not
3. After individuals or families have received the voucher, they need to go to the designated website or check in the local Chinese papers to find out the nearby participating restaurant where they can enjoy the discount; on the Foundation's website www.pgfnz.org.nz there is comprehensive information on problem gambling
   RESULTS:
   - Discount dining vouchers 12,000 distributed
   - Mobilised strong support from the community including restaurant owners, "moving community forward, making community move to prevent and raise gambling awareness", "at least 60 owners supported the activities"
   - 600 customers turned up to take advantage of discount dining- "know it was gamble free day, I received this voucher from my friend, I am a problem gambler", observed by restaurant owners that customers seemed to know the event was grounded on gamble free day
   - People kept the problem gambling related vouchers and used them in restaurants, "it's sensitive issue, but people still used it publicly, 'gambling vouchers' were still used…the gamble free day concept stayed in the person's mind"
   - When the Appreciation Certificate was issued and presented to the restaurant owners, restaurant workers gathered around and appeared to be pleased receiving the certificate and they took notice of central message of the campaign- problem gambling
   - A lot of restaurant workers and owners gamble, "they witness a lot of damages, they can relate to it (problem gambling)…"

- **A group of volunteers** (10 Chinese and 7 Koreans) was trained and involved in this raising problem gambling awareness campaign- men and women, young people and older adults, students and retired people. Their roles were to approach and invite restaurants to participate in the Discount Dining event and distribute vouchers among the community, also take part in activities assigned on the GFD.
  - RESULTS: the evaluation feedback from volunteers suggests that: 1) volunteers appreciate the opportunity to be involved in this meaningful community work, to help combat the harms caused by problem gambling, 2) they feel learning useful life skills for example, approaching business and restaurant owners to discuss the campaign and 3) grow a sense of self-confidence and in some cases, help individuals feel as part of the wider New Zealand society

- **Strengthening the links with the communities.** An Action Group was formed to provide advice and steer the development of the above programme of work. Members of the Action Group represented individuals drawn from the wider Asian communities and they brought a variety of background and expertise to the project for example mortgage manager, law and justice department, newspaper reporter, website editor and tertiary student.

WHERE TO FROM HERE

Similar to previous years, the Gamble Free Day will be held again on the 1st September 2008 Monday. In 2008, the Problem Gambling Foundation Asian Services will stage a similar "Dining Discount" campaign involving Chinese, Korean and other ethnic specialised restaurants in the five main cities- Auckland, Hamilton, Wellington, Christchurch and Dunedin.

Also we recruit and train volunteers to join our team to combat problem gambling in New Zealand Asian communities.

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EXPERIENCES AND ISSUES FOR SPECIFIC COMMUNITIES

FACTORS INFLUENCING SUN EXPOSURE BEHAVIOURS OF SOUTH ASIAN WOMEN AGED 18-40 LIVING IN AUCKLAND

Fiona Pettit

ABSTRACT

There is evidence that South Asians living in New Zealand are at risk of vitamin D deficiency. This research investigated the sun exposure behaviours of South Asian women aged 18-40 living in Auckland to identify the factors that influence their behaviours and discover whether they are at risk of vitamin D deficiency. The two major influences on sun exposure behaviours among South Asian women were found to be their perception of the risk and their ideas about the desirability of tanning. Participants who migrated to New Zealand as adults had a high awareness of the risks of sun exposure through media and public health messages and were less likely to describe adequate sun exposure than women who were born or grew up here. Four women had been diagnosed with vitamin D deficiency and a further three were assessed as being at risk, accounting for about 30% of the women studied. Public health messages about sun safety need to be tailored appropriately for different population groups.

Pettit, F. (2008). Factors influencing sun exposure behaviours of South Asian women aged 18-40 living in Auckland. In S. Tse, A. Sobrun-Maharaj, S. Garg, M. E. Hoque & Y. Ratnasabapathy (Eds.), *Building healthy communities. Proceedings of the Third International Asian Health and Wellbeing Conference, September 8-9* (pp. 139-150). Auckland, New Zealand: University of Auckland.

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INTRODUCTION

Vitamin D plays a critical role in bone health by enabling the absorption of dietary calcium (Thomson et al., 2004). There is evidence that vitamin D deficiency is implicated in the increased risk of Type 1 and Type 2 diabetes, hypertension, osteoarthritis, intrauterine growth retardation, pneumonia, multiple sclerosis, tuberculosis and schizophrenia (Vieth, 2003).

Until recently it was thought that vitamin D deficiency was relatively uncommon in New Zealand, which has one of the highest summer levels of ultra violet radiation (UVR) in the world (McKenzie, 2006). These high levels of UVR, lightly pigmented skin and the cultural value placed on sun exposure and the outdoor lifestyle by many European New Zealanders, place them at high risk of skin cancer (SunSmart Partnership, 2005). Yet a growing body of evidence suggests that low vitamin D levels are more prevalent in New Zealand than previously recognised and coexist with the high risk of skin cancer (Judkins & Eagleton 2006; Rockell et al., 2006; Scragg et al*.,* 1995a; Scragg et al*.,* 1995b).

In particular, there is evidence to suggest that the South Asian population in New Zealand is at risk of low vitamin D levels. Twelve out of eighteen children presenting with rickets in Auckland in 1998 were of Indian descent (Blok et al., 2000), while a study of pregnant woman in Wellington found that 87% had low vitamin D levels, including several Indian

women (Judkins & Eagleton, 2006). Since skin exposure to UVR is the single most important source of vitamin D, this research was directed at understanding what factors influence sun exposure among South Asian women in Auckland and whether individual women were at risk of low vitamin D levels. In this paper I will discuss the findings and argue that New Zealand's sun safety advice needs to take into account the changing demographics of New Zealand society and, in particular, the position of immigrants trying to interpret and negotiate multiple perceived risks.

Sun Safety in New Zealand

Sun safety is a major public health priority in New Zealand. Skin cancer (malignant melanoma and non-melanoma), is the most common cancer (Cancer Society, 2003). Incidence of malignant melanoma, a skin cancer common among Europeans, in the Auckland region is the highest in the world at 56.2 cases per 100,000. (Jones et al., 1999). There are around 50,000 new cases diagnosed each year and around 250 deaths (New Zealand Health Information Service, 2004). Melanoma is associated with high levels of intermittent UVR exposure and a history of sunburn (Elwood & Jopson, 1997). Sun protection behaviours, such as the use of shade, sunscreen, hat, clothing and the avoidance of peak UVR times, are strongly promoted for lightly pigmented individuals to protect their skin during daylight savings months (Cancer Society, 2003).

Although public health promotion messages are aimed at lightly pigmented individuals, this target population is not made explicit. SunSmart advertising campaigns are not specifically targeted at Maori, Pacific and Asian populations in New Zealand because of their lower perceived risk of skin cancer (SunSmart Partnership, 2005). The organisation acknowledges, however, that research is needed into the beliefs and behaviours surrounding sun exposure among these populations in order to assess their risks regarding skin cancer and vitamin D deficiency (SunSmart Partnership, 2005).

Media messages about sun exposure frequently emphasise the extreme nature of the risk in New Zealand. A newspaper article at the beginning of summer 2005 stated that, "*scientists are warning sun lovers to be cautious this summer as ultraviolet rays will be at near record intensity*". (The New Zealand Herald, 2005). The internet is another important source of information and for new migrants this may be their first or main resource for information until they become settled in New Zealand. The National Institute of Water and Atmospheric Research (NIWA) website describes the UVR intensity in the north of the North Island as "extreme" (NIWA, 2006). An extract from a website specifically aimed at migrants to New Zealand states that the UV index "often exceeds 12. In the far North 14 is reached, risky even for people with naturally brown skin" (The ENZ NZ Immigration Guide, 2006).

METHODS

Multiple methods were used in order to ascertain a) to what extent women were exposing themselves to sunlight on summer and winter days and b) what factors might influence this.

Data on the extent to which women were exposing their skin to sunlight were gathered through observation, interview and questionnaire. Around 100 women were observed in public outdoor spaces during winter and summer days to determine the approximate percentage of skin exposed to UVR. Semi structured interviews were also carried out with a further fifteen women to discover their reported sun exposure behaviours and another eight women completed questionnaires. The interview and questionnaire groups were asked to match their level of skin pigmentation against a pigment chart and to determine their skin phototype using a standardised tool used as part of the sun safety campaign in New Zealand (SunSmart, 2006) (Table 1).

Table1

Assessment Tool for Skin Phototype

Skin Type I	always burns, never tans, sensitive to sun exposure; redheaded, freckles
Skin Type II	burns easily, tans minimally; fair skinned, blue, green or grey eyes
Skin Type III	burns moderately, tans gradually to light brown
Skin Type IV	burns minimally, always tans well to moderately brown; olive skin
Skin Type V	rarely burns, tans profusely to dark; brown skin
Skin Type VI	rarely burns, least sensitive; deeply pigmented skin

The interviews and questionnaires were also used to explore the reasons for women's patterns of behaviour. The majority of interviews were taped. Interview transcriptions were used to identify themes emerging from interviews and data was coded by theme. After data had been analysed within themes, connections were looked for between different coding categories in order to find an "overarching" theme that integrated the data and explained the research findings (Rubin & Rubin, 1995).

Assessment of the individual risk of vitamin D deficiency was based on the estimated sun exposure times required for vitamin D synthesis for individuals of different pigmentation levels published by the Working Group of the Australian and New Zealand Bone and Mineral Society, the Endocrine Society of Australia and Osteoporosis Australia (2005). This report states that a lightly pigmented individual in Auckland can synthesise adequate levels of vitamin D with 6-8 minutes of sun exposure during summer and 30-47 minutes in winter, depending on cloud conditions and pollution levels. These times assume exposure of hands, face and arms, or approximately 15% of total skin surface area, outside peak UVR periods. Necessary exposure times for people with darkly pigmented skin are estimated to be 3-4 times longer. Exposure times are recommended for "most days" to avoid vitamin D deficiency (Working Group of the Australian and New Zealand Bone and Mineral Society et al., 2005).

Women were assessed as being at risk if their reported skin exposure times were below those estimated as necessary for their skin pigmentation. Where participants reported they regularly exposed less than 15% of their skin, their exposure time was taken into consideration to see if it was long enough to compensate for the lower proportion of skin exposure. Where women reported they used sunscreen, it was assumed this significantly reduced their capacity for vitamin D synthesis. It was concluded that women were at risk for vitamin D deficiency if their exposure to summer sun appeared inadequate. Where exposure to summer sun appeared adequate, but winter exposure was almost certainly inadequate, it was concluded the participant was not at overall risk of vitamin D deficiency given that the body can store some vitamin D. However, seasonal vitamin D deficiency may be common in some populations (Harris & Dawson-Hughes, 1998).

Participant Characteristics

Participants were women aged between 18 and 40. This age group was selected because women of childbearing age may be at particular risk of poor bone health if vitamin D deficient due to the increased physiological requirements for calcium during pregnancy and breastfeeding (Agarwal & Stuart-Macadam, 2003). Women identified themselves as being from Indian, Sri Lankan, Bangladeshi and Pakistani population groups (Table 2). Each woman identified with only one ethnic group, although some mentioned that they also saw themselves as New Zealanders, New Zealand Indian or New Zealand Sri Lankan for example. All women interviewed spoke excellent conversational English.

The median age of women in the study was 28 years. This is similar to the median age for the general New Zealand Indian population (Statistics New Zealand, 2001). The average age, however, of women who were born and grew up here was nine years younger than the average for women who migrated as adults.

Most of the participants had lived in New Zealand for three years or less and were, therefore, relatively recent migrants. Excluding women born here, the average length of time resident in New Zealand was 7.3 years.

Table 2
Ethnicities and Migration History

	Interview (n=15)			**Questionnaire (n=8)**		
	NZ Born	**Migrated aged 13 or earlier**	**Adult Migrants**	**NZ Born**	**Migrated aged 13 or earlier**	**Adult Migrants**
Indian	1		8	1	1	3
Sri Lankan		3	1		1	1
Bangladeshi			1			1
Pakistani		1				
Total	1	4	10	1	2	5

An important characteristic of this sample was their level of education – nineteen of the twenty three had at least a bachelor's degree. Clearly this sample is not educationally representative of the general South Asian population in New Zealand. Women who have migrated recently, however, are likely to have higher educational qualifications, reflecting the selective bias of immigration requirements. There may also be a study recruitment bias towards women with degrees because of advertising in the university and through university e-mail networks. The particular focus of this study however, was to explore the way in which factors influencing sun exposure acttogether to create risk rather than in achieving a completely representative sample of all South Asian women.

FINDINGS

Skin Exposure

Around 40% of both the interview participants and the women observed wore clothing in summer that would expose approximately 15% of their skin (i.e. face, hands and arms). There was, however, a difference between the two groups. A much higher proportion of participants (around a quarter) reported exposing more than this amount of skin surface on a working day, while observation indicated only 12% exposed this much, and nearly half exposed less than 15% of their skin surface area (Figure 1). Clearly the study sample was probably at lower risk of vitamin D deficiency than the general population of South Asian women. Even so four participants reported having been diagnosed with vitamin D deficiency and a further three women were assessed as being at risk, a combined total of about 30% of the total sample.

Women who migrated as adults were more likely to belong to the at risk group than women who grew up in New Zealand. For example, even on a leisure day only 20% reported wearing clothing that would expose more than 15% of their skin surface, compared to 62.5% of the non-migrant group (Figure 2).

In winter most women (85.7%) reported wearing clothing exposing less than 15% of their skin surface on both work and non-work days, and again this was even more marked in the observational group (94.2%).

These data suggest that 40% of migrant and 12.5% of New Zealand born women in the study may be at risk of inadequate skin exposure to sunlight. It also suggests, however, that

around 20% of migrants and 62.5% of non-migrants could be at risk of over exposure to sunlight.

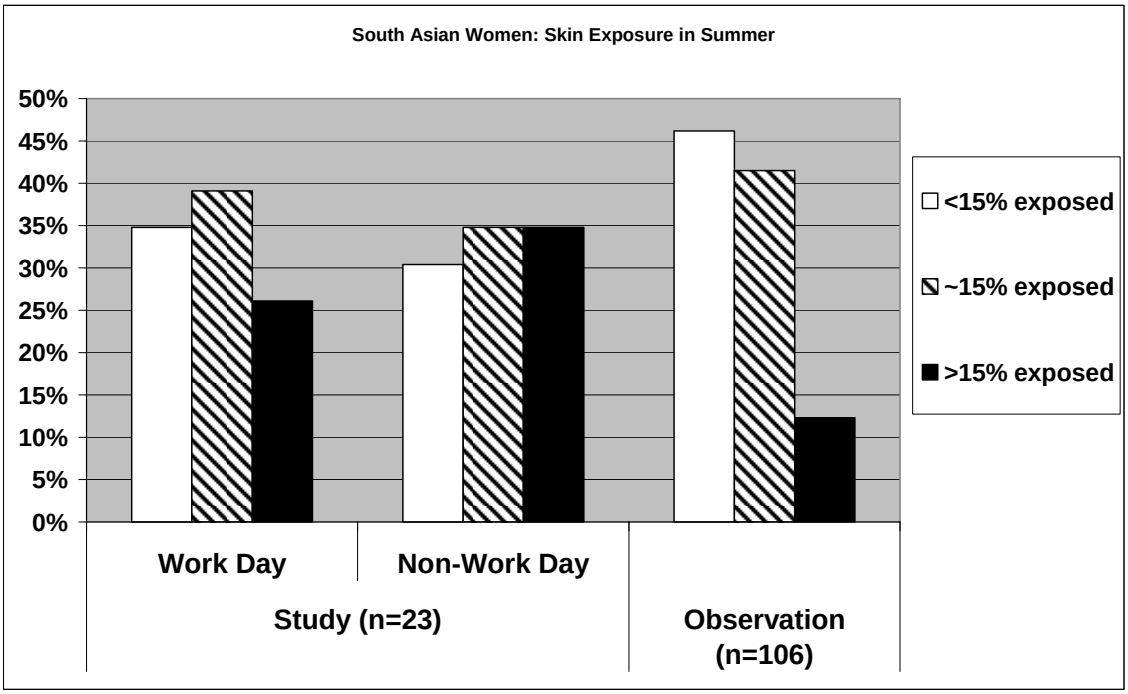

Figure 1. South Asian women: Skin exposure in summer.

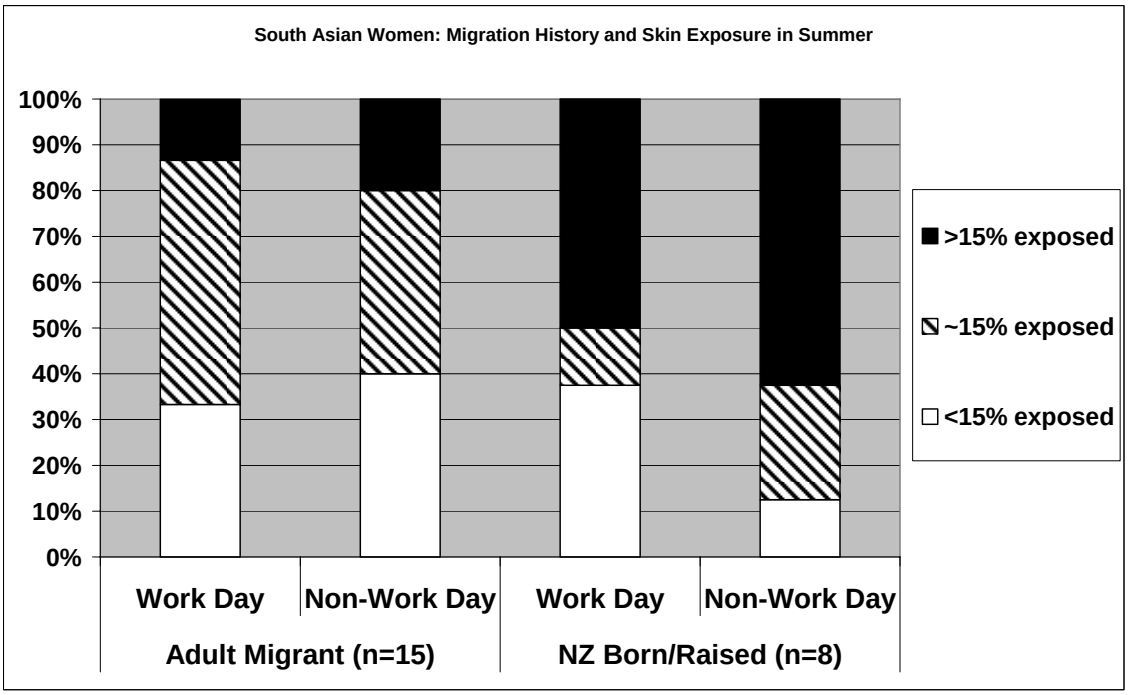

Figure 2. South Asian women: Skin exposure and migration history.

Risk, Skin Pigmentation and Phototype

In order to examine the relationship between how participants evaluated their risk of sun exposure and their actual risk based on skin pigmentation, participants were asked to assess their risk of sunburn (skin phototype) and their level of skin pigmentation. There was no apparent association between skin phototype, and therefore risk perception, and the level of

pigmentation of untanned skin in women in this study (Table 3). There was also no apparent difference in age or country of origin between those who rated themselves as having a lower burn risk, compared to those who rated their risk more highly.

Table 3

South Asian Women: Self Assessed Skin Phototype and Pigmentation Level*

Skin Phototype	**Lightly pigmented**	**Moderately pigmented**	**Darkly Pigmented**
II (burns easily)			
III (burns moderately)	3	1	1
IV (burns minimally)	1	1	3
V (rarely burns)	4	4	1
VI (rarely burns, least sensitive)	1	1	

*Combined data unavailable for two participants

Five women, however, who rated themselves as likely to burn moderately (phototype III) migrated as adults, representing one third of all the adult migrants. This was an unexpected result in view of the higher level of skin pigmentation of some women, and considering their recent migration from a tropical country. The average length of time living in New Zealand for these five women was 2.8 years. This suggested that perceptions of the risk of sun exposure in New Zealand and the personal experiences of recent migrants could be important factors influencing their sun exposure behaviours.

It was noticeable that few of the adult migrants actively sought to expose themselves to the sun, although several did report walking or exercising outside. Most reported finding that direct sunlight in New Zealand resulted in physical discomfort, ranging from sunburn to headaches or a scorching feeling on their skin and limited their sun exposure accordingly.

In contrast the five women interviewed who were born and/or grew up in New Zealand all reported enjoyed spending time outside and in the sun and did not deliberately avoid it. Of these, three reported regular sun exposure without sunscreen use, while two used sunscreen more regularly. Those who perceived their risk of long term ill effects to be low or who preferred not to think about it were least likely to report sun protective behaviours. They also assessed their skin phototypes as being among the least sun sensitive. For this small group, there appeared to be a link between self assessed skin phototype and sun exposure behaviours. Thus, there may be a small subset of South Asian women who, despite awareness of the sun safety campaign are at risk of overexposure to sunlight and long term health effects.

Yet when talking to participants it was found that sunburn was a subjective term. For some women sunburn consisted of a painful redness on exposed skin that later peeled. For others sunburn signified a burning sensation or discomfort on their skin that would leave no visible mark. Six participants, however, described skin rashes or marks on their skin they attributed to sunlight exposure. One woman reported that sunlight had marked her face around the eye, leaving:

"dark patches and…little spots there as well".

Perception of the risk of sunburn, skin discomfort or rash appears to be an important influence on sun exposure behaviours for some women who migrated as adults. Their photosensitivity and high awareness of the publicised risks of sun exposure in New Zealand result in the perception of increased personal risk for sunburn or sun associated skin problems.

One participant said that she felt that summer heat was a common problem limiting sun exposure among Indian women in New Zealand:

> *"I have asked a few of them here, they all have the same feeling. You feel like nauseated. Yeah, the heat is very different here so, it's nice to go out, but not in the sun here….That's why I don't think we have got more exposure to sun here. We all like to stay inside".*

Headaches were also attributed to heat. These feelings of discomfort served to highlight concerns about the risk of sun exposure.

Risk, Time and Opportunity

Risk perception is also a key contributor to women's decision making and prioritisation surrounding sun exposure. Women who grew up in New Zealand were more likely to believe that spending time outside was important, probably because of the cultural value ascribed to sun exposure and the outdoor lifestyle in New Zealand and similar societies (Hill & Boulter, 1996). For most women who migrated as adults spending time outside in the sun was not seen as a high priority.

Most of the participants were working or studying full time. Many also had domestic and family responsibilities. Married women were most likely to indicate that these responsibilities were usually prioritised over opportunities for being outside and were more likely to report time and opportunity constraints, possibly because of different cultural role expectations of women and priorities surrounding exercise and sun exposure. One participant diagnosed with vitamin D deficiency told me that as a working mother she spends the majority of her time inside. She feels she has too many things to think about and is always busy. She also feels that her work and domestic responsibilities are more important than her own health. Although she understood that increasing sun exposure might be beneficial for her health, she felt she would only be able to justify making the time to do it if she were to become physically incapacitated. Other studies with South Asian migrant women have found that childcare and domestic responsibilities are key factors in them not looking after their own health, especially when health benefits are not immediate as in the case of preventive behaviours (Ahmad *et al.,* 2005).

Risk and Sun Exposure

Migration history meant that the participants used different sources of information to evaluate risk. For women who were born or grew up here the most commonly mentioned source of information on sun safety was SunSmart in schools and the media. There was a high level of awareness, but not all felt the information was relevant to them. One woman who enjoys spending time in the sun and rarely uses sunscreen said:

> *"the messages about UV don't really get through to me I guess*."

This was partly because she believes brown skin is more protective and partly because she perceived herself as being less at risk because she does not burn.

In general, migrant women also had a high awareness of the risk of skin cancer in New Zealand. Many had found information on the internet, in the media, from their educational and working backgrounds and frequently from friends or relatives already living in New Zealand. For example, one participant reported that:

> *"when we come into NZ we knew that NZ sun and the UV layer is not that good, not conducive, the skin cancer rates are high"*.

Another said:

> *"It's only after I came to NZ [that] I've known about this fact, that if you're in sun you will get skin cancer"*.

Alongside the media messages about the high risk of skin cancer in New Zealand, women also mentioned information they were aware of regarding the protective qualities of the melanin in their skin. One migrant said:

> *"I know I wouldn't get [skin cancer] because my skin's dark. It's only…for people with white skin".*

Women's assessment of their risk of sunburn using skin phototype suggests that some women perceive their skin to be at high risk despite their level of pigmentation. Information in the media and from the internet may emphasise the risk of sun exposure to the point where women may overestimate the risk to their health of relatively short exposure times. Women who migrated as adults had a high level of awareness of the risk of skin cancer in New Zealand and therefore a high level of concern. The awareness of skin cancer risk is also high among New Zealand born South Asians, but the level of personal concern appears to be lower. Although all the women who were born or grew up here reported being aware of sun safety advice, several chose not to follow it or did so only intermittently.

Overall, South Asian women have been careful to inform themselves about the possible health risks of sun exposure in New Zealand. The information, however, is not necessarily tailored to their health needs. Since more darkly pigmented skin requires longer exposure to UVR for adequate vitamin D synthesis, the high perception of risk among migrant South Asian women in New Zealand arising from the media emphasis on the risk of skin cancer may predispose them to vitamin D deficiency.

The Cultural Desirability of Tanning

Participants held a variety of views about how desirable it was to be tanned. Several women interviewed mentioned that lightly pigmented skin is highly valued by many South Asian women because fair skin is considered to be more beautiful. Women who were born or grew up in New Zealand were as likely to be aware of the "fair skin is more beautiful" concept as adult migrants. One woman in her twenties who grew up here told me:

> *"if you're fair it's really...a plus point, particularly in arranged marriages where looks is what they focus on [in] the girl……I could guarantee if you talk to young second generation immigrants from the sub-continent, like females, they would mention the pressure of being fair".*

Research in Canada also found that young second generation South Asian women felt pressure to maintain lighter skin (Sahay & Piran, 1997). Unlike the majority of New Zealand Europeans who value a tan as healthy and attractive (Lucas & Ponsonby, 2002), one woman said that in South Asian culture a tan is used as:

> *"a euphemism for dark skin".* (Laughter).

Another New Zealand woman in her middle twenties described the idea that fair skin is more beautiful as:

> *"one of those dominant ideas….in our culture…it's like a stigma attached the darker that you are. But for me it's not an issue 'cause I'm reasonably fair anyway, so I don't really have any issues about it, but I know lots of people do".*

She thought however that:

> *"if I was darker those messages would have affected me"*.

She also felt that the idea did have an impact on the sun exposure behaviour of some young South Asian women in New Zealand because:

> *"I know...in my age group…girls will get married and their weddings will be in summertime. They'll spend the whole summer not going in the sun so they don't get dark….Like in India when they choose, because obviously the marriages are arranged*

in India, but a family might say no about a certain girl. The groom's family might say no about a certain girl because she's too dark or, you know, it's part of the marketing as well. So like if you're dark you won't get a good husband".

Other women were more ambiguous about how their sun exposure behaviours might be affected by the message that fair skin was more beautiful. One woman said:

"I don't think I have that perception [because] …I had one grandmother saying that fair is beautiful and I had one grandmother saying that it doesn't matter how dark you are, what matters is how sharp your features are".

She went on to say, however, that she does avoid tanning because:

"I'm already too dark".

Several women reported that they did not mind getting a tan. Interestingly, however, only two women, both of whom grew up in New Zealand, identified a tan as being desirable. Although some women who grew up with the idea that dark skin is undesirable may feel that it should no longer be important or relevant to them, it is clear that there is some ambiguity in what participants say and what they do. Women may experience strong cultural pressures to limit sun exposure and avoid tanning their skin, irrespective of their perception of risk.

DISCUSSION AND CONCLUSION

This research suggest that two major influences on sun exposure behaviours among South Asian women were the personal perception of risk of skin cancer, sunburn or other negative effects and ideas about the desirability of tanning.

South Asians in New Zealand form part of a transnational community. Research into identity and acculturation in second generation New Zealand Indians aged 18-25 years found that most retained a bicultural identity, drawing on both their Indian and New Zealand cultural heritage with no apparent conflict (Raza, 1997). Although they had positive attitudes towards the dominant culture, young New Zealand Indians also wished to maintain traditional cultural traits (Raza, 1997).

For many women the pressure to maintain fair skin might be considered a higher priority than personal preferences or perceptions of risk. If endogamy remains important to South Asians living in New Zealand and husbands continue to be selected from South Asia or from within the traditional South Asian community in New Zealand, this will reinforce traditional cultural ideals and values. Women who believe in the cultural value ascribed to a fair skin are likely to be at increased risk of inadequate sun exposure in New Zealand while successfully avoiding skin cancer.

The majority of women in this study were born overseas. Many have lived in New Zealand for relatively short periods of time. They originate from diverse ethnic and religious groups in different countries in a geographically vast sub-continent. The most striking thing about the women who migrated to New Zealand as adults was their high awareness of the risks surrounding sun exposure. It was evident that there was a high perception of personal risk among adult migrants for skin cancer, sunburn, skin problems and other physical discomforts.

Sun safety messages in New Zealand represent the body as highly vulnerable to the potential dangers of sun exposure. This impression of the body as being imperilled is supported by women's own knowledge of the problems of ozone depletion in New Zealand, and may be further reinforced by advice from schools and workplaces and later by personal experience. Risk perceptions are based not only on cultural knowledge and personal experience, but also on reactions to warnings about health risks (Oaks & Harthorn, 2003). Thus, it appears that

South Asian women may be particularly susceptible to health promotion messages about sun exposure in New Zealand.
Siegel argues that our ability to assess risk and to keep fear in perspective has diminished as more of the information on threats to our safety, including illness, comes from the internet and media. Information from these sources may be fragmented, inappropriate to our own situation and be more alarming than reassuring (Siegel, 2005). This is more likely to be a problem for recent migrants, who are heavily dependent on publicly available information about hazards in their new environment, but have no personal experience to guide them in evaluating the relevance of that information to their own situation. However, South Asian women who were born or grew up in New Zealand were less likely to feel that they were at personal risk of skin cancer and also less likely to be concerned about the long term effects of sun exposure.

For some migrant South Asian women, their concerns about health problems arising from sun exposure moulds their perceptions of risk and reinforces cultural values and behaviours that lead to reduced sun exposure in New Zealand. These perceptions of risk sit alongside transnational cultural values surrounding sun exposure, the desire to maintain fair skin and enhance marriage prospects being foremost among them. Low priority given to sun exposure and high perceptions of personal risk, together with cultural pressures to maintain fair skin, place women at increased risk of inadequate sun exposure in New Zealand and, therefore, vitamin D deficiency.

The significance of this research lies in the fact that it is the first study carried out in New Zealand investigating sun exposure behaviours among South Asians. Scragg *et al.* suggested that low vitamin D levels might be a partial explanation for the higher incidence of Type 2 diabetes and cardiovascular disease among Maori and Pacific people (1995a, 1995b). Given the rising incidence of Type 2 diabetes and cardiovascular disease among Indian populations in New Zealand, it is possible that vitamin D deficiency may also be a contributing factor to the growing burden of ill health in this group (Rasanathan et al., 2006).

The primary focus of sun safety campaigns in New Zealand has been on reducing sun exposure and increasing sun protective behaviours among the majority population of European descent (McGee, 1995; Sneyd & Cox 2006). However, sun safety advice needs to take into account the changing demographics of New Zealand society and be targeted appropriately at different population groups. Paradoxically, South Asian women were more likely to perceive themselves to be at risk of skin cancer, despite their generally darker pigmentation level. Understanding how women perceive risks relating to sun exposure and how they negotiate between information and experience is a crucial element in enabling public health messages to be tailored for different groups. This research suggests that sun safety campaigns emphasising the risks of sun exposure are much more likely to be heeded by South Asian women than many European New Zealanders. The result of this can be that women who significantly limit their sun exposure in response to the perceived risk of skin cancer are more likely to be at risk of vitamin D deficiency.

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FEMALE FRIENDLY TB-CARE INTERVENTION: AN EFFECTIVE MODEL FOR MINIMIZING GENDER DISPARITIES IN TB-CARE IN RURAL COMMUNITIES OF BANGLADESH

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ABSTRACT

BACKGROUND

Tuberculosis (TB) remains the primary killer of adult women and men in developing countries despite the existence of highly effective tools that can completely cure the disease (Jacobson, 2001)**.** Bangladesh ranks 5th among the top 22 high TB burden countries of the world, where 300,000 new TB cases occur every year, half of them are infectious and therefore spreading the infections in the community (WHO, 2005). TB is associated with taboos, fear and stigma (Somma, 2008; Anderson 2008). These factors along with poor health care facilities and unfriendly behaviors of health care providers can create barriers for TB patients in accessing health centers for treatment, despite availability of free, highly effective TB drugs under DOTS program.

OBJECTIVE

The Intervention was given to compare the effectiveness of Female Friendly TB-care intervention with a non intervention community in terms of case detection, social problems in accessing TB care and treatment outcomes, particularly among the female TB patients of a rural community of Bangladesh.

METHODOLOGY

A total of 350 new TB patients (age $\geq$ 15 years), comprising of 175 from intervention and 175 patients from a non intervention community were sampled following a systematic sampling technique, from April 01, 2004 to April 30, 2005, and followed-up until completion of treatment.

RESULTS

The basic characteristics of the study population were majority of the females (65.8%) were within the age group of 15-34 years. The median age of female TB patients was 25 years compared to 40 years for male TB patients. The female patients of the control community confronted more social problems and stigma than the intervention community. Female TB patients of the intervention community experienced less severe social problems and stigma (20%) than the control community (25.8%) which is statistically significant ($P< 0.05$). Female patients of the intervention community had better knowledge on tuberculosis (83.6%) than the control community (68.2%). The detection rate for female patients remarkably increased in the intervention community after using Gender Sensitive Package Services during the year 2004 (34.37% vs 26.69%) to 2005 (35.05% vs 28.57%). The treatment outcome of female patients in regard to the cure rate was much better (86.7%) than for male TB patients (77.1%). The cure rate of the female patients of the intervention community (91.8%) was greater than the female TB patients of the control community (81.9%).

CONCLUSION
These findings suggest that the Gender Sensitive TB Control Interventions could be effective in similar situations like rural populations in other Upazila of Bangladesh.

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INTRODUCTION

Tuberculosis (TB) remains the primary killer of adult women and men in developing countries despite the existence of highly effective tools that can completely cure the disease (Jacobson, 2001). Bangladesh ranks 5th among the top 22 high TB burden countries of the world, where 300,000 new TB cases occur every year, half of them are infectious and therefore spreading the infections in the community (WHO, 2005). TB is associated with taboos, fear and stigma (Anderson, 2008). These factors along with poor health care facilities and unfriendly behaviors of health care providers can create barriers for TB patients in accessing health centers for treatment, despite availability of free, highly effective TB drugs. The report of National TB Control Programme (2005) revealed that the present case detection rate in females is 30% where that in males is 70%. The study done by Ahsan et al. (2004) indicates the socio-cultural barriers and unfriendly behaviour of the TB care providers prevailed in the rural community, discouraged females in seeking treatment from the health center. The majority of females (82.7%) wanted their TB diagnosis undertaken confidentially and 85.6 percent of them wanted to be examined by providers of same gender (Ahsan et al., 2004). These finding led to the implementation of the Gender Sensitive TB Control Intervention study, to compare the effectiveness of gender sensitive TB control intervention with a non intervention community in terms of case detection, social problems in accessing TB care and treatment outcomes of the sample TB patients, particularly among females. The cohort sample of TB patients in the intervention and control communities were followed till the treatment outcomes, either as cured not cured.

MATERIALS AND METHODS

Study population and sampling process

The Quasi-experimental study was designed to compare the effectiveness of a gender sensitive TB control intervention with a non intervention community in terms of case detection, social problems in accessing TB care and treatment outcomes of the sample TB patients.. Systematic Gender Sensitive Intervention package services were given to the intervention community (Bhaluka) of Mymensingh district and the control community (Gaforgoan) received regular TB services. A total of 350 new tuberculosis (TB) patients (age $\geq$ 15 years), comprising of 175 TB patients from the intervention group and 175 TB patients

from the non intervention area were sampled following a systematic sampling technique, during April 01, 2004 to April 30, 2005 and followed-up until completion of treatment. Interviews were conducted with study participants after they gave their informed consent.

The Female-friendly TB-Care Intervention package comprised of several important female friendly TB care activities. These included: the provision of TB care by provider of same gender: the provision of regular educational messages, screening for TB suspects and patients to optimize and sustain community awareness; helping symptomatic women to bring up good quality sputa, sputum collection from the door step of women suspects and cases; providing health education and counseling; ensuring direct observation of intake of drugs by voluntary community TB workers and ensuring contact tracing of suspected TB cases. The data collection methods included structured questionnaires, a standard checklist and record collection sheets. Ethical issues, as for example, informed decision-making consent, maintenance of confidentiality and privacy of the patients and data, etc. were addressed. Continuous supervision and crosschecking and monitoring of data during collection were implemented to ensure accurate data collection. A specific database for this study was designed for smooth analysis and accurate interpretation of data.

Statistical analysis

The data was analyzed both in qualitative and quantitative ways. For qualitative analysis, we used manual methods, because of the relatively small number of samples. For quantitative analysis, we used categorical data analysis procedures such as chi-squire test with Yates corrections or Fisher's exact test, as appropriate Adjusted Odds Ratio with a 95% confident interval was computed by using multiple logistic regressions to assess statistically significant differences in case detection, treatment seeking behaviors and treatment outcomes between males and females or among factors of interest. Descriptive data was categorized as frequency distribution, central tendency, etc. Confounders were controlled for by mathematical modeling and stratified analysis as appropriate. All statistical analysis was performed by SPSS for window (version 11.5) and Stata.

RESULTS

The socio-demographic characteristics of sampled TB patients (Table 1) revealed that among all participants, 45.4 percent were young adults between 15-34 years of age. Most participants in this age range were females (65.8%) compared to males (36.7%). In contrast, for participants 45 years and over the majority of patients (45%) were males. Among all 350 TB patients, 105 (30%) were females and 245 (70%) were males. The median age of female and male TB patients was respectively 25 and 40 years. More than half of the TB patients were uneducated (52.3) and the remaining were educated from primary (34.6%) to higher secondary level (2.6%). Most of the TB patients were married (81%), 16 percent of them were unmarried and only few (3.1%) were separated or divorced. Forty three percent of the TB patients had no income and were dependent on others and 36.3 percent of them had a monthly income less than taka 2500. Most of the study population was Muslim (92.3 %) and the remaining (7.7%) were Hindu.

Table 1
Comparison of Socio-Demographic Characteristics of Female and Male Tuberculosis (TB) Patients

Demographic	Female (n=105)		Male (n=245)		Total (N=350)		P-value[b]
Characteristics	n	%[a]	n	%[a]	n	%[a]	
Age (Years)							
15-34	69	65.8	90	36.7	159	45.4	0.000
35-44	17	16.2	45	18.4	62	17.7	
45-54	11	10.5	34	13.9	45	12.9	
55 +	08	7.6	76	31.0	84	24.0	

Educational status						
Illiterate	60	57.1	123	50.2	183	52.3
Primary	31	29.5	90	36.7	121	34.6
High school	13	12.4	24	9.8	37	10.6
Above high school	01	1.0	08	3.3	09	2.6
Marital status						
Unmarried	24	22.9	32	13.1	56	16.0
Married	75	71.4	208	84.9	283	80.9
Separated	06	5.7	06	2.0	11	3.1
Religion						
Muslim	99	94.3	224	91.4	323	92.3
Hindu	06	5.8	21	8.6	27	7.7
Income/month						
No income	88	83.8	64	26.1	152	43.4
<Tk.2500	11	10.5	116	47.3	127	36.3
>Tk.2500	06	5.7	65	26.5	71	20.3

a: Column percentage
b: Compare the significance difference between female and male

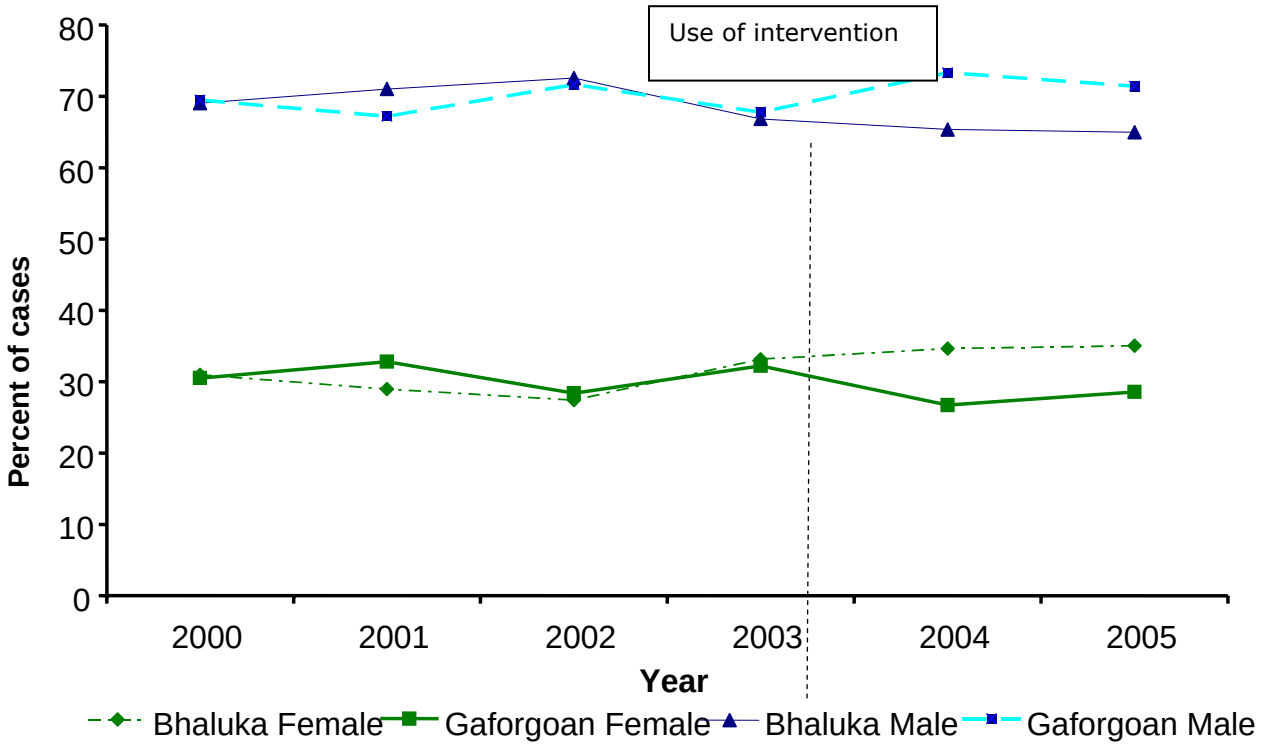
The Table 2 summarizes the study's findings and indicates that the majority of TB patients (61.7%) of the intervention community have good knowledge of TB. In the intervention group, female TB patients had better knowledge of TB (83.6%) than the control community (68.2%) indicating a significant association between knowledge of tuberculosis and the study communities (P-value < 0.05). This result could be due to the intervention package services promoting greater knowledge of TB among the population in the intervention community.

Table 2
Comparison of Knowledge of TB Patients on Tuberculosis between the Study Communities

Knowledge on TB	Bhaluka (n=175)				Gaforgoan (n=175)				Total (N=350)		P-value[b]
	Female (n=61) n%[a]		Male (n=114) n%[a]		Female (n=44) n%[a]		Male (n=131) n%[a]		N	(%)	
Poor	10	16.4	44	38.6	14	31.8	66	50.4	134	(38.3)	0.000
Good	51	83.6	70	61.4	30	68.2	65	49.6	216	(61.7)	

a: Column percentage

Graph 1 indicates that female TB patients' case-detection rate was approximately similar between the intervention and control communities before the intervention until 2003. The case-detection rate of females increased in the intervention community (Bhaluka) after implementing the Gender Sensitive Package Services during the year 2004 (34.37% vs 26.69%) and 2005 (35.05% vs 28.57%). There was little change of male patient detection in the control community. Graph 1 is plotted using secondary data from the TB Patients register of the study areas during 2000-2005.



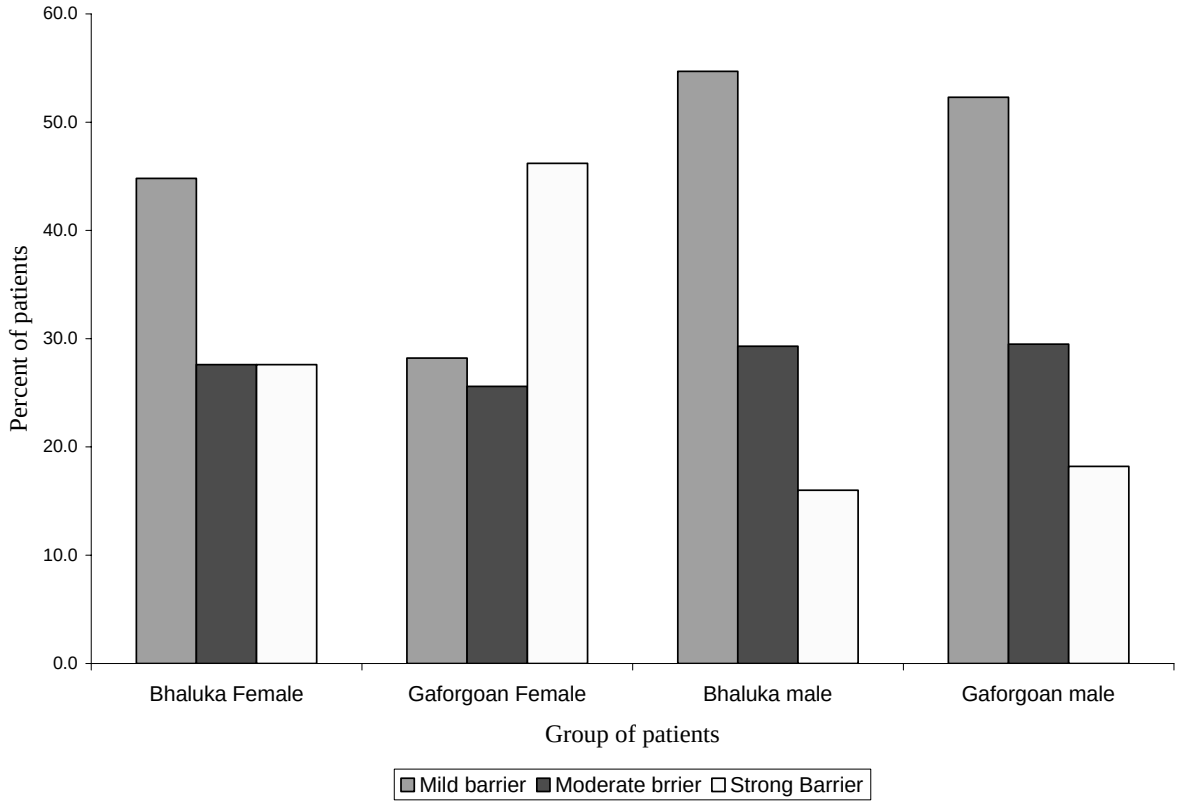
Graph 1. Comparison of TB patients detection between the intervention and control communities before and after intervention.

The study findings indicate (Table 3 & Graph 2) that the prevailing situations of social problems and stigma associated with TB in the rural community of Bangladesh. Half of the TB patients (49.7%) confronted mild social problems and stigma in both of the study communities, especially among female patients. Female TB patients of the intervention community experienced significantly less (P-value < 0.05) severe social problems and stigma (20%) than the control community. These differences may be due to the community education programs aimed at female TB patients and suspected TB cases. However, female TB patients in both the control and intervention communities experienced mild to moderate of social difficulties, though the strength of such difficulties was much lower in the intervention area.

Table 3
Comparison of Over All Barriers (Social Problems And Stigma) Experienced By TB Patients In Relation to Access to TB Care Between the Control and Intervention Communities

Overall barrier of TB patients in access to TB care	Bhaluka (n=175)				Gaforgoan (n=175)				Total (N=350) N (%)	P-value [b]
	Female (n=61)	n%[a]	Male (n=114)	n%[a]	Female (n=44)	n%[a]	Male (n=131)	n%[a]		
No	32	52.5	39	34.2	5	11.4	43	32.8	119 (34.0)	0.000
Yes	29	47.5	75	65.8	39	88.6	88	67.2	231 (66.0)	
Mild barrier	13	44.8	41	54.7	11	28.2	46	52.3	111 (48.1)	
Moderate barrier	08	27.6	22	29.3	10	25.6	26	29.5	66 (28.6)	0.000
Strong barrier	08	27.6	12	16.0	18	46.2	16	18.2	54 (23.4)	

a: Column percentage



Graph 2. Comparison of overall social problem and stigmas of TB patients in accessing TB care between study communities.

Female TB patients in the control community experienced more social problems and stigma than the intervention community (Table 4). The social problems include hesitation of the family members to sleep together, eat together, sharing beds, refusal to wash clothes by other relatives or maid, social isolation or maintaining physical distance by the family

members and villagers, denial of accepting ritual or spiritual activities, etc. One third of all female TB patients reported the family member's hesitation in interaction after getting TB. Of these, females in the control community experienced more social isolation from family members (40.9%) than females in the intervention community (27.9%). Though, 39 percent of female TB patients in both communities reported social ostracism from their neighbors after TB diagnosis, yet females in the control group experienced more social avoidance from villagers' (47.7%) than females in the intervention community (32.8%). Over 20 percent of the total female TB patients from both study communities were not allowed to sleep with their family members after TB diagnosis. This experience was more common for females in the control group (29.5%) than the intervention group (16.4%). This is probably due to increase in knowledge on TB among the population in the intervention community. Influences of social stigma were also experienced by women when family members deny to wash clothes, though it was less in the intervention community. In addition, nineteen percent of the female participants reported their family members and neighbors avoiding them after TB diagnosis.

Table 4
Social Problems and Stigma Confronted by Female TB Patients in Intervention and Control Study Areas

Factors related to social problems and stigma	Bhaluka (n=61)		Gaforgoan (n=44)		Total (N=105)		P-value[b]
	n	%[a]	n	%[a]	n	%[a]	
Hesitation in taking food together							
Yes	11	18.0	14	31.8	25	23.8	
No	50	82	30	68.2	80	76.2	
Sleeping with family members							
Yes	48	78.7	29	65.9	77	73.3	
Sometimes	3	4.9	2	4.5	5	4.8	
No	10	16.4	13	29.5	23	21.9	
Villagers hesitate in interaction							
Yes	20	32.8	21	47.7	41	39.0	
Sometimes	3	4.9	5	11.4	8	7.6	
No	38	62.3	18	40.9	56	53.3	
Participation in ritual functions							
Yes	49	80.3	33	75.0	82	78.1	
Sometimes	4	6.6	6	13.6	10	9.5	
No	8	13.1	5	11.4	13	12.4	
Refusal to wash cloths by other relatives							
Yes	12	19.7	9	20.5	21	20.0	
Sometimes	4	6.6	6	13.6	10	9.5	
No	45	73.8	29	65.9	74	70.5	
Family members kept physical distance							
Yes	14	23.0	6	13.6	20	19.0	
Sometimes	2	3.3	6	13.6	8	7.6	
No	45	73.8	32	72.7	77	73.3	
Finding marriage partners with cured TB girls/boy							
Yes	14	23.0	11	26.2	25	24.3	
Sometimes	5	8.2	6	14.3	11	10.7	
No	42	68.8	25	59.5	67	65.0	

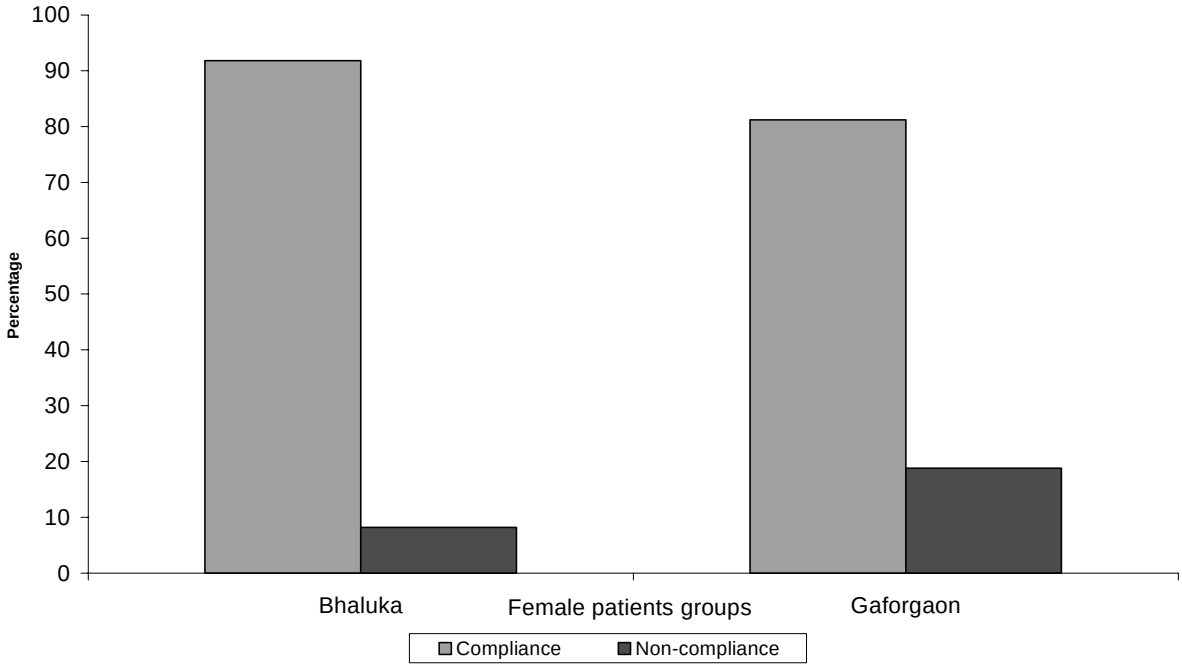
a: Column percentage
b: Compare the significance difference between female and male

The Table 5 and Graph 3 illustrate comparisons of treatment outcomes between the control and intervention groups. Seventy nine percent of the sample TB patients in the study were completely cured. Cure rate for overall TB patients in the intervention group were 85.7 percent compared to 71.4 percent for the control group. Similarly, the default (discontinuation of the treatment for consequent two months or more), relapse (new bacteriological episode of the disease after initial cure), treatment failure (persistence of bacteriologic positivity, either in sputum or in culture), death and others outcome of the TB treatments of the sample TB patients were respectively 8.3 percent, 0.9 percent, 2.6 percent, 1.1 percent and 8.6 percent. The treatment failure (4%) and default rate (11.4%) were more higher in the control community than those in the experimental community where the treatment failure and default rate were 1.1 and 5.1 percent only. The treatment outcome of the female TB patients in regard to the cure rate was much better among the female patients (86.7%) than male TB patients (77.1%). The cure rate of the female TB patients in the intervention community (91.8%) was greater than that for females in the control community (81.9%). The treatment outcomes of female TB patients in terms of default, failure and death were 4.9 percent, 1.6 percent and 1.6 percent respectively in intervention community, while those in the control community were 6.7 percent, 1 percent, 2.9 percent, 1 percent and 6.7 percent.

Table 5
Comparison of Treatment Outcomes of Females TB Patients between Intervention and Control Communities

Treatment outcomes	**Bhaluka (n=175)**		**Gaforgoan (n=175)**		**Total (N=350)**	
	n	% [a]	n	% [a]	n	%[a]
Cured	150	85.7	125	71.4	275	78.6
Default	9	5.1	20	11.4	29	8.3
Relapse	0	0.0	3	1.7	3	0.9
Failure	2	1.1	7	4.0	9	2.6
Died	2	1.1	2	1.1	4	1.1
Others	12	6.9	18	10.3	30	8.6
Treatment outcomes of Female TB patients						
Treatment outcomes	**Bhaluka (n=61)**	%	**Gaforgoan (n=44)**	%	**Total (N=105)**	%
Cured	56	91.8	30	81.9	86	81.9
Default	3	4.9	4	6.7	7	6.7
Relapse	0	0.0	1	1.0	1	1.0
Failure	1	1.6	2	2.9	3	2.9
Died	1	1.6	0	1.0	1	1.0
Others	0	0.0	7	6.7	7	6.7

a: Column percentage



Graph 3. Compliance of female patients on TB treatment in the two communities.

The compliance (taking medicines regularly as prescribed, up to treatment completion or death) to the TB Treatment among female TB patients in the intervention area was much higher than that of the female patients in the control area (91.8% vs 81.2%)

DISCUSSION

TB is dreaded in countries like Bangladesh (Baussano, 2006; WHO, 2001) where a huge reservoir of TB cases remain untreated in rural communities, particularly among women who prefer to be treated by various traditional healers leading to spreading infection (Fair, 1997). Ahsan et al (2004), Gosoniu (2008), Karim (2007) in their study on gender difference in health seeking behavior also found that 70 percent of female participants with TB sought traditional healers before attending DOTS treatment [though, in 2003, 11% of all TB patients were treated by traditional healers (Hamid Salim, 2006)] leading to delays in bacteriological diagnosis with a mean patient delay of 63 days (Ahsan et al., 2004). The primary aim of this research was to improve TB case detection and treatment compliance of TB patients, particularly for females by using a Female friendly intervention in the intervention community. Findings from this study indicate that the majority of females TB patients (65.8%) were young adult between 15-34 years of age, with the median age of 25 years. The age distribution suggests that TB affects mostly younger age groups among women in rural communities which is reported in many studies (Hamid Salim, 2006; Karim, 2007), but health-care seeking for TB among females are low (Gosoniu, 2008). We found an increase in health care seeking for TB among females in the intervention community which may be due to the increased community awareness activities of intervention program.

Female patients in the control community experienced more social problems and stigma than the intervention community. In additions, social exclusion and stigma was less severe for Females in the intervention group than those experienced by females in the control community due to the effect of sustained health education. Female patients in the intervention community also had more extensive knowledge of TB (83.6%) than the control community (68.2%). These findings support the argument that implementation of the

Female-friendly intervention program can increase TB knowledge and reduce social stigma. In addition, female patient case-detection significantly increased in the intervention group demonstrating that the intervention can increase TB case detection. Favorable treatment outcomes measured through TB treatment compliance, default, relapse and cure rates were also significantly improved for females in the intervention group compared to the control group. The findings suggest that the Female-friendly Interventions could be effective in similar situations where female case-detection is low or social stigma is high. This type of intervention will help the health professionals in better TB diagnosis and TB treatment compliance. These will improve the cure rate or reduce relapse and thus prevent further spread of the disease. This intervention package is ideal because it involves the community in TB control, increase community awareness and reduce social stigma.

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NEGOTIATING SUBJECTIVITIES OF KOREAN ASTRONAUT MOTHERS IN NEW ZEALAND: THE EXPERIENCE OF ASTRONAUT FAMILY, GENDER AND ETHNICITY

Hyunok Jeon

ABSTRACT

Korean astronaut families are the biggest group of migrants amongst Asian groups in New Zealand. This paper explores how Korean women in these families experience the self within the New Zealand context. Qualitative methods are used, including in-depth individual interviews with ten Korean mothers. The data is analyzed using discourse analysis. Being an astronaut mother is constructed in a way that means having to deal with the power relations within the host society while knowing that inevitably they will return to their home country. In addition, traditional gender roles within the family are challenged after migration. The participants recognise these changes and negotiate their subjectivities in the following asymmetrical relationships: between astronaut families and permanent residents; between the ethnic minority group and the host society; and between women and men. By simultaneously complying with and resisting the available positions within these power relations, the women reinterpret and reformulate their subjectivities. The research findings suggest that researchers in this area need to consider these multiple and contingent subjectivities, which are influenced by the women's experience of citizenship, gender and ethnicity.

Jeon, H. (2008). Negotiating subjectivities of Korean astronaut mothers in New Zealand: the experience of astronaut family, gender and ethnicity. In S. Tse, A. Sobrun-Maharaj, S. Garg, M. E. Hoque & Y. Ratnasabapathy (Eds.), *Building healthy communities. Proceedings of the Third International Asian Health and Wellbeing Conference, September 8-9* (pp. 162-170). Auckland, New Zealand: University of Auckland.

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INTRODUCTION

The Astronaut family is a unique form of migrant family that has emerged in western countries during the last decade (Ho, Bedford, & Goodwin, 1997). The term 'astronaut family' refers to families that have been split to occupy different countries for a specific purpose. Often mothers come to the new country with their children solely for the children's education. Their husbands remain in the country of origin to provide financial support for the family. The mothers and children usually plan to go back to their country of origin, to reunite with the rest of their families after the intended outcome is achieved. This form of migrant families mainly comes from Hong Kong, Korea, and Taiwan, migrating to countries like New Zealand (Ho, Au, Bedford, & Cooper, 2002), Australia (Pe-Pua, Mitchell, Castles, & Iredale, 1998), and Canada (Lam, 1994). Koreans are regarded as the biggest ethnic group, making up most of the astronaut families in New Zealand. Half of the international students enrolled in primary and secondary schools in 2007 were Koreans (New Zealand Ministry of Education, 2007). Mothers come from Korea, along with these young students to form astronaut families. How

these mothers adjust to their new circumstances is a critical issue for the health and wellbeing of the family, the children and the mothers themselves.

Literature on mothers in astronaut families shows contrasting stories for these women. Studies in Toronto and in Auckland showed that mothers from astronaut families suffered from overwhelming responsibilities and loneliness, made worse by language and cultural barriers (Sheppard, 1999; Aye & Guerin, 2001; Lee, 2002). However there is also evidence that these women in Astronaut families develop stronger independence and confidence over time (Waters, 2002). Waters (2002) conceptualised the independence of these women as a process of confronting the patriarchal dominance within their families, taking charge when their husbands were absent. The implication is that these women may experience confusion and difficulties when changes of micro (family) and macro (culture, society) contexts occurs. However, the dramatic cultural transitions from Asian to Western culture, apparently also provides them with possibilities to explore, many of them challenging traditional gender roles or embracing aspects of a new ethnic culture, for example.

The inquiry of my study supports the argument by Murray and Campbell (2003) that many psychological theories have focused too strongly on defining people's behaviour 'as something that belongs to the individual' (p. 232). Further criticism associated with the individualistic approach on migrant studies includes its tendency to undermine the influences of social and cultural contexts (Okazaki, Lee, & Sue, 2007). More specifically, Bhatia pointed out that power relationships around gender and ethnicity in migrants' lives tend to be neglected in previous research (Bhatia, 2003). Based on those criticisms, new approaches in migration studies suggest us to consider the context in a wider sense than individual experience (Okazaki, Lee, & Sue, 2007). By moving beyond the individual perspective, migrant research could locate specific meanings attached to being in particular social cultural contexts and experiencing challenges related to migration and gender.

Informed by these new perspectives, I draw on the concept of subjectivity to understand the Korean mothers' experiences. The term subjectivity emphasises experiences of the self that is "her sense of herself and her ways of understanding her relation to the world" (p. 32, Weedon, 1987). Subjectivity has a function in this sense, to overcome the dichotomy of the individual and social spheres and to understand experiencing the self as multiple, at times conflicting and continuously produced in the course of social relations (Mama, 1995). For example, being a woman in one culture would be experienced differently in another culture, and to understand this difference one would need to draw on the various cultural understandings around gender. Therefore, in my study, the concept of subjectivity is used as a way of looking at contingencies and sensitiveness to the culture. Drawing on this approach, this research looks at the subjective experiences of Korean mothers in astronaut families and how their subjectivities are constituted and negotiated while in New Zealand.

METHODS

The participants of this study were ten Korean women living in Auckland. They all lived with their children under their direct care while their husbands remained in Korea. All participants were aged between their mid 30s to late 40s, with one to three children under the age of 16 years old. They all received financial support from their husbands, for costs of living and their children's study, and were mostly not earning other income. Only one participant, had a part-time job. To include people with sufficient experience of local culture for this study, I set the criterion of having lived in New Zealand for at least one year but no more than ten years. The women all lived in suburbs of Auckland; five in the North Shore, three in central Auckland and two in Howick, the eastern part of Auckland.

Participants were recruited through the researcher's acquaintances, using snowball sampling to identify and contact them. Each participant took part in one interview lasting about one

hour. The interviews were conducted in the participants' homes with the exception of two interviews which took place in other quiet places. The interviews were semi-structured. The participants were asked about challenges and benefits of coming to New Zealand and invited to discuss changes in their lives after their migration. All interviews were recorded and transcribed. The entire process was carried out in Korean language by the researcher whose first language is Korean. All data collection was completed between June 2006 and December 2006.

This research was considered for ethical approval through formal peer review within the School of Psychology at Massey University, and gained approval as being of low risk to the participants and to the researcher. The participants were fully informed about the researcher, purpose of study, scope of their involvement and the probable future use of the research data before they made the decision to participate in the research. Their personal details remained confidential, and pseudonyms were used in all reports from the data. Before the interview, participants were advised that they could refuse to answer any questions and withdraw from the research at any time during the process. They were also given a list of New Zealand health services in Korean language that were available to help them with getting information about any issues that might arise for them as a result of the research.

Analysis of the data was based on identifying themes, the use of social cultural resources (discourses), and ways of constructing subjective meanings. This analytical approach is influenced by the Foucauldian version of discourse analysis, which proposes the importance of relationships between discourses and power in shaping subjectivity (Willig, 2001). My analytical focus is more in line with formulating subjectivity in a new context rather than identifying or elaborating particular discourses.

RESULTS

Participants talked about their challenges and any changes after migration as a Astronaut mother. In the following analysis section, I identify four important themes from their talk and discuss the multiple subjectivities that emerged through these themes. The four themes identified are: impermanence, disconnection, language and gender. Firstly, I discuss the theme of impermanence which relates to the temporary nature of astronaut mothers' positions in New Zealand. Secondly, I discuss the theme of disconnection and loneliness in the new country. The third theme is the dominance of the English language as it relates to the dominance of Western culture. Fourthly, the theme of gender roles in relationships with their husbands is discussed.

The Temporary Nature of Being in New Zealand

Participants' temporary living arrangements are built around plans for going back to Korea sooner or later. Their mothering in New Zealand is different from other migrant mothers, because of the temporary nature of their living arrangements:

> *"We are different from other migrants. We have to do much within a limited time... so my kids have many private lessons for grammar, math and violin and so on. Because... they should be able to catch up with Korean schools later and need to learn English while we are here". (Jisuk)*

This temporariness impacts on mothering because there is pressure to get the children's education completed in the shortest time possible. They also want their children to be able to adjust to schools in Korea when they go back, and it is common to arrange many extra classes for their children. This temporary nature also creates a boundary between those mothers and other long-term residents in New Zealand:

> *"I heard that immigrant mothers say "do not hang out with the astronaut mothers." Because…they [migrants] have a life here that goes on, paying tax, and so on. But we, astronaut mothers, stay for a certain time only and leave..." (Sunyoung)*

Sunyoung is talking about the rumours that surround astronaut mothers, which highlights that astronaut mothers are merely visitors and therefore not very reliable socially. The temporary migrant status has been identified as stressful, and frequently leads to a lack of social support (Ward, Bochner & Furnham, 2001). Sunyoung's talk explains how being a temporary visitor is distressing because of the social isolation caused by her status as an astronaut mother. There is a sense of belonging nowhere, which is experienced through the boundary drawn between temporary residents and longer-term residents.

The next extract shows how the lives of astronaut mothers are constructed as temporary and disposable in New Zealand:

> *"What's the point to buying nice things? So I buy cheap ones, just good enough for a couple of years... The thing is.. it is not a good feeling to buy and live with things to throw away". (Mina*)

Mina metaphorically describes her life in New Zealand as living with cheap and temporary things that are not meant to last long. Here, differences from others are presented in a way that describes life in New Zealand as disposable and downgraded from their usual lives. However in the next extract, drawing on the same subjectivity as temporary visitors, positive aspects of self are apparent:

> *"This is neither a short trip nor a permanent migrating. I do have place to go back to (in Korea). It gives me a comfort". (Jiwon*)

Here, the temporariness is drawn on to create safety. What gives comfort to Jiwon is that she has her own place to go back to, she is comforted by being able to address her own sense of belonging. This might provide Korean astronaut mothers with a comfortable space to negotiate between advantaged and disadvantaged aspects, denoted by their sense of not being governed by the host society, and between adhering to Korean norms and taking up new cultural norms from New Zealand.

Loneliness: Losing Connectedness vs. Building Independence

The loneliness these women experience involves losing their connectedness in the new context, a connectedness that the women have to sacrifice for their children.

> *"I think I may not be able to forget the sound of the Fisher & Paykel washing machine. No, not because it is too noisy but… when I first arrived and start living, I had nothing to do... so I did laundry everyday. When I hear the 'wing wing ~' sound... I still feel my chest dropping down. It reminds me of the feeling ... the extreme loneliness ... that I had during the first few months here". (Soyon)*

Loneliness is here vividly described as a physical sensation, and highlights the permeation of loneliness into the very core of Soyon's life. Naming the New Zealand home appliance company is further evidence of Soyon's unfamiliarity with New Zealand. In the next extract, mothering in New Zealand is described in terms of sacrifice in other parts of the women's live:

> *"I started feeling that myself is disappearing. My existence here is just filled by doing things like transporting my kids between school and home, cooking for them...' (Heyoung)*
>
> *"When I see my face, I realise I am getting old so fast. It is probably because I am not laughing as much as before. I haven't been with the people I feel comfortable with for far too long". (Heyoung*)
>
> *"I sacrifice my time for my boy…I regard the time here as a blackout in my life". (Soyon)*

In seeing their lives cut off from meaningful people, and only connected with children, Korean astronaut mothers may define themselves solely as mothers and find it hard to be anything else, highlighting a sense of being unfulfilled. This is so powerful for Soyon that she regards

this period as a 'blackout' in her life. This emptiness is related to the women's feelings about missing the opportunities to explore age-related expectations with people meaningful to them.

> *"Because my husband is not here... well even if people wouldn't tell me off, I don't feel comfortable to put on make up when I go out. Even going out for eating with friends… well, it can make rumours". (Heyoung*)

The sense of being alone, and of having to be alone, is made more intense by acknowledging the risks attached to being out of the protection of men or the family frame. Fox (1977) has noted that women's vulnerability is socially constructed, so that they come to believe that they need protection and regulation. Thus, seeking regulation and protection becomes part of what it means to be a woman. It is shown in Heyoung's talk that she is aware of the fact that people tend to see married women away from their husbands as somehow incomplete and defective, with a high likelihood of behaving inappropriately. Whether such an understanding of unaccompanied women is true or not, it becomes, for these Korean astronaut mothers, an internal pressure that obstructs their socialising and activities. By putting herself in this position, Heyoung becomes uncomfortable in situations where she is considered as a woman before she is considered as a mother. Her focus on mothering makes these situations difficult for her. In the next extract, however, this situation of being alone is described as the reason for becoming more capable and independent.

> *"In Korea, if you buy furniture, people will deliver it and assemble it for you. However, here, they come with pieces and just leave the rest to you. Anyway you can't sit idle when your kids are watching you. You have to do everything..."(Mina*)

Most participants speak of doing for themselves what they regard as men's work, such as assembling furniture and looking after cars. However, the challenging situation of having to be independent was ultimately acknowledged, and accepted, as a necessary condition of good mothering in these particular astronaut parent situations. Here astronaut mothers take on fathering roles as part of their mothering role. Conceptualising loneliness and emptiness includes a loss of the usual context that they had previously taken for granted. New and adapted subjectivities draw on the powerful discourse of being a responsible mother. This enables Korean astronaut mothers to cope better with the challenges of their current context in New Zealand.

Handling the Dominance of the English Language

The English language is given as a main reason why participants chose to come to New Zealand, but the women also associated English language difficulties with the stress of living in New Zealand:

> *"When I talk to [New Zealand] parents at school, I can use only easy and always the same words to express myself. But I am more intelligent than that. While I talk in English I feel smaller and stupider". (Mina*)

Mina refers not only to the loss of a communication tool but also to the loss of a resource that constitutes her sense of dignity. This loss is constructed in opposition to the dominant power of English language, entailing experiences of shame or inferiority when English is not spoken fluently. The next excerpt shows how this particular foreign language gains a specific meaning in the Korean context.

> *"You know, English has always been a big one at school when I grew up in Korea. I studied up to university but I am still not good at English. But, to some of my friends who had lived overseas, it was so easy. I always envied them so much. I want my boy freed from such stress and to give him more opportunity to have a better quality of life".(Suna*)

This view of the English language has been built from school experiences in Korea. The power ascribed to speaking the English language well reflects beliefs about the power of Western countries. Although the participants do not directly acknowledge the influence of globalisation,

or the usefulness of the language to access political and economical power, it is reflected in their view of the English language. That is, when they say they are not confident in English, there are socially influenced interpretations attached to this. This relationship to the English language reflects the way that Korean astronaut mothers experience their lives in New Zealand, where they feel themselves to be inadequate in dealing with the dominant Western culture. These components work against *("I want my boy freed from the stress"*) the women's main reason for being in New Zealand, which is for their children's education.

> *"I don't go to the GP here in New Zealand. I can't see a GP by myself. I need to bring a good English speaker. I don't want to bring a man. Therefore, the person should be a woman, one that speaks good English, knows me well, is close to me and has time to go with me. There's no one like that. Therefore, it is not so easy to bring someone along to my appointment with GP". (Suna*)

Suna avoids the situation where she is treated as a medical subject, where she has to use English with a western professional. In such an interaction, a Korean astronaut mother has to manage herself in multiple power relations, created between the authority of the medical professional and her ownership of her private body, between a male doctor and a women client, and between the Western knowledge of woman's body and the ethnic knowledge of her body. Hardey (1998) noted that medical encounters are negotiations between doctors and patients, where both parties exert their resources and strategies to influence the interaction. In this case, Suna points out the unfairness of having to negotiate in an even more complex situation, with less resources without even English to help her:

> *"I tell myself that I need to be honest to my feelings even though cannot express it with English. Because... I find myself pretending to be a nice person, saying yes and smiling even when I don't feel like it... So I tell myself that it is ok, that English is not everything".(Suna*)
>
> *"I have realised that I need the life with my mother tongue. I think it [stress from trying to function in English] is enough for me now. We just need to talk a little bit of English". (Jiwon*)

In these excerpts, participants reinterpret the power of English language. Handling the pressure of the new language becomes more important than being able to speak it. Through this process, the negative view of the English language becomes softened, being seen as a life tool rather than as overpowering. Appreciation at having their own language is also reinforced. The meaning of using one's mother language in a foreign country is pointed out by Bhatia (2002); by speaking in the mother tongue, the speaker is "not just privileging" the mother tongue. Rather, it is a way of voicing one's position, the moods, emotions, histories and cultures that are associated with being a member of her or his ethnic group (Bhatia, 2002). The participants' talk about speaking in Korean is constructed in a similar way, where speaking in Korean holds their Korean identity in place in a western country.

Re-Interpreting Self to Bring Change

Living in New Zealand means these Korean astronaut mothers live outside previously valued role structures. In New Zealand, physically distanced from the rest of their families, they have the opportunity to enjoy their own spaces and explore different ways of being a mother and being a wife:

> *"We, women, are good here, once you got over the initial settlement period... [Because] no Jesa (제사, Confucianism rituals for close ancients), no family days, no husband's family... Those are big things once you are married". (Sunyoung*)

Family events such as Jesa, Chuseok (Korean Thanksgiving Day) and New Year are big days for Korean women, who do most of the work for these events. In particular, married women are expected to prioritise their husbands' family gatherings. When participants mention their relief of being free from the burden of being a daughter-in-law, it is an expression of freedom,

not only from the extra physical work during those days, but also from being in a position where they are so very constrained by expected roles:

> *"Now I have become so used to the life here. When he (her husband) visits us from Korea, it means more work for me, like cooking for him... (laugh) My husband said I have been changed. Of course, I have. Before, I thought that I could not have a good life without a husband". (Sunyoung)*

Sunyoung sees the burden in her previous life and comes to challenge her belief about domestic roles, freeing herself from the obligations and realising that life need not be bad without them. However, this freedom does not come without cost. Before reaching this level of comfortable understanding about their domestic obligations, Korean astronaut mothers must first experience confusion during the process of adjustment. Being away from their usual contexts, the Korean women lose the reinforcement of familiar concepts that had previously constructed their world. Nevertheless, this provides them with valuable chances to see their lives from a different perspective. It does not mean that they chose one over the other, such as selecting western notions over Korean traditional ones. Rather the meanings of being a wife are contingent on the situations and those women have agency in negotiating ways of being a good wife while being a good mother in a foreign country. The changes create new dynamics in their relationships with their husbands.

> *"Before, I was doing my best for my family by hiding myself…I think I am happy here and I have become brave… I have told him that if he loves me, he should accept the happiness that I feel now. It is good for both of us". (Soyon)*

In Soyon's talk, she positions herself as a person with growing confidence and satisfaction in life, brought about by negotiating life in New Zealand on her own and away from traditional role constraints. By seeing herself in this way, Soyon constructs her past roles, including her relationship with her husband, as negotiable rather than passively or invisibly accepted. She suggests a new way of building harmony, based on her newly interpreted and practiced subjectivities.

SUMMARY

From the analysis, I found that Korean astronaut mothers' experiences of being a mother, a Korean and a temporary resident in New Zealand substantially constitute their subjectivities. Their feelings about motherhood relate closely to their pursuit of education for their children. Being a temporary resident is partly constructed by comparison with people who are resident citizens. The isolation and loneliness are related with their sense of powerlessness, which is amplified by the discourse surrounding women who do not live with their husbands. Furthermore, through constructing the power of western culture, such as the dominance of English language and western professional knowledge, they find themselves in asymmetrical relationships with New Zealanders.

Initially this positioning of power relationships is disempowering and distressful to the women and is experienced as marginalising, isolating, and disabling. However, the disempowered position is not the whole picture of Korean Astronaut mothers' living in New Zealand. They also construct new subjectivities, ones that construct themselves as capable and independent in the new context. They reinterpret their understandings of being a Korean and a mother in response to new tasks and new relationships. Changes in mothers' perspectives are more apparent when they become aware of previous or current relationships that are distressing and disempowering. Being aware of these is painful. However, these changes also allowed the women to open up to opportunities for different, more flexible and more empowering construction of subjectivities. Changes included seeing Western knowledge and language as manageable, and being alone as an opportunity for exploring and testing their own potential. These mothers also came to experience the previously rigid relationships with their husbands' family as more flexible.

It is important to note that Korean astronaut mothers' subjectivities are associated with their complex social relations with men, with other Koreans residing in the host country as citizens and with the host society. These women construct their subjectivities as mothers and as a members of an ethnic group by managing complex power relationships within their given contexts. We can understand women's lives in astronaut families as social practices that are contingent on the social and cultural contexts in which they are located.

IMPLICATIONS

The findings of this study suggest that, as Murry and Campbell (2003) noted, researchers need to go further than defining individual traits in order to understand migrants' lives. As Crawford (2006) suggests, we should look at people's behaviour as social practice, managing subjectivities and renegotiating social and cultural constructs. The Korean women's subjectivities in this study are closely related with meanings of being a good mother and being a competent resident in New Zealand, and are constructed through relationships with men and with the host society. Adjustment of these women in the astronaut family, in particular, can be understood as a process of managing various power relationships located around discourses of citizenship, gender and ethnicity.

In addition, by recognising the dynamics within which they occur, we can effectively make suggestions that are specific to points of change and resistance. For service providers and policy makers, it would be important to bear in mind that mothers in the astronaut family deal with power relationships that are related to the use of dominant language, of gender, of their residence status and of ethnicity. Therefore, individual and organisational service providers could create better relationships with those women by attending to these sensitive issues. Also, individual professionals encountering migrant women could become more aware of the difficulties for these women in their dealings with English language and western people. These kinds of sensitive interventions could create and offer options for better adjustment for astronaut mothers and their families.

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POLICY INSTRUMENTS AND REPRODUCTIVE POWER: CHINESE IMMIGRANT WOMEN'S TRANSNATIONAL EXPERIENCES IN HUMAN REPRODUCTION

Hong Wang

ABSTRACT

In the past two decades, the number of Mainland Chinese in New Zealand has experienced a rapid growth. The growth is not only attributed to the increasing inflow of Chinese people from Mainland China but also to the changed reproductive behaviour among women in this group. However, we know little about the reason for the change through transnational movement and the way by which the pre-arrival experiences influence current reproductive behaviours. To examine the issue, this article uses a case combining policy analysis with interviews with two Chinese immigrant women who grew up under China's One-Child Policy and are living in New Zealand. By combining the 'top-down' with the 'bottom-up' approach, this article presents the historical process of making this policy and its policy instruments and explores by which way and to what extent these factors influence individual Chinese immigrant women's decision on and attitude to marriage, pregnancy, birth and access to relevant health services under different circumstances.

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INTRODUCTION

There are numerous studies from different disciplines relating to human reproductive practices. According to Darwinian perspectives on mating and parenting, human reproduction is a biological event in which the biological principles, such as evolution, the survival of the fittest and adaptation, are applied (Betzig, 1988). Since Malthus's theory, emphasising the availability of resources as a crucial factor for determining human reproductive behaviours, was initiated in his *Essay on the Principle of Population* in 1798, the biological process of population growth has been linked to questions of economic development and those of government and state policy (Adams & Sydie, 2001). Usually, the term 'government' is interpreted in relation to state apparatuses, class relations and the power relations of inequality and oppression (McNay, 1994). However, governmentality literature written by scholars, such as Foucault (1982), Dean (1999), Rose (1999), shows that the practices of government are not directly exerting political power, which forces individuals to obey the law; rather, it involves an intricate composition of means or tactics for producing knowledge and truth to regulate individuals and make them behave as desired. From this view, government becomes a practice of persistent pursuit of political rationalities and technologies of rule. However, O'Malley, Weir and Shearing criticise governmentality literature for seeing

government programmes as always coherent and systemic. According to them, it fails to understand politics as involving complex social relations, to identify differences and diversity in the implementation of programmes and to recognise the multiplicity of voices and discourses involved in the process of making and implementing a policy.

Among countries, although there are different policy intentions to shape the size of the population so as to respond to the need of economic development, governments share the assumption that they can directly influence individual fertility decisions by exerting power with policy instruments. China's One-Child Policy is one example. As the most populous country in the world, China enacted the One-Child Policy in the late 1970s with unprecedented discussions and official comments on the relationship between population growth and economic development embodied in the slogan of 'Realisation of Four Modernisations'. 'Four Modernisations', including the modernisation of science, industry, agriculture and defence, were believed to be a solution for rescuing the country from the edge of the economic collapse shortly after a political movement known as the Chinese Cultural Revolution. In turn, the action of controlling the quantity of population while improving its quality was regarded as the key to achieve the objective of modernisation. Under such circumstances, the One-Child policy sought to manage individual reproductive behaviours by introducing economic and welfare rewards for couples with only one child. It is expected to achieve the central government's objective of population control.

However, population manipulation through regulating the birth rate is far more complex than expected. In the past three decades or more, a wealth of literature presents diverse and complex situations at the local level. Short and Zhai (1998) examined the implementation of the One-Child Policy in eight provinces in China during the period from 1989 to 1993 and confirmed that there was no single One-Child Policy. Policy strength and incentives varied from place to place. Merli's and Smith's study shows that the acceptance of the One-Child Policy and its sanctioned family size is determined both by the degree of economic development and the enforcement of the policy (Merli & Smith, 2002). Furthermore, the transformation from a planned economy to a market-oriented economy provided a possibility for family planning actors (cadres) at the local level to negotiate with the up-levels in terms of the tensions between their responsibilities and available resources (Merli, Qian, & Smith, 2004). Some research shows that birth rates are affected by family financial situations. For example, Liu, Yamada and Yamada used an economic method to present a Chinese general fertility model and predicted 'U-shaped income effects on Chinese general fertility' in which both low and high per capita income families have relatively high general fertility rates (Liu, Yamada, & Yamada, 1996). Other research suggests that individuals with different resources and knowledge, such as the understanding of the policy and accessible contraceptive methods, will take different strategies to find potential opportunities to deal with the requirements of the One-Child Policy (Short, Ma, & Yu, 2000).

Both theoretical debates on the practice of government and empirical studies on the diverse effects of the One-Child Policy suggest that formation of power relations in the implementing process of the fertility policy, such as China's One-Child Policy, is socially interactive involving various human and non-human actors. The literature presenting empirical evidence at the local level focuses mainly on statistical analysis of the effects of the One-Child Policy on or the influences of institutionalised power in reproductive decisions from policy makers' perspectives rather than from the viewpoint of individuals women—the objects of the policy. Moreover, there is a dearth of literature on the effects of the policy on reproductive behaviours among some groups of Chinese women, such as Chinese immigrant women, who used to live under the One-Child Policy. According to the data provided by Statistics New Zealand in 2003, the average birth rate of women born in Mainland China and currently living in New Zealand was 1.99 per woman (which was slightly higher than the average birth rate of

1.95 per woman in New Zealand)[3]. This indicates that some women from this group tend to have at least more than one child and their reproductive behaviours have experienced significant change with their transnational movement. It seems to suggest 'reproductive emancipation' at the absence of the One-Child Policy and the irrelevance of this policy to these Chinese immigrant women's current reproductive behaviours in New Zealand.

However, individual women have different stories about making decisions on childbirth to adapt and respond to distinctive political and socio-economic environments. Despite transnational movement, their experiences in human reproduction in their home country are not clearly cut from their current behaviours and beliefs in childbirth in New Zealand. In this study, I will examine the process of formation of China's One-Child Policy and its policy instruments guided by relevant theories while using the transnational experiences of two Chinese immigrant women living in New Zealand in human reproduction, to illustrate how these factors can shape and reshape their reproductive behaviours. I will explore the following questions to evaluate the effectiveness of policy intervention and the degree of effects of China's One-Child Policy on some Chinese immigrant women's reproductive behaviours: Why have Chinese immigrant women living in New Zealand changed their reproductive behaviours? How and why do they make different decisions in different contexts? How and to what extent do these policy factors influence individual Chinese immigrant woman's decision on and attitude to marriage, pregnancy, birth and access to relevant health services under different circumstances?

THEORIES AND METHODS

Since this study explores issues related to fertility policy and individual's transnational experiences in human reproduction, it was designed as a case study combining a policy analysis of the formation and implementation of China's One-Child Policy and interviews with two Chinese immigrant women. From the perspective of policy makers, the integrated analysis of the documents and literature of the One-Child Policy and interview transcripts provided insights into the way by which the One-Child Policy works and gives the effects on individual women's human reproductive practices. Foucault's ideas on governmentality were deployed as one of theoretical frameworks to guide analyses of the power relations formed in the implementation process of the One-child Policy. Foucault elaborates on the concept of 'governmentality' through undertaking a genealogical analysis on the emergence of the art of government in the mid-sixteenth century. According to him, government is "a right manner of disposing things so as to lead not to the form of the common good … but to an end which is 'convenient' for each of the things that are to be governed" (Foucault, 1979 (1991), p.95).

Drawn from Foucault's work on governmentality, Dean (1999) analyses the practices of government and holds that modern forms of authority are characterised by a triangular power relation: sovereignty-discipline-government. Governmentality combines the three types of power to achieve its 'convenient ends'. Sovereign power is exerted through juridical systems and executive institutions to guarantee obedience to the law; disciplining power provides opportunities for the state to regulate individuals and their bodies, thoughts and capacities through bureaucratic and administrative apparatuses; and government power is mainly referred to as exerting political power with the economic means. These forms of power utilise the capacities of the individual as resources to "be forced, to be used, and to be optimised" for ends chosen by the state (Dean, 1999, p.22). By exerting these powers, individuals are constructed as 'governable' free persons.

[3] According to Statistics New Zealand, the total fertility rate in a particular year is the average number of births a woman would have during her reproductive life if she were exposed to the fertility rates characteristic of various childbearing age groups in that year.

Foucault illustrates the linkage between the government and its population with a 'shepherd-flock game' and uses the ideas of pastoral power and bio-politics to explain governments' development of expertise about their population and their concerns about the welfare of their citizens (McNay, 1994). According to Foucault, bio-politics is "the endeavour, begun in the eighteenth century, to rationalize problems presented to governmental practice by the phenomena characteristic of a group of living human beings constituted as a population: health, sanitation, birth rate, longevity, race" (Foucault in Dean, 1999, p.99). He also maintained that bio-politics attempts to govern a population through regulating its life conditions such as health, birth, education and life environments. In Foucault's work on Police, "the health of the population becomes an asset, something that must be cultivated and maintained for the benefit of the state and the happiness of the people" (Sigley, 1997, p.434).

The concepts from governmentality show that government is regarded as a decentralised process in which "power is decomposed into political rationalities, governmental programmes, technologies and techniques of government" (Foucault, 1979 (1991); Foucault, 1982). However, O'Malley's, Weir's and Shearing's (1997) critiques on the governmentality literature suggest that we need to examine power relations in an alternative model to understand the role of different actors at the local settings. The Actor-Network Theory (ANT) deploys a 'translation' model to explicate power relations to explore how individuals modify, displace and translate power according to their own interests and resources. A translation model of power relations is understood as "one of the ways of holding society together and enrolling enough people to constitute power" (Latour, 1986). From this viewpoint, society is constructed through enrolling people and defining their roles with multilateral negotiations. In relation to issues of human reproduction, this model indicates that individuals are no longer passive recipients of fertility policies but active participants who translate these policies and thus, shape their outcomes. The perspective drawn from ANT will guide the interpretation of the transnational experiences of the two interview participants in human reproduction. Based on the translation model of power, I focused on the analysis of the Chinese women's reproductive experiences under China's One-Child Policy, while using their experiences in New Zealand as a 'counterpoint', deepening understanding of how the two Chinese women adapted to the different living conditions.

The two participants were selected from Chinese women immigrants living in Christchurch, New Zealand, who are currently in their thirties and forties, originated from different cities and provinces of China and have had born one or more children in China and New Zealand. These criteria determined that the two Chinese women selected had witnessed first-hand, the propaganda styles of and received relevant information on China's One-Child Policy at different stages of their lives and had personal childbearing experiences in both Chinese and New Zealand policy contexts. According to these criteria and considering the accessibility of the Chinese women immigrants, I contacted different Chinese immigrant women whom I know and who are living in the Christchurch Chinese community and selected two of them, with their consent, as participants in the research. Interview questions were developed based on the following topics. They include the women's educational backgrounds and occupations; their childbearing and related experiences in China; their childbearing decisions in New Zealand; and their views on marriage, pregnancy, birth and the role of women both in the family and in society.

FINDINGS AND ANALYSES

China's One-Child Policy: Population Problem and Discourse Formation

The genealogical process of making China's One-Child Policy illustrates how the Chinese government has identified population problems and formed the discourses for population control. According to written records, China's population was about 13 million in the 21st and 20th century BC when the slave society began. In the following 1300 years, the population

never exceeded 20 million. In the 2700-year period of feudal society from about 790 BC to 1910 AD, the population dynamics were characterised by high birth rate, high death rate and a low rate of increase. China's population and its dynamics have been used both by Thomas Malthus (an English scholar) and Dr Sun Yixian (the founder of the Chinese Republic) to illustrate different dimensions of population policy. In Malthus's *An Essay on the Principle of Population*, he explained that the enormous population of China was the result of the "natural tendency of population to increase" and famine, war and epidemics operated as positive checks to population (Tien, 1973, p.5). He used China's population as empirical evidence to illustrate the relationship between poverty and overpopulation. In contrast, Dr. Sun viewed the population problem in China as a crisis of disappearance of the Chinese race as there was no apparent population increase between 1840 and 1925. These two ways of problemization of population have affected the Chinese government's stance on population policy since 1949.

The founding of the People's Republic of China in 1949 started the history of modern Chinese population policy. The development process of the People's Republic population policy is divided into four phases: inception, orientation, direction and implementation of policies related to the population 'problem' (Tien, 1973; 1980; 1991). In the process, the population 'problem' was identified and discourses for population control were formed and shifted with changes in leaders' remarks, academic reasoning and the political power struggle. In the years prior to 1971, the struggle between the Left and the Right in the Communist Party caused the discourse on the population issue to oscillate between the view that a rapid population increase would not harm and may even enhance economic growth and the view that population increase undermined economic growth. After 1971, the logic of economic development supported by the Rightists became the dominant ideology. In 1971, the requirements of population control were illustrated by the slogan '*wan, xi, shao*', by which the government encouraged 'late' marriage (i.e. 25 for females and 26 for males), few children per family and long intervals between childbearing periods. In the 1970s, the aim of "two children per family" was believed to be the most suitable way to achieve the government's target. Moreover, academic reasoning also supported this ideal. *Population Theory* (*Renkou lilun)* published in December 1977 systematically reviewed the need for controlling population in China while criticising Malthus's principle of population and justified the importance of recognition of a close relationship between the state and the science of demography. This academic reasoning was regarded as crucial in shaping and legitimising the consequent population policies since it could be argued that policies for population control were based on 'socialist science' rather than 'bourgeois' ideology. In particular, statistical science and the logic of the planned economy were used to justify the state's intervention in individual reproductive behaviours enabling the two streams of discourse to shift from the view that 'a large population is a good thing' to 'control population size and enhance population quality' (Tien, 1980).

In 1978, the new Constitution of the People's Republic of China reads, "The state advocates and encourages family planning" (Tien, 1980, p.5). In 1980, the State Council's Planned Birth Staff Office, which was established in the mid 1960s, put forward the "one child per family" policy at the Third Session of the Fifth National People's Congress. In 1981, the office was reconstituted as the State Family Planning Commission to take charge of the implementation of family planning policy. In the second half of the 1980s, there was a temporary relaxation of population control due to the childbearing traditions of minority nationalities and the difficulties of peasants who faced hardship because of lack of sons. However, the fourth national census in 1990 showed that there were 1133.68 million people living in China (Tien, 1991). This figure reinforced the government's intention to intensify controls on population growth. However, the discourses of officials seemed to have shifted to some degree. The population problem in China was starting to be linked with global debates on population policies, which emphasised sustainable development and poverty alleviation. Following the International Conference on Population and Development held in Cairo in 1994 and the Fourth World Conference on Women organized in Beijing in 1995, the Chinese government started to

promote a "human-centred population and family planning programme" focusing on reproductive health and services (Attane, 2002).

Implementation of the One-Child Policy

Population Education and Identity Formation

Political reasoning and academic debates justified the decision of the Chinese government to limit family size. However, before starting to implement its family planning policy nationally, the Chinese government had to put in huge efforts to convince those they governed that a large population was a problem and population control was the 'correct' choice. The focus of this effort was directed not only at women of childbearing age but also at the population as a whole with the mass media, exhibits, posters, booklets and textbooks (Fraser & Caldwell, 1987). The effectiveness of these efforts was reflected in my interviews. The two Chinese women were born in the late 1960s and each bore their first child in the mid 1990s. They witnessed first-hand, the propaganda styles and received relevant information at different stages of their lives. Both of the Chinese women mentioned their experiences in gaining knowledge of the relationship between economic development and population growth through public media such as newspapers and TV, while one of the Chinese women mentioned the high school textbook on population knowledge.

In determining their marriage and childbearing choices under the One-Child Policy, the two Chinese women constructed their identities differently from others. For example, one interviewee said:

> *"My husband and I received higher education and did not care about having a son or daughter. I guess that my parents-in-law would want a son although they didn't say it explicitly…Sometimes, I felt upset while thinking that I had to deal with these 'feudalist brains'".* (Interview 2)

The Chinese feudalist society with a nearly three-thousand-year history generated widely accepted beliefs on gender roles in marriage and childbearing. Women's major task was abundant childbearing, particularly sons, to fulfil filial pieties. According to the Chinese government, feudal beliefs were not only barriers for the implementation of the One-Child Policy, but also constraints the development of women as independent individuals. One of the major tasks of the government was to struggle against these 'feudal' ideas. The government's discourses focused on empowering and emancipating women through encouraging them to become constructers of a socialist country rather than housewives.

In urban areas, the government opened up most occupations to women, guaranteed equal pay for the same job and provided rewards for individual women based on their personal achievements in education and work. This strategy of institutionalising new gender roles in urban society attempted to re-orientate individuals', especially women's energy, to issues such as pursuing education and career development to become intellectual women equipped with scientific knowledge. The two interviews I conducted show that tertiary education was a crucial factor contributing to their choices of the time of marriage and childbearing. This, in turn, would automatically be consistent with the requirements of 'late marriage and late birth'. By this means, identity construction of the two Chinese women served as a significant way of subjectification and self-government to make individuals governable.

Policies, Plans and Institutional Arrangements: Decomposition of Power

Since the 1978 Constitution of the People's Republic of China defined family planning as a basic strategy for the country, the Chinese government has started to exert the triangular sovereignty-discipline-management power through a variety of policies, plans and institutional arrangements in order to meet its goal of population control. Rules set out in various legal documents from the Constitution at the national level to the regulations in each work unit allowed the Chinese government to exercise sovereign power to force its citizens to obey laws and policies related to population control. For example, the Marriage Law had set the age for

'late marriage' and some work units requested their staff to apply for marriage when they reach that age. At the same time, a number of steps were set out to guarantee that population plans were integrated into national economic development plans (Wang, 1991a; 1991b). These steps allowed the Chinese government to exert governmental power to use and optimise its population as a resource to meet economic goals.

Institutional arrangements were made for the formation and implementation of the Family Planning Programme and guaranteed that the state government's intentions in family planning were linked directly to individual reproductive behaviours. For example, according to the State Council Document No. 110 (1981), the State Planning Commission (SPC) and the State Family Planning Commission (SFPC) had a joint responsibility for population planning. Below the state level, the subordinated institutions of the SPC and the SFPC worked as two parallel systems at provincial, municipal and county levels to guarantee the integration of economic and population plans (Wang, 1991a). This institutional arrangement shows that economic and population plans had been integrated into the government's administrative framework and incorporated into the routine work of these departments.

Moreover, work units, as one of the major implementers of the policy, became a site in the struggle for control over reproductive power. In urban China, the system of high employment and low wages allowed most of the urban population to work in work units (*Danwei*). During the mid 1990s, work units like micro societies provided most urban people with wages and various benefits including housing, health care and retirement pensions. Meanwhile, it was a means by which the government could manage individual behaviours. All official documents, which contained the dictates of the government including the requirements of the One-Child Policy, were distributed to work units through the government's administrative system. Following this, the results of the implementation of these policies were reported to the higher level of the administrative system as the achievements of work units, the lowest level of government organisations. The interviews in the study showed the role of the work unit in regulating the two Chinese women's behaviours in marriage and childbearing. To register for marriage, both their fiancées and they had to apply for a certificate from their respective work units. This enabled each work unit to maintain control over an individual's marriage age and ensure that it met the requirements of a higher level of the family planning administrative system.

Contraceptive Technology and Eugenics: The Medicalisation of the One-Child Policy

Since 1980, the major objective of the One-Child Policy has been to 'control the quantity of the population and improve the quality of the population'. To respond to the political call, contraceptive technology and eugenic knowledge became extremely important and were actively disseminated. To control the quantity of the population, contraceptive methods such as oral contraception, intrauterine devices (IUDs), sterilisation, diaphragms, condoms and induced abortion were legalised and available from the 1950s. Generally, the government's attitude to the introduction and application of contraceptive methods was relatively cautious. Each couple were allowed to have the opportunity to choose freely among different contraceptive methods. However, this freedom, supported by medical technology, was restricted by the requirement of having no more than one child (Hou, 1981; Wang, 1991a).

The Chinese government placed a high level of emphasis on eugenic knowledge which was believed as knowledge for bearing an intelligent child based on scientific evidence. The two interviews show that eugenic ideas were heavily influenced by government propaganda. The government disseminated eugenic knowledge in various ways, such as through both the public media and training courses provided for youth applying for marriage. Eugenic knowledge justified the 'scientific' basis for 'late marriage, late birth' and thus, the time for marriage and childbearing became one of major concern for the two women. During their pregnancies, they voluntarily had regular checkups in the hospital. One interviewee said:

> *"Although these prenatal physical examinations were not compulsory, I was keen to have them done on time. One child was so precious for a family, so I needed to make sure that everything was going on the right track".* (Interview 1)

Moreover, the interviews showed that 'eugenic superstitions' started to permeate into the society as norms. One of the interviewed women, who was working as a computer software engineer, described her experiences:

> *"Most people in China believe that it is not good for a pregnant woman to stay in front of a computer for a long time due to radiation …at the beginning, I worried a lot. I read lots of books on the issue. It seemed that it was not as serious as imagined, so I didn't apply for a transfer. Sometimes, other women who had childbearing experiences even suggested not watching too much TV … I think that it is because the One-Child Policy has made people too nervous. When I were pregnant in New Zealand and consulted my family doctor, she seemed to be strange to these ideas. Pregnant women here feel more relax than us".* (Interview 2)

The replacement of the relationship of state/family with that of doctor/pregnant woman allowed the government to exert its bio-power through technological means rather than political dictates. Eugenic knowledge also addressed individual women's concerns on childbearing and facilitated their self-regulation. It decreed that pregnant women and their families should follow the norms of eugenics if they wanted to bear intelligent singletons. For both parties, it was an ideal solution to solve their different problems but eventually, resulted in the same outcome. Therefore, the triangular relationship between the One-Child Policy, eugenics and the preciousness of the one child in each family was one of persistent themes running through the two interviews and guided the two women's various decisions on issues such as marriage and childbearing.

Chinese Women's World and Strategies

Constructing a World for Marriage and Childbearing

The efforts of the Chinese government on population control seem to suggest that individuals' lives are completely enmeshed in a power network which shares all of their choices in childbearing. However, the process from getting married to bearing a child shows how, under the One-Child Policy, the Chinese woman's world was gradually constructed through enrolling various actors and allocating them different roles. Her parents initiated the idea of getting married while her friends played a persuasive role although they did not comment on it specifically. One Chinese woman said:

> *"As a girl, if I did not get married, it would be a crazy idea…When I became old, I would have less and less choices. Eventually, I have to live with my parents forever. For parents, they would feel shame although they did not say anything. In fact, the pressure coming from my parents was heavier than that from my own concerns. I did not mind getting married late. However, they would think that I was abnormal".* (Interview 2)

Similarly, the childbearing process further embedded the women's life in official, familial and peer relationships. Moreover, these actors placed different expectations on the Chinese women in regards to the issues of marriage and childbearing. Family members and friends usually made a judgment on marriage and childbearing according to Chinese tradition and popular culture while various agencies tended to make sure that each case was consistent with the regulations related to the One-Child Policy. For example, one interviewee comments on her experiences in applying for a *Hukou* for her newly born baby:

> *"To get Hukou (Household Register Book), I went to the Family Planning Office in my work unit to get a certificate called the One Child Glory Certificate. Then, I had to go to The Street Committee in my residential area and the police station. I had never been to those agencies such as The Street Committee. As I understood, childbearing*

> *was a private issue but at that moment, I had to deal with those public agencies".* (Interview 2)

The remark illustrated how pregnancy and childbearing were interwoven the relationships between the private and the public spheres of the woman's life. The events of marriage and childbearing were potentially full of contention under the One-Child Policy and thus, the Chinese women had to deal strategically with various relationships to make their own ways in that arena.

Strategically Dealing With Popular Culture and the Requirements of the One-Child Policy
In the event, various actors attempted to exert their power to influence the final decision. Their distinctive expectations on the Chinese women's marriage and childbearing made the process of decision-making full of contentions. The interviews indicate that nonofficial norms and the requirements of the One-Child Policy were two major forces shaping the Chinese women's behaviours. As a major actor of the event, the two Chinese women were concerned about the time when they should get married and bear their single child. In particular, the two Chinese women I interviewed had a goal of getting married after they had received tertiary education and gained good jobs. However, their goals had to be modified when they considered the expectations of their parents and friends. Traditionally, the Chinese believe that marriage and childbearing are a natural process. Girls in particular, should get married and bear children when they reach a certain age. However, the appropriate age for marriage and childbearing has changed over time. In pre-revolutionary China, girls typically got married at eighteen and bore their first child in their early twenties. After 1949, the enactment of the Marriage Law and women's increasing participation in 'socialist construction' had gradually postponed the acceptable age for marriage and childbearing for girls. In contemporary urban China, girls are expected to get married and bear a child before they are thirty because it is considered a crucial factor leading to a 'normal' life. Thus, the two interviewees' goal for marriage and childbearing was translated to 'getting married after they had received tertiary education and got a good job but before they became too old'.

Meanwhile, the two Chinese women had to consider the requirements of the One-Child Policy. According to the policy, the age for 'late marriage' was 25 for Women and 26 for men, so they had to reach this age before registering for marriage in order to be eligible for getting an apartment from their work units. All these considerations suggest that these Chinese women's decisions on the age for marriage and childbearing were not only a manifestation of a 'personal' goal but also of translated ones. In this case, when they made the final decision, they had to make sure that "I am normal, I obey the law and I am a good staff member". In other words, the two interviewees' decisions on getting married after 25 years old and bearing a child before 30 years old was a negotiated result combining her personal goals, the expectations according to popular culture represented by her family and friends, the requirements of the One-Child Policy, the rules for the availability of housing and other resources. In this way, the Chinese woman needed to ensure that her decision was acceptable to everyone else as well as herself.

Dealing With Uncertainty and Adapting to Different Policy Environments
Uncertainty about the future of families with singletons could be identified as one of the major effects of the One-Child Policy on ordinary people's lives although neither of the Chinese women I interviewed mentioned the word directly. The Policy had made the single child in each family so precious that all events around bearing one child became enormously sensitive and uncertain. The two Chinese women in the interviews expressed their expectations of their single child's growth in a Chinese context. One woman said:

> *"If we still lived in China, we would have one child. I would definitely be keen on his growth. At least, I would force him to work hard on his study. I could not decide his*

future, but I should regulate his present. He must go to university even if we spend lots of money on it".

While the other woman expressed her opinion on this issue in this way:

"If I lived in China now, I would be very cautious to my child's growth. I would try my best to make sure that everything he got was the best. I would have only one child, so I could just accept his success rather than his failure. Otherwise, it was hopeless".

Perhaps surprisingly, the two Chinese women, who used to live in different areas in China, had entirely similar attitudes to their single child's growth. Both of them bound up their own and their husband's futures with that of the single child. The only hope for them was to raise a quality singleton to ensure the future of the whole family. Tertiary education and a prestigious and rewarding job turned out to be a solution for their single child and themselves.

For both these Chinese women, moving to New Zealand turned out to be an alternative solution to dealing with the uncertainty of the future. They started to rethink childbearing in the New Zealand context. One interviewee said:

"We moved here in 1995. At the beginning, we didn't consider having additional children since both my husband and I were studying. Then, we decided to have the second child when my husband's clinic opened and the life became stable. We thought that our son would feel lonely without siblings playing with him. The third child came without a plan … another reason for having more children was that we could have additional children without worrying about losing jobs in New Zealand ... For me, it is a supplement. Although my former colleagues living in China might be richer than us now, they have no an opportunity to have additional children. For us, we lost lots due to moving here, so bearing additional children turns out to be a kind of supplement…"(Interview 1)

Another interviewee said:

"Bearing more children means that mothers have to sacrifice themselves and give up their personal interests and development …We have no specific expectation on them as long as they can grow up with a healthy body and mind … In the future, if they were filial and wanted to live with us, we would be happy. If they were reluctant to live with old people, we would not force them to live with us. As you know, children growing up here would accept more Western value than the Chinese tradition. My husband and I prepare to accept these changes since we have decided to live here". (Interview 2)

Although both of them said that moving to New Zealand meant a degree of sacrifice in terms of their own career and personal development, they were full of confidence about their children's future in New Zealand. Compared with their expectations on their single child's success in the Chinese context, they hoped that their children could live in a relaxed environment, enjoy their childhood and grow up with a healthy mind and body.

DISCUSSION AND CONCLUSION

Population manipulation through regulating birth rate is one of the most difficult and complicated interventions for governments. The introduction of the One-Child Policy was a process in which a new definition of the population 'problem' gradually emerged and policy discourses were strategically formed. The government's efforts in making and implementing the One-Child Policy are the interactive and intertwining processes of governing and self-governing. Population education allowed the government to convince its people that the big population is a problem and then, to justify its actions in regulating fertility-related events. At the same time, individual women took up new identities as intellectuals while pursuing

tertiary education and personal career development to re-create themselves as governable subjects. Hierarchically institutional arrangements constructed a power network to guarantee that the private sphere was under the public gaze on the issue of reproduction while work unit participation led to Chinese women's self-governing in order to access available resources for their lives. Eugenics and contraceptive technology provided an alternative for the government to manage its population while, at the same time, offering a solution for individual women to address their own concerns on bearing intelligent singletons and dealing with the uncertainty faced by their families.

Although all the policy instruments deployed by the Chinese government seemed to have an apparent effect in limiting population in the past decades, some literature suggests that there is no straightforward relationship between the deployment of policy instruments and the regulation of population control. The two Chinese women's transnational experiences in childbearing also show that they were not passive recipients of the One-Child Policy enacting the dictates of a power hierarchy. Instead, they constructed their own responses to their world through the processes of marriage and childbearing. Their decisions on marriage and childbearing involved 'translation' and were achieved by their negotiations with the institutional pressures of the state and the non-institutional pressures of family relations and popular culture. Living in the power arena, the Chinese women strategically found their own ways to adapt to the One-Child Policy and deal with the uncertainties brought about by its implementation.

Bearing additional children in New Zealand, shows how the two Chinese women responded to different population policies and adapted to different socio-economic and political contexts. However, they did not bear as many children as they could in New Zealand. For them, bearing additional children was not merely in response to liberation from the policy but involved their own considerations. Thus, neither of the population policies directly determined the two Chinese women's behaviours in marriage and childbearing but involved them in developing flexible strategies to adapt to different living conditions. Generally, the study shows not only how state policy can reshape decisions about bearing children, but also how individual women pursue their own logics in adapting to and negotiating with different socio-economic and political conditions to find their own way. It suggests that, in the human reproduction domain, it can never be expected that policies always guarantee a powerful state and directly lead to the expected results. As one of the Chinese women in the interviews said, "I bore two additional children in New Zealand but it is a result rather than a cause." The remark seems to echo the idea that power is not cause but effect. Indeed, power has never been stored up in any agency's hand to cause changes but rather as an effect generated by a dynamic and interactive process in which various actors enrol in and translate the power according to their own interests and resources.

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POST-CHANGE LIFE OF PROBLEM GAMBLERS AMONG CHINESE INTERNATIONAL STUDENTS

Wendy Wen Li

ABSTRACT

This paper explores post-change life of problem gambling among Chinese international students. Initial and follow-up interviews were conducted with nine male and three female students between May and September in 2006. The methods of data collection and analysis in this study were informed by a narrative approach. Findings suggest that successful re-rooting is a characteristic of most participants' post-change experiences. Also, engaging in spirituality, study and work helped boost a sense of success and meaningfulness to life to Chinese international students.

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BACKGROUND

During the past decade the number of international students attending New Zealand educational institutions has boosted. The vast majority of these students are from the People's Republic of China (Berno & Ward, 2003). The size and economic importance of this group have attracted the attention of researchers and the public. Public discourse in relation to the arrival of Chinese students to some extent has been less than supportive, often painting a hostile response from other groups in New Zealand. In particular, media reports frequently refer to Chinese international students (CIS) having gambling problems (Phoenix TV, 2003).

Research has too suggested that CIS are disproportionately affected by problem gambling. Goodyear-Smith, Arroll and Tse (2004) suggested that significantly more Asian students (87.2 per cent of the respondents in the study was of Chinese nationality) admitted to sometimes feeling unhappy or worried after a gambling session. They reported highly significant increased positive responses in relation to wanting to reduce their gambling. Thomas and Thomas (2006) also argued that a significantly greater proportion of CIS were at risk than non-Chinese. The existing literature with respect to CIS' gambling mainly focuses on gambling participation, gambling expenditure, and their risk of becoming problem gamblers (Goodyear-Smith, Arroll and Tse, 2004; Thomas and Thomas, 2006; Tse et al., 2005; Tse, Wong, Kwok, & Li, 2004; Zheng, 2006). However, the activities in which problem gamblers are involved after they stop or reduce gambling warrants research. When exploring problem gamblers' change processes, for example, it is important to ask what alternative activities can take the place of their gambling activities after they change their gambling behaviour. This study tries to fill this research gap exploring post-change activities of problem gamblers among CIS. It draws on the findings of a qualitative study of *Understanding Chinese International Students'*

Gambling Experiences in New Zealand, a research project aiming to investigate gambling experiences among CIS in New Zealand. It should be noted that this project was exploratory and was not intended to be a representative study.

METHODS

Participants were recruited using a snowball sampling technique. Potential informants were approached through Chinese communities, church groups, tertiary institutions and personal contacts who provided referrals. The following criteria were used to recruit of research participants: international students from the People's Republic of China, who had gambled at least once during the period of their stay in New Zealand and who were over 18 years of age.

Participants

There were nine male and three female participants aged between 20 and 41 years of age. Five participants were studying in universities, five participants in polytechnics, and one participant was in a private tertiary educational institution as an international student. The twelfth was a university student in the first interview but had become a visitor visa holder by the time the follow-up interview was carried out. He had lost his student visa because he failed to pay tuition fees which were lost through gambling. Participants' length of residence in New Zealand ranged from three to seven years. Among the twelve participants, eight participants reported they had gambling problems. These problems included physical health problems, mental health problems, financial hardship which resulted in some participants borrowing money from loan sharks, failing in study and/or not being eligible for a student visa.

Procedure

The initial interview was conducted in May 2006. At the beginning of the interview, confidentiality was affirmed, and permission to record the interview was sought by asking the participants to sign a consent form. To ensure anonymity participants agreed to the use of pseudonyms. The semi-structured interview schedule started with participants' personal data, and then briefly touched on their study experiences and leisure time activities in New Zealand, followed by topics relating to gambling. The topics included gambling experiences in China, family history of gambling, initiation to gambling in New Zealand, continued gambling experiences in New Zealand, and benefits and impacts of gambling. A follow-up interview was conducted in September 2006. The follow-up interview included some standard questions such as help-seeking experiences and alternative activities which replace gambling, which were put to each participant, and some questions developed specifically for each individual participant in the wake of a preliminary analysis of the initial interviews. These interviews lasted approximately one and a half hours each and were conducted in Chinese.

Analysis

Transcribing was the fundamental step towards data analysis. All interviews were transcribed in Chinese and translated into English for analysis. Data analysis was processed in English.

The method of analysis used in this research was narrative analysis. Categorical content analysis was employed (Lieblich, Tuval-Mashiach, & Zilber, 1998). First, All relevant sections of a text were marked and assembled to form a new subtext file titled "post-change life". Second, content categories were defined that emerged from the subtext were those of successful re-rooting, engagement in spirituality, and study and work. Third, the material was sorted into the categories. At this stage, separate sentences or excerpts were assigned to relevant categories. While some excerpts were all from a single story, categories also included extracts by several different individuals. Themes would be drawn from the participants' stories particularly focusing on negative consequences of gambling related harm as well as how they were able to stop gambling to reach a "post-change phase".

RESULTS

At the beginning of post-change, life is very challenging because participants battle against an urge to gamble again. Keith's psychological struggle against gambling greatly impacted on his life, his study, and his mood.

> *"I went back to school after stopping gambling. At the beginning I recalled what happened in the casino a lot. I still felt very thrilled and nervous every time I thought about gambling, just like I was still in the casino". (Keith)*

Following initial psychological struggles against gambling, participants were gradually able to engage in new activities that were incompatible with gambling, such as spirituality, and study and work that assisted them to re-root in the host country.

Successful Re-rooting

Successful re-rooting in New Zealand was of significance in participants' post-change lives. The World Health Organisation has identified uprooting as a common factor in a number of psychological high-risk situations, such as migration, urbanisation, resettlement and rapid social change (World Health Organization, 1979). In the case of CIS, when they move to New Zealand they are separated from their familiar social, cultural and environmental support systems. This process is often referred to as uprooting. A tree which is rootless, or whose roots are insecure or poorly nourished, is unhealthy, and its fruit will not grow properly (Raeburn & Herd, 2004). In this context, gambling may be used as a way to handle stresses caused by uprooting. When CIS are able to re-root their social networks and build new social identities in New Zealand they may no longer need to rely on gambling as a means to escape from the difficulties they face in a new culture. David identified that, for example, establishing supportive connections with the communities as an important feature in his post-change life.

> *"At the beginning of living in New Zealand I did not have a sense of belonging. I was living like a rootless tree in a desert. Gambling then helped me to release [my stresses and frustration]…After I became involved in a church, I gradually understood the new society better...I felt that I was a member of this society. I feel that my tree is re-rooting and re-growing". (David)*

Engagement in Spirituality

Although a church is not the only place for CIS to build strong connections with the community, spirituality has played an important role in the process of change. In recent years, spirituality has received an increasing amount of attention in social sciences, particularly in regard to the role that spirituality can play in moderating mental health problems (Piedmont, 2004). Findings from this study show that spirituality has helped some participants stop gambling and find meanings in life.

> *"Spirituality helps me to understand why I exist, and what is the meaning and purpose of life…Gradually, I stayed away from bad influences, such as gambling". (David)*

David's extract reveals that spirituality offered him an alternative worldview which encouraged him to think about the meaning of life. He finally realised that there was something more important and positive to do in life than gambling.

Study and Work

Study and work are important aspects of CIS' post-change life too. As time passes, many participants have overcome the study difficulties they experienced when they first arrived in New Zealand and they have adapted to learning styles more appropriate to the educational system here. When they start to gain a sense of success with their studies they may no longer feel the need to escape from their study difficulties by gambling. John, whose gambling caused his failure of two papers in the first semester of his first year at university, made a

decision to stop gambling and put more effort into his studies. Study occupied John's after school hours, while good grades provided him with a sense of success. He now knows study is an important thing he can do to replace gambling:

"Studying hard brings me good marks and a sense of success. … I enrolled in an extra English course. …I go to the university for my bachelor course during the day, and go to an English class in the evening. I do my assignments after the evening class. I no longer have time to gamble". (John)

Work also makes some participants appreciate that earning money is harder than they used to think it was when they lived on money sent by their parents. With this realisation they learn to value what they earn, and prefer to save money rather than losing their wages in the casino:

"Now I earn money by working hard and saving as much as I can. …I work during the day after school and sometimes I watch movies at night. My life is so simply and beautiful. …I do not want to go back to the hell I was living when I was a gambler". (Jack)

Working has helped Jack understand the meaning of life and has made him think about what he expects his life to be in the future. Jack cherishes what he gains by his hard work, not only materially but also psychologically. He now values the simple life he owns. In this case Jack's gambling experience was part of his growing up process in New Zealand, although the price he paid was costly and painful.

DISCUSSION

It is important to point out that post-change life is not a static stage. At the beginning most problem gamblers have to struggle against an urge to re-gamble. They gradually become more adjusted to their post-change life by engaging in alternative activities. There appears to be three main activities in which participants are involved in their post-gambling life: successful re-rooting, engagement in spirituality, and study and work. Regardless of what activities the participants involved in their post-change life, the activities help them understand there is something more important than gambling. The activities assist them to reconstruct the meaning of life. Based on the findings, three key areas where further discussion would be beneficial for problem gamblers to maintain post-change life are presented as follows. Limitations of this research are also discussed.

Supporting CIS to Successfully Re-root

There is a need to support successful re-rooting of CIS in a new culture. With successful re-rooting, CIS can retain their heritage identity while taking on the host society's culture and values. Research suggests that building relationships, both within and outside CIS' own ethnic communities, is essential in the re-rooting process (Ho, Cheung, Bedford, & Leung, 2000). Support from host society is therefore as important as that from CIS' own community for their re-rooting. Host society should not take it for granted that CIS can successfully re-root themselves once they are in the country. For many CIS, it might be the first time that they have left their own families. If the host society's attitudes toward CIS are unwelcoming or even hostile, CIS may feel isolated and excluded. Gambling is sometimes used as an avoidance-oriented strategy to escape re-rooting stress. Within this context, promoting welcoming attitudes towards CIS in host society could be a means to support CIS to re-root in a new environment. More effort by the host society is thus required to support CIS to successfully re-root in larger society.

Enhancing CIS' Spiritual Engagement

Spirituality is concerned with existential and transcendent aspects of life that contribute to a sense of meaning and purpose, coherence and connectedness to others (Spaniol, 2001). It may include belief in God or a higher power and a religious or other set of values to guide relationships with other people and live one's life more generally. Tse and colleagues (2005)

maintained that spirituality may has special healing powers, and the notion of "the higher being" could help individuals stop addictive behaviours and find meanings of life. Religious beliefs give people strengths to recover from problem gambling, and the associated social support is helpful to rebuild the family, the trust and promote a sense of forgiveness. The present results corroborate the literature. Churches could act as support organisations to help problem gamblers change their gambling behaviour and maintain the change. Tse and colleagues also asserted that the impact of spirituality on gambling remains an under-researched topic. Research on this topic is thus needed.

Assisting CIS to Address Study Difficulties and Encouraging Them to Seek Part-Time Jobs

Chinese educational systems have large classes, seem highly authoritarian, and are examination oriented. CIS, as a result, are accustomed to teachers offering detailed notes, providing model answers, assigning heavy homework schedules on a daily basis, providing exercises for examinations, and even managing the students' day-to-day lives. In brief, they expect teachers to assist them to occupy their after-school hours. Such a learning style does not work when they move to New Zealand because teachers here require critical thinking and independent study. The function teachers performed in China, as a crutch – which CIS relied upon - suddenly disappears in New Zealand. The students may end up in situations where they encounter a number of academic challenges. More assistance to deal with such situations is required. Furthermore, the students no longer have heavy homework loads assigned to them by their teachers in New Zealand. Part-time jobs can be utilised not only to occupy their after-school hours but also to learn to value money they earn by hard working.

Limitations of the Research

In this research, limitations of generalisation of the findings must be considered. The choice of studying the experiences of a relatively small number of participants meant that participants could be interviewed twice. Many participants were able to give private accounts of their gambling lives in follow-up interviews where rapport had already been established. Thus, the use of a small sample allowed for the development of deep descriptions and explanations (Flick, 2006) of CIS' gambling lives. On the other hand, given the small size of sampling, caution must be exercised when generalising the findings.

Translation of data is relevant to the analysis of data where translation from Chinese to English has taken place. There are some issues surrounding translation, which have particular implications for the quality of data. The first of these relates to the translation of words for which there is no true equivalent in resource language (Twinn, 1998). The difficulty of finding English words to capture the meaning of the Chinese data is also a continuing issue throughout the translation process, particularly when translating data reflecting participants' feelings (Twinn, 1998) as well as Chinese slang. Second, the influence of grammatical style to some extent affects the quality of data. This is demonstrated by the difficulty in translating data where there is little similarity in the grammatical structure of the two languages. This is particularly so with Chinese where tenses and personal pronouns are not used (Twinn, 1998). Although the use of participants' first language may have enhanced the quality of data collection in the course of the interviews, the translation factors highlight the issues created by translating transcriptions.

CONCLUSIONS

Gambling remains an important social and economic point of tension for CIS. It is a reflection of social isolation and economic hardship for many. This study focuses on post-change life of problem gamblers among CIS. The study shows that successful re-rooting is a characteristic of most participants' post-change experiences. Also, engaging in spirituality, and study and work help boost a sense of success and meaningfulness to life to participants. This research suggests that supporting CIS to successfully re-root, enhancing CIS' spiritual engagement,

assisting CIS to address study difficulties and encouraging them to seek part-time jobs could help CIS maintain the change.

Given the small size of sampling in this research, further research utilising a larger sample size can improve the present research design. Also, as discussed in the discussion section, further exploration of the impact of spirituality on gambling is needed. In addition, gender difference was not investigated in the present research. Further investigation on gender differences of CIS' gambling experiences is recommended.

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BREAKING BARRIERS, BUILDING HEALTHY COMMUNITIES

ASIAN MIGRANT AND REFUGEE YOUTH SETTLEMENT IN NEW ZEALAND: BARRIERS AND MENTAL HEALTH CONSEQUENCES

**Amritha Sobrun-Maharaj, Samson Tse,
Ekramul Hoque & Fiona Rossen**

ABSTRACT

BACKGROUND INFORMATION

The migrant population from Asian countries has increased significantly in Aotearoa New Zealand over recent years. This has significant social implications for the country. While there has been a substantial amount of international research into the effects of migration on adults, there is limited research documenting the impact of migration upon the mental well-being of young Asian migrants. Both anecdotal and empirical evidence show that our Asian migrant and refugee youth are not settling as well as their invisible, English speaking migrant counterparts. This has negative psychological consequences.

This study, which is part of a larger study exploring the settlement and social inclusion of ethnic minority migrant and refugee youth in New Zealand, seeks to ascertain through key informants who are stakeholders, what issues face Asian migrant and refugee youth in New Zealand; what factors act as barriers to their settlement and social inclusion, and what impact this has on their mental well-being.

METHOD

The study employs qualitative research methods and surveys key informants (i.e. those who provide services to Asian migrant and refugee youth, and those with significant expertise in the area) through a focus group discussion, individual face to face interviews and telephone interviews. The focus group discussion and interviews gather in-depth data on a wide range of issues within the contexts of the family, community, school/university/workplace, and peers that shape youth development and experiences.

Seventy one key informants, comprising 42 service providers and 29 experts, from both ethnic minority and majority groups were recruited through purposive sampling from Auckland, Hamilton, Wellington, Christchurch, Palmerston North and Nelson. Data were analysed using an inductive approach to produce primarily qualitative and some quantitative data which identified key themes and issues.

RESULTS AND DISCUSSION

The most significant issues and barriers were found to be racism, prejudice and discrimination, lack of resources, language, intergenerational conflict, cultural conflict and clash of values.

Asian migrant and refugee youth response to barriers include feeling victimised, frustrated, and losing hope and power and giving up, with some achieving poorly at school (lack of concentration/motivation) or avoiding school, and some leaving home causing breakdown of families. Some experience feelings of dislocation, unhappiness, rejection, isolation, and homesickness. Some experience identity conflict due to peer pressure to assimilate. These lead to mental health issues in some such as stress, anxiety, panic attacks, and depression. Suicidal behaviour is reported by some.

To cope with this situation many employ dysfunctional coping strategies such as becoming angry, violent and aggressive, which sometimes manifests as problem behaviours such as dangerous driving, crime, gambling and drug and alcohol consumption. Many withdraw from the larger society and form ethnic group enclaves (gangs) due to loss of status,

embarrassment, and negative attitudes and behaviours of New Zealanders toward them. Some pretend nothing is wrong, especially refugees who feel very lucky to be here and therefore try hard "to not rock the boat".

CONCLUSION
Findings reveal that Asian migrant and refugee youth generally do not feel settled and socially included in New Zealand and that many may suffer psychological and social consequences due to this. To ameliorate this, we need to foster social connectedness between Asian youth and the host community, and to promote bi-directional acculturation between Asians and hosts. We also need to encourage retention of cultural identity by Asian youth and their families while simultaneously adopting aspects of New Zealand culture.

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INTRODUCTION

The migrant population from Asian countries has increased significantly in Aotearoa New Zealand over recent years. This has significant social implications for the country. While there has been a substantial amount of international research into the effects of migration on adults, there is limited research documenting the impact of migration upon the mental well-being of young Asian migrants. Both anecdotal and empirical evidence show that our Asian migrant and refugee youth are not settling as well as their invisible, English speaking migrant counterparts. This has negative psychological consequences.

Many countries receiving migrants and refugees have now adopted diversity and multiculturalism as an official policy to foster national harmony and prosperity. The literature suggests that cohesive support to migrants and refugees would reduce inequality and ensure good health, employment and housing (Burke, 1986).

The literature identifies the following main themes as significant factors in resettlement in New Zealand: racism, prejudice and discrimination, stereotypes and assumptions (e.g. Harris, Tobias, Jeffreys, Waldegrave, Karlsen, & Nazroo, 2006; Human Rights Commission, 2007; Kunaswary, 1996; Sobrun-Maharaj, 2002); language and communication (e.g. Watts, White, & Drago, 2002; Chu, 1997); employment (e.g. Dakuvula, 1984; Didham, 1989); clash of cultural values and intergenerational conflict (e.g. Davey, 2002; Liu & Ng 2004; Lloyd, 1995; NZFEC, 1993); literacy and education (e.g. (Chung, Walkey, & Bemak, 1997); trauma and mental illness (e.g. Au, 2002; Elliot, Lee, & Jane, 1995); identity conflict (e.g. Berry, 2001; Eyou, Adair, & Dixon, 2000; Ward, 2006; Ward & Masgoret, 2004); dysfunctional coping strategies (e.g. Gance-Cleveland, 2004; Pearlin & Aneshensel, 1989), and social, psychological and educational support (e.g. Sobrun-Maharaj, 2002; Tofi, Flett, & Timutimu-Thorpe, 1996).

Research suggests that issues such as racism, prejudice and discrimination based on stereotypes and assumptions on the part of the host society may give rise to a frustrating sense of isolation, being under-valued and marginalised among ethnic minority migrants and refugees (Harris et al., 2006; Human Rights Commission, 2007; Kunaswary, 1996; Sobrun-Maharaj, 2002). The lack of sensitivity among some teachers from dominant ethnic groups may also adversely affect the performance of migrant and refugee youth in schools (Sobrun-Maharaj, 2002).

Language is found to be a significant element of settlement (Chu, 1997; Watts, White, & Drago, 2002). Studies show that most migrant and refugee youth are bilingual or multilingual and maintenance of ethnic languages is helpful for a sustainable ethnic identity. However, language is also perceived as a major barrier to acculturation if there is a lack of English language proficiency (Chu, 1997).

Employment is seen to be a critical aspect of settlement, especially for individuals in their early adulthood. In New Zealand, employment is reported to be difficult for youth from migrant and refugee backgrounds compared to Pakeha (European New Zealanders) youth and their employment is heavily concentrated in a narrow range of industries where income is on average lower. However, New Zealand born youth of migrant parents are more likely to gain higher skilled jobs than overseas born youth (Benson-Rea, Haworth, & Rawlinson, 1998).

Differences in culture between ethnic minority groups and that of the mainstream society in New Zealand can create a clash of values resulting in conflict between migrant and refugee youth and their parents (NZFEC, 1993). Parents are apparently anxious about loss of their culture and values, while youth are more eager to integrate into the local culture at the expense of intergenerational conflict within the family (Lloyd, 1995). Furthermore, high academic expectations of some parents are creating stress which adversely impacts on the self-confidence of students (Chung, Walkey, & Bemak, 1997).

Differences in educational systems between migrant and refugee source countries and the host country creates coping difficulties for youth from migrant and refugee backgrounds at school (Cochrane & Lees, 1993). This impacts negatively on their ability to settle well and to be socially included. This can also lead to negative psychological consequences.

The acculturation process for some migrant and refugee youth, especially for teenagers, is highly stressful and if this is not appropriately negotiated, it can result in identity conflict or even crisis for young migrants and refugees (Berry, 2001; Ward, 2006; Ward & Masgoret, 2004;). Youth under stress often find dysfunctional ways of coping with their situations as they are not mature enough to deal with adversity in a positive way (Gance-Cleveland, 2004). This may sometimes manifest in the formation of gangs of some sort (Eggleston, 2000; Sobrun-Maharaj, 2002;). Inadequate social support to youth from migrant and refugee backgrounds has been found to be inversely associated with academic performance and psychological wellbeing (Tofi, Flett, & Timutimu-Thorpe, 1996).

It will become apparent in this report that the themes identified by the literature as being significant to resettlement, have also been identified by the key informants of this study as having a significant impact on the settlement and social inclusion of Asian youth from migrant and refugee backgrounds in New Zealand, with mental health consequences.

DEFINITION OF TERMS

The following definitions have been used in this paper**:**

Asian
The term Asian includes people with origins in the Asian continent from Afghanistan in the west to Japan in the east, and from China in the north to Indonesia in the south (Statistics New Zealand 1996).

Migrant
The term "migrant" denotes "one that moves from one region to another by chance, instinct, or plan" or "an itinerant worker who travels from one area to another in search of work" (Houghton Mifflin Company, 2003). In New Zealand it is used to describe all immigrants, permanent or temporary, living in the country. This definition is used in this research.

Refugees
The term "refugees" refers to those people who have fled their countries because of war, political oppression or religious persecution and have sought refuge in New Zealand.

Youth from Migrant and Refugee Backgrounds
The young migrant and refugee population is defined as the group of people aged between 12 years and 24 years (as per Ministry of Youth Affairs, 2002) who have come to New Zealand, mostly with their family, to resettle, and those who were born in New Zealand to first generation migrant or refugee parents (Ministry of Youth Development quoted in Department of Labour, 2007).

Ethnic Minorities
Ethnic minorities are defined as those groups whose fundamental cultural values, customs, traditions and characteristics differ from the majority of the New Zealand population. This includes people from well-established ethnic communities, recent migrants, refugees and those people born in New Zealand who identify with their ethnic heritage.

Host Community
The host community is defined as New Zealanders of Maori and European ethnicity who are not recent immigrants, and who make up the majority of the New Zealand population.

AIMS AND OBJECTIVES

This study is part of a larger study which explored the settlement and social inclusion of migrant and refugee youth in New Zealand and examined issues, barriers and facilitators of settlement and social inclusion, as well as services provided for youth from migrant and refugee backgrounds. This section of the study looks at the issues and barriers experienced by Asian migrant and refugee youth.
The overall aim of the study is:

- to ascertain (based on key informant responses) whether Asian youth from migrant and refugee backgrounds are well settled in New Zealand by examining issues experienced by them, factors that act as barriers to their settlement, and their consequences on mental health.

The objectives are:

- to identify (based on key informant responses) the significant issues facing Asian youth from migrant and refugee backgrounds,
- to investigate what factors (according to key informants) act as barriers to the settlement of Asian youth from migrant and refugee backgrounds; and

- to examine the mental health consequences (according to key informants) for Asian youth from migrant and refugee backgrounds who are not well settled in New Zealand.

METHODOLOGY

The study adopts an ecological view of Asian migrant and refugee youth and their settlement, and accommodates both ethnic minority migrant and refugee and ethnic majority host perspectives. Within this methodological paradigm, the study also employs some elements of communographic and ethnographic approaches to research. The communographic aspect arises from data which have been collected from migrant ethnic minority key informants who approximate the voices of migrants and refugees and provide an 'insider' perspective (Sobrun-Maharaj, 2002). The ethnographic element relates to data also being provided by non-migrant ethnic majority key informants who have had an extended involvement in the lives of youth from migrant and refugee backgrounds (Bryman, 2001), and provide an 'outsider' perspective on the situation. These two perspectives (the 'insider' and 'outsider' perspectives) enhance the quality and depth of data produced by the study.

Because the study is exploratory and seeks a wide perspective on the settlement of Asian youth from migrant and refugee backgrounds, key informants are interviewed rather than youth themselves.

Data Collection

The study employs qualitative research methods and surveys key informants (i.e. those who provide services to Asian migrant and refugee youth, and those with significant expertise in the area) through:

1. a focus group discussion,
2. individual face to face interviews, and
3. telephone interviews.

The focus group discussion and interviews gather in-depth data on a wide range of issues within the contexts of the family, community, school/university/workplace, and peers that shape youth development and experiences.

Sample

Seventy one key informants, comprising 42 service providers and 29 experts, from both ethnic minority and majority groups were recruited through purposive sampling from Auckland, Hamilton, Wellington, Christchurch, Palmerston North and Nelson.

These numbers were determined by the availability and willingness of participants in the specified locations.

Experts are those with significant expertise in the settlement of migrants and refugees, and service providers are those who provide various settlement services to migrants and refugees.

Data Analysis

Data collection and analysis were concurrent and reflexive. Analysis of the data began following the first pre-interview focus group discussion. The focus group discussion data were analysed and served as an emerging basic framework to identify topics to be covered in more depth in face to face interviews. Face to face interview data were then analysed and identified significant issues to be covered in telephone interviews.

Interviews produced primarily qualitative and some quantitative data (discussed below). The qualitative data were analysed using an inductive approach to identify key themes relevant to the research objectives. During this process, concepts were reduced to themes and sub-themes, and their linkages refined. The quantitative data produced information such as

frequency of specific types of cases and issues for the different groups within the sample (age, gender, region, and nationality), frequency of events, duration and intensity, and this supplemented and strengthened the qualitative data.

FINDINGS AND DISCUSSION

Most Significant Barriers

Key informants were asked to list the most significant barriers faced by Asian youth. The most significant barriers were found to be some of those listed in the literature presented above. These included racism, prejudice and discrimination and non-acceptance from the host community, language, intergenerational conflict, cultural conflict and clash of values. Key informants of this study also identified lack of funding and resources as a significant barrier for migrant and refugee youth in New Zealand. These are discussed below:

Racism, prejudice and discrimination:

Ninety four percent of key informants suggested that racism, prejudice and discrimination and "narrow worldviews" for example, closed-mindedness and inflexibility, apathy and unwillingness to integrate with migrants and refugees, lack of cultural sensitivity, negative media portrayal of migrants and refugees, led to general non-acceptance (lack of 'tolerance') and social exclusion of Asian migrant and refugee youth, which in turn impacts on the provision of services and their ability to settle successfully.

> *"Racism is the biggest issue, but institutional racism more than the other…the institutional one is the key factor because charity begins at home - institutions are the ones that safeguard policies and laws. New Zealand is a signatory against racism, but if it's not implemented and people realise that institutions are promoting racism. If it's being promoted by politicians, then what do you think will the layman do? There is no committed leadership in New Zealand that commits resources to combating racism". (Education)*

As suggested by the literature (Human Rights Commission, 2007; Harris et al., 2006; Sobrun-Maharaj, 2002; Kunaswary, 1996), this is seen by key informants as being a barrier to integration and causing a sense of isolation, being under-valued and marginalised among Asian migrants and refugees, which impacts all aspects of their lives:

> *"Racism is the clear cause of lack of integration, and this impacts on every aspect of settlement and social inclusion such as employment, housing, etc". (Youth Development)*

Language difficulties:

Three quarters of the sample (75%) cited *language difficulties* - accent, inability to communicate, including issues with New Zealand accents and jargon, as the primary personal barrier to settlement and social inclusion of Asian youth from migrant and refugee backgrounds. This is reflected in the following comments:

> *"They feel like they're inferior because they cannot speak the language". (Settlement Support)*

> *"Staff and users don't speak the same language which makes them feel uncatered for and excluded". (Youth Support)*

Furthermore, some felt that those who cannot speak English well are often considered to be unintelligent by some members of the host community, which restricts their opportunities and their ability to settle well:

"When people cannot express themselves well, it doesn't mean they are not intelligent and don't know the work". (Ethnic Representative)

Intergenerational conflict:
Almost three quarters of participants (70%) referred to intergenerational conflict between youth and their parents due to issues such as differing expectations of youth and their parents about life in New Zealand, differences between New Zealand and migrant and refugee 'norms', and shifts in power from adults to youth who frequently become the family voice and are burdened with family responsibility. The following quotes illustrate some of these issues relating to these difficulties:

"I've often had phone calls from the parents, not so much the youth, about how their teenagers have become rebellious, simply because of the culture that is practiced here, and they're trying to adapt. Then I have got a group of very young people who call me and share with me their frustrations with their parents. So we cannot look at youth as a youth problem, there is a problem in both ways". (Police)

"Inter-generational issues (parents vs youth). Opposing pressures and expectations from parents and peers/mainstream culture. Different 'norm' between parents and peer groups – can lead to tension e.g. clashes around independence and appropriate ages to do things". (Children's Commission)

"All youth want to fit in and be like others – this is particularly challenging for immigrant / refugee youth who can end up stuck in the middle trying to juggle two cultures which can be a source of tension with parents who want them to get a good education and hold onto their culture and language". (Education)

Cultural conflict and clash of values:
The trauma of migration and its concomitant culture shock resulting from having to cope with a new culture, especially the freedom that youth in New Zealand have (including sexual freedom), were cited by almost half the key informants (46%) as an important barrier. For example:

"For youth there's a culture difference, there's a struggle to understand your own culture and the culture at home and of New Zealand, and so there's a growing gap for our young migrants, trying to keep up with the youth culture and the culture of New Zealand and the culture that they come from…" (Youth Worker)

According to key informants, this apparently leads to issues such as sexual practices resulting in high levels of pregnancy and abortion amongst migrants (especially East Asian), and gang culture (especially African), amongst others:

"We are now seeing high levels of pregnancy and abortion amongst migrant youth who are dealing with a new culture and sexual practices". (Health Professional)

Lack of funding and resources:
A barrier not frequently mentioned in the literature, is the issue of funding and other resources. This was seen by almost two thirds of the key informants (61%) as the largest institutional barrier in New Zealand. A lack of funding and resources has social and psychological consequences for Asian youth and their families:

"We don't have enough resources for all kinds of issues, especially psychological issues of refugees. We don't have the capacity to assist them to grow within our society. We dump them into state housing which can create problems". (Youth Services)

Other Major Barriers

In keeping with the international and national literature discussed above, unemployment and underemployment due to lack of recognition of qualifications; pressure from hosts to conform to New Zealand culture, and skills, literacy and educational inadequacies were also considered to be major barriers. Other major barriers identified by key informants in New Zealand and not frequently cited in the literature include: limited capacity/capability of some migrants and refugees to help themselves, and differences in understanding of concepts. These are discussed below:

Unemployment and underemployment due to lack of recognition of qualifications:

Over one quarter of the participants identified lack of recognition of qualifications, which leads to unemployment and underemployment, as a significant barrier for Asian youth of both migrant and refugee backgrounds and their families. This was offered as a barrier by respondents in all six centres of Auckland, Hamilton, Palmerston North, Wellington, Nelson and Christchurch, and the example of doctors driving taxis around New Zealand was often cited by respondents from various organisations and from migrant, refugee and host communities. This is reflected in the following quotation from a key informant of refugee background:

> *"Most of the well-educated people we have are not employed, they are not in employment. They are being used, as I'm used. You know? I couldn't get even a 20-hour job to continue what I'm doing, for example. And it's not only me, we have people who are really qualified, but who are in the dustbin, who are either driving taxis, or going to the Hawkes Bay [to the Halal plant] as well. Adults. And who are cleaning up or doing dirty jobs to survive because they can't – or others who went into big depressions and are dependant on Work and Income New Zealand, and who are on sickness benefit because they are not allowed to give their best to their people, by employment, by making a difference…". (Refugee Support)*

As suggested by this quotation, unemployment and underemployment has social and mental health consequences such as depression for Asian youth and their families.

Pressure from hosts to conform to New Zealand culture:

Pressure on youth and families to conform to both their own cultural values and New Zealand values was mentioned by one fifth of the participants. Such pressures were identified by some key informants in this study, as has been done in other New Zealand studies and internationally (Berry, 2001; Ward, 2006; Ward & Masgoret, 2004) as causing *identity conflict/crisis* amongst youth which leads to low self-esteem.

> *"They've got two quite different ends of continuums of cultural beliefs [between culture of host society and culture at home] that they're dealing with, so it's a very confusing time for them, and they find it incredibly challenging to find their own identity within that. So as a result, they, I believe that they, have probably more challenges than – they've had far more complex challenges compared to the normal youth who already have challenges…" (Education)*

Skills, literacy and educational inadequacies:

This was cited by over half the respondents (54%), and concerned inadequate educational support at school (including assessment and placement of migrant and especially refugee youth) and inadequate training for employment:

> *"Youth are placed in classes with their own age group, but they know nothing at school, cannot cope with older, more educated youth, and adopt dysfunctional*

coping strategies such as joining gangs for feeling of inclusion". (Refugee Settlement)

"Some refugees come here with no education and get put into classes of their own age group. They cannot cope with this and find dysfunctional ways of coping". (Youth Services)

Lack of literacy, education and training (especially for refugees) were cited by one third of the participants (33%) as creating an inability to obtain knowledge about and tap into resources available to them:

Especially for Asians, social benefits or social services is not a common practice. So they won't know, unless they're out of a job, they know that New Zealand gives a dole system, but other than that – Like PHO [Primary Health Organisations]…how many of them know that if I go to an organisation, a clinic that is registered with the Health Board I actually get better discount. They don't know. You know? Simple things like that". (Police)

As suggested by the literature, this creates coping difficulties for youth from migrant and refugee backgrounds at school (Cochrane, & Lees, 1993), which impacts negatively on their ability to settle well and to be socially included. Furthermore, it can result in poor academic performance and poor psychological wellbeing (Tofi, Flett, & Timutimu-Thorpe, 1996).

Limited capacity/capability of some migrants and refugees to help themselves:
A barrier identified by the New Zealand key informants is the limited capacity and/or capability of some Asian migrants and refugees to help themselves. Some felt there are insufficient active migrant and refugee community groups to provide help to Asian communities. One example cited by a participant was:

"It took 12 months for a community group to put in one funding application for transport…They need active community leaders who are really pushing, for example, the Bangladeshi community is more active…" (IT Training)

This can create feelings of inadequacy and dependence on the host community.

Differences in understanding of concepts:
An important barrier raised by key informants of this study and not cited in the literature is the issue of differences in understanding of concepts between the host community in New Zealand and migrants and refugees. This includes the concepts of *settlement* and *social inclusion*. Participants considered these differences in understanding to be significant because it impacts on the settlement and social inclusion of Asian youth from migrant and refugee backgrounds. They suggested that these groups assume that their understandings are the same, but they often have a different understanding of these concepts, hence misunderstandings occur about needs and services required:

"We make assumptions about mutual understanding of concepts which leads to misunderstandings – some cultures don't have particular concepts that the west has because of their lifestyle etc. We assume that what works for us works for others". (Youth Development)

Lack of migrant and refugee willingness to integrate:
A few key informants felt that there is a lack of intention or willingness to integrate by some Asian migrants and refugees who 'cling' to their own culture and language. This results in a lack of commitment to New Zealand and hinders settlement. For instance:

"Migrant kids also need to learn they need to mix with New Zealand communities". (Multicultural Services)

A couple of European participants placed the burden of not settling in and experiencing problems on migrants and refugees because they are not willing to interact and integrate or learn local ways. They suggested it was their attitudes and cultural practices that elicited racist attitudes from the locals:

> *"I find they [migrants and refugees] are just not willing to interact or to integrate or to learn about the local ways. How can they settle in then? They just want to retain their own culture and language". (Migrant and Refugee Support)*

Youth Responses to Barriers- Coping Strategies and Mental Health Consequences

Youth responses to the barriers listed above were examined together with their coping strategies and the mental health consequences for Asian youth. The literature states that youth under stress often find *dysfunctional ways of coping* with their situations (Gance-Cleveland, 2004). According to key informants, this appears to be the case with many Asian youth.

Almost half the key informants (46%) suggested that youth experience feelings of *dislocation, unhappiness, rejection, isolation, and homesickness:*

> *"We have quite a number of new migrants who come to us because they feel isolated and they feel that they're oddities, people stare at them in schools that are primarily Pakeha [New Zealand European] or Pacific Island". (Ethnic Advisor)*
>
> *"It's the loneliness, especially of ethnic minority groups, and not having faces that they can identify with". (City Council)*

One third of the participants stated that Asian youth from migrant and refugee backgrounds feel *victimised and frustrated,* and a few suggested that *some youth lose hope and power and give up* (some leave home) as suggested by the following quotations:

> *"I've seen people pack up and leave, and I've seen it manifest in violence". (Settlement Support)*
>
> *"…you will be frustrated, you might give up and go home". (Settlement Support)*

Key informants suggested that some youth (especially refugees) consequently experience *emotional issues and mental illness*. These emotional issues include self-blame, self-pity, guilt (about betraying cultural heritage), anger and frustration about not having control of their lives (youth not consulted by parents) and about not being treated well by New Zealanders, and consequent depression:

> *"Some develop a lot of anger and feel that they don't owe anything to this society due to the way they've been treated…" (ESOL)*
>
> *"…believing that you are to blame for whatever goes wrong…anger, opting out. This leads to depression, men lose status in the family, feel rejected". (Settlement Support)*

Most participants recognised that depression can lead to a downward spiral characterised by alcohol and drug abuse and violent reactions, which many had observed in refugee youth. This is reflected in the following statement:

> *"They are depressed so they indulge in drugs, alcohol and those sorts of things…they form gangs which are their peer support groups". (Settlement Support)*

A third of the participants (33%) indicated that some Asian youth respond to barriers by *withdrawing* from the larger society. Respondents indicated that this is a result of loss of status, embarrassment, and negative views of New Zealanders towards them:

> *"Some might withdraw and congregate together (i.e. not integrate) – especially refugees if they are not getting enough support, resources." (Migrant and Refugee Education)*

One quarter of the sample suggested that Asian youth from migrant and refugee backgrounds consequently "stick together" in their own ethnic groups, creating *ethnic enclaves* which can develop into 'gangs':

> *"Youth find they are not welcomed and valued, they find people who are aggressive, and what they do is they team up, they build alliances with a solidarity group to combat that. And obviously, that triggers more racism.*
> *Sometimes they are physically attacked and they are outnumbered, so they build gangs to defend themselves". (Education)*

Many face to face interviewees suggested that some youth *become involved in crime and other problem behaviours* such as "gambling and dangerous driving" (Health Professional), and *drug and alcohol abuse*:

> *"Some respond negatively - e.g. involvement in crime, gangs, drugs, dropping out of school". (ESOL)*

> *"… they find it hard to find jobs and feel excluded. This leads to them forming gangs in which they feel included. When they feel disenfranchised, they sometimes turn to crime and get into trouble with the police". (Youth Support)*

Some respondents noticed youth experience *identity conflict* due to peer pressure to assimilate:

> *"…migrants/refugees try 'too hard' to fit in". (Mental Health Services)*

> *"Some… are trying to cope with non-acceptance by finding a new identity for themselves. They are no longer identifying with their own culture…" (Community Representative)*

A few respondents suggested that some *pretend* nothing is wrong, especially refugees who feel very lucky to be here, and therefore try very hard 'to not rock the boat':

> *"You first pretend you don't see it, but it takes your innocence away…People put on a front – I'm ethnic minority, but I'm not. They whiten up, if you like, and say I don't experience these things that these poor brown people do". (Ethnic Advisor)*

Many participants also reported that some youth *achieve poorly* at school (report lack of concentration/motivation) or avoid school because they feel unwelcome and excluded:

> *"We have lost a generation of young people…the school system is failing them…so they join gangs, indulge in drugs, alcohol and have identity confusion". (Social Development)*

A few participants also reported *suicidal behaviour* in a few youth as illustrated by these participants:

> *"They are having to prove themselves to their hosts, which is putting pressure on young people many of whom are becoming suicidal…". (Ethnic Representative)*

> *"A young Filipino boy who was in a mixed family with a Pakeha (New Zealand European) stepfather and was confused about his culture and who he was, took to drugs and alcohol and became suicidal…" (Settlement Support)*

Many key informants suggested that *refugees* experienced more trauma such as isolation, stress, frustration and anxiety in New Zealand than migrants because most of them are physically different, such as South and Southeast Asian refugees:

> *"Refugees tend to experience more isolation than migrants…The more different that you are, the more difficult it is for you to be accepted and have a sense of support". (Ethnic Representative)*
>
> *"Skin colour and the way of dressing can make some people more vulnerable to abuse and discrimination which leads to frustration and other negative feelings…" (Human Rights)*

Participants felt this was exacerbated by *pre-migration trauma*; hence, refugee youth were more susceptible to mental health issues such as depression which impacts negatively on their ability to settle well:

> *"Previous trauma disposes them to depression or anxiety problems. Poverty, isolation, fear of doing the wrong thing, not knowing the social norms compounds this". (Academic)*

A small group of participants reported that some youth find *positive ways of coping*, which include making an effort to understand cultural differences, being conscious and 'tolerant' of differences, trying to help themselves, and standing up for their own culture:

> *"I'm really speculating, I don't know. But my observation of what I see is that, you know, youth are very innovative and they're creative, and they look for ways to overcome it [barriers and issues]. They have lots of networks usually within, you know, between youth and they look… if one person knows a place that they can go to get that kind of help or whatever, then that kind of information is disseminated within their own network. So I think youth seek to empower themselves, if you like, or seek their own options and initiatives". (Ethnic Advisor)*

CONCLUSION

Findings reveal that Asian migrant and refugee youth generally do not feel settled and socially included in New Zealand and that many may suffer psychological and social consequences due to this. The study acknowledges the potential skew of the young people who presented to social services and the key informants of this study, and the impact of this on generalisability to the entire population.

To ameliorate this condition, we need to foster social connectedness between Asian youth and the host community, and to promote bi-directional acculturation between Asians and hosts. We also need to encourage retention of cultural identity by Asian youth and their families while simultaneously adopting aspects of New Zealand culture.

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KNOWLEDGE OF CERVICAL CANCER AND THE UPTAKE OF CERVICAL CANCER SCREENING AMONG CHINESE WOMEN IN NEW ZEALAND

Wanzen Gao, Ruth DeSouza, Janis Paterson & Tongjing Lu

ABSTRACT

OBJECTIVE

This pilot study examined the knowledge of risk factors of cervical cancer and its association with the uptake of cancer screening practices among Chinese women living in Auckland.

METHOD

A community-based survey was conducted and 234 questionnaires were administrated to ascertain the uptake of cervical screening. Participants were asked whether they had ever been screened in New Zealand and whether it had occurred in the previous three years. They were also asked to identify risk factors from the provided twelve questions.

RESULTS

More than half of the respondents identified the risk factors of being older (75.2%), having a sexually transmitted disease (62.4%), having multiple sexual partners (59%) or having sexual activity with a man who has had multiple sexual partners (52.7%). In contrast, only 42.3% identified the lack of 3-yearly smear tests; approximately one third of respondents recognized the following as risk factors: human papillomavirus infection, smoking, or having intercourse at an early age. The knowledge level was not significantly associated with the uptake of cervical cancer screening.

CONCLUSION

The majority of Chinese women who participated in the study did not recognise the importance of regularly cervical screening to prevent cervical cancer. Findings suggest that there is a need for Chinese women to be educated in order to increase awareness and understanding of cervical screening and ultimately uptake.

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INTRODUCTION

Invasive cervical cancer is the second leading cancer among women in mainland China (Guo et al., 1994). Several studies have suggested that Chinese women living in North America have higher cervical cancer incidence rates than the general population (Archibald, Coldman, Wong, Band, & Gallagher, 1993; Parkin et al., 1993), and that this higher prevalence is due in part to inadequate cervical screening (Hislop, Teh, Lai, Labo, & Taylor, 2000; Taylor et al., 2002).

The knowledge level of risk factors can influence the uptake of health promoting behaviour such as screening. Women completing the National Health Interview Survey in the USA who had greater knowledge about cervical or breast cancer risk factors were more likely to have received cervical and breast cancer screening (Pearlman, Clark, Rakowski, & Ehrich, 1999). Studies have found that the average knowledge level about cervical cancer risk factors is low in Chinese women living in North America and knowledge of these risk factors influences cervical cancer screening behaviour (Hislop et al., 2004; Ralston et al., 2003). However, greater knowledge about cervical cancer risk factors does not always lead to increased screening. In a study of female university students in South Africa, most respondents were able to identify the major cervical cancer risk factors but this level of awareness did not translate into an appreciation of personal risk or influence cervical cancer screening behaviour (Buga, 1998). Therefore there is a need to ascertain motivating factors that would lead to the uptake of cervical cancer screening.

The New Zealand National Cervical Screening Programme (NCSP) reported a screening coverage of 73% overall for the last five years. However, the coverage varies by ethnic groups with the lowest coverage of 45% or so among Asian women (Ministry of Health, 2005). Well Womens Nursing Service (WONS) performed a review of their medtech cervical screening results for the period of 2000-2005 and reported Chinese women were over-represented in the high grade abnormalities with rates similar to Maori women. They concluded that Chinese and Korean women presented later and were less likely to be screened due to cultural, language and knowledge barriers (Fredatovich, 2005).

The Asian ethnic group was New Zealand's fourth largest major ethnic group after European, Māori, and Other Ethnicity, totalling 9.2% in 2006. Two-thirds of people who identified with the Asian ethnic group live in the Auckland Region; that is, almost 20% people in the Auckland Region identified with the Asian ethnic group, the highest proportion of all the regions, and the second largest ethnic group in the Auckland region (Statistics New Zealand, 2007). According to 2001 census data, Chinese are the largest Asian group, making up 45 percent of all Asian people in the Auckland region (Statistics New Zealand, 2002).

In response to the lack of research on the reasons for the low uptake of cervical screening in the Asian population in New Zealand, we conducted a pilot study focusing on mainland Chinese women to investigate the (1) cervical screening practices in Chinese immigrants, (2) barriers and facilitators to cervical screening that could be used to develop intervention strategies for Chinese women, and (3) knowledge of cervical screening and cervical cancer risk factors in this immigrant population. The demographic predictors of the uptake of the cervical screening programme have been reported elsewhere (Gao, Paterson, DeSouza, & Lu, 2008). This article focuses on the knowledge of cervical screening and cervical cancer risk factors and its association with the uptake of cervical screening programme.

METHODS

This was a community-based pilot survey that was followed up with a focus group interview.

Study Sample

Women were eligible to participate in the study if they (1) were born in Mainland China; (2) currently resident in Auckland New Zealand; (3) were aged 20 to 69.

Survey Recruitment

We partnered with the Chinese New Settlers Services Trust (CNSST), a local non-government organization, to assist in the principal method for recruiting participants through access to their database. The researchers also utilised their considerable personal networks and affiliations in ethnic community organisations. In order to promote the survey and enhance

recruitment, information about the study was publicised in Chinese-language posters distributed in community settings and in Chinese newspapers.

The survey was conducted between November 2006 and February 2007. Ethics approval from AUT Ethics Committee was obtained before the recruitment started. Two hundred and sixty questionnaires were sent to eligible participants and 234 were received. Of these 234, 190 were recruited through CNSST, 33 through personal networks and 11 through an advertisement (details on the recruitment have been reported elsewhere) (Gao et al., 2008).

Survey Instrument

Socio-demographic information were collected regarding the woman's age, marital status, educational level, employment, income, and housing status (owned, rented), duration of residence in New Zealand and their fluency of English speaking.

For the uptake of cervical screening, participants were asked whether they had ever been screened with a cervical smear test in New Zealand, and, if so, whether they had been recently screened (within the last 3 years).

Knowledge of cervical cancer and risk factors were sought from the participants using previously established risk factors and modified questions. The risk factors included, having intercourse at an early age, having multiple sexual partners, having sexual activity with a man who has had multiple partners, having a sexually transmitted disease, giving birth to many children, smoking, and lack of cervical cancer screening (Brinton, 1992; Holly, 1996; Parazzini, La Vecchia, Negri, Cecchetti, & Fedele, 1989). Two questions (having very frequent sexual activity with the same man and having several miscarriages) were also included that are not associated with cervical cancer risk (Hislop et al., 2004; Ralston et al., 2003). The age risk factor of 'being over 50 years old' was changed into 'being over 35 years old, risk increasing with age' and two more questions (using contraceptive pills and human papillomavirus infection) were added after consultation with experts in women's health.

The survey questions were developed in English, translated into Chinese, piloted, revised and back translated to ensure lexical equivalence.

Statistical Analysis

Knowledge score was calculated by adding the total number of correct responses for each participant. Student's t-test or analysis of variance was used to compare the knowledge score by socio-demographic factors. The unadjusted and adjusted logistic regression analyses were performed to summarize the independent effects of knowledge score on the uptake of cervical cancer screening after adjusting for socio-demographic factors. In these analyses, the knowledge score was forced to enter into the regression models as a continuous variable; whereas socio-demographic factors were selected into the models by stepwise method.

The crude and adjusted odds ratios and 95% confidence intervals were reported for the effects of knowledge score on the uptake of cervical cancer screening. A significance level of α=0.05 was used to determine statistical significance for all calculations.

RESULTS

The mean age (SD) of the 234 participants was 41 (10.6), ranging from 20 to 69 years old, 80.3% reported legally married, 80.7% had tertiary or post-graduate education, 47% were employed, 62.4% could converse in English, 38% had religion beliefs, the mean duration of living in New Zealand was 6 years (SD=3.8).

One hundred and fifty two (65.0%; 95% CI: 58.5-71.1) reported ever being screened in New Zealand and 56.0% (95% CI: 49.4-62.4) reported they were recently screened in New Zealand.

Knowledge of Cervical Cancer Screening and Risk Factors

146 (62.4%) respondents knew that the purpose of the cervical smear test was to detect abnormal cells that can develop into cervical cancer; 23 (9.8%) believed it screened for ovarian cancer, 3 (1.3%) for sexually transmitted disease and 62 (26.5%) didn't know or didn't give an answer.

The number and percentage of women who answered the individual knowledge questions correctly are presented in table 1. Correct rates varied from 14.5% to 75.2%. More than half of the respondents identified the risk factors of elder age (75.2%), having a sexually transmitted disease (62.4%), having multiple sexual partners (59%) or having sexual activity with a man who has had multiple sexual partners (52.7%). In contrast, only 42.3% identified the lack of regular 3-yearly smear tests; while one third recognized human papillomavirus infection, smoking, or having intercourse at an early age as risk factors. Only about one in five considered that giving birth to many children (20.9%) or using contraceptive pills (17.1%) put women at higher risk for cervical cancer.

Table 1
Knowledge of Risk Factors of Cervical Cancer in Chinese Women in Auckland (N=234)

Question	Correct answer	n	%
Being over 35 years old, risk increasing with age	Yes	176	75.2
Having intercourse at an early age	Yes	85	36.3
Having multiple sexual partners	Yes	138	59.0
Having sexual activity with a man who has had multiple sexual partners	Yes	123	52.7
Having very frequent sexual activity with the same man	No	89	38.0
Having a sexually transmitted disease	Yes	146	62.4
Having several miscarriages	No	34	14.5
Giving birth to many children	Yes	49	20.9
Not having regular 3-yearly smears	Yes	99	42.3
Smoking	Yes	89	38.0
Using contraceptive pills	Yes	40	17.1
Human papillomavirus infection	Yes	79	33.8

The knowledge score ranged from 0 to 11 with a mean of 4.9 (SD 2.8). Table 2 presents the comparisons of knowledge scores by sociodemographic factors. Women who did not identify themselves in term of age, marital status, education level, income, employment, years lived in New Zealand, English ability, religion or age at immigration (unknown group) generally had the lowest knowledge score compared with women who identified themselves. In addition,

women with qualifications at tertiary level and above and who could converse in English had more knowledge than those with secondary or lower levels of education or those who could not converse in English.

Table 2
Knowledge Score of Risk Factors of Cervical Cancer by Sociodemographic Factors

Variable	Category	Total	Mean	SD	P value
Age (yr)	20-29	24	5.3	2.8	0.089
	30-49	161	5.1	2.8	
	50+	33	4.7	2.5	
	unknown	16	3.3	3.6	
Marital status	Married	188	5.0	2.8	0.001
	Unmarried/single	36	5.3	2.9	
	Unknown	10	1.7	2.5	
Education*	Secondary or under	31	3.3	2.6	<0.0001
	Tertiary and above	189	5.3	2.7	
	Unknown	14	2.9	2.7	
Income (weekly)	$0 - $400	100	5.0	2.7	0.014
	$401-$600	33	5.8	2.7	
	>$600	36	5.4	3.1	
	Unknown	65	4.0	2.8	
House tenure	Owned	121	5.1	2.9	0.294
	Rented	113	4.7	2.8	
Employment	Unemployed	91	4.9	2.7	0.026
	Employed	110	5.3	2.9	
	Unknown	33	3.8	2.6	
Years lived in NZ	0-4	98	4.8	2.7	0.083
	5-9	75	5.1	2.7	
	10+	53	5.2	3.0	
	Unknown	8	2.5	3.3	
Can converse in English*	No	77	4.4	2.7	<0.0001
	Yes	146	5.4	2.8	
	Unknown	11	2.3	2.1	
Religion	No	134	5.1	2.8	0.079
	Yes	89	4.8	2.8	
	Unknown	11	3.1	3.1	

Age at immigration	0-39 years	163	5.2	2.7	0.018
	40+ years	52	4.6	2.9	
	Unknown	19	3.3	3.3	

* The comparison of the first two levels was statistically significant

The Knowledge of Risk Factors and its Association with the Uptake of Cervical Cancer Screening

One unit increase of knowledge score, the odds ratio of ever being screened was 1.05 (95% CI 0.95, 1.15). The adjusted OR remained non-significant after controlling for age and years lived in New Zealand that were independently associated with ever being screened (adjusted OR 1.06; 95% CI 0.96, 1.16). Similarly, the association between knowledge score and receipt of a recent smear test was not significant, either.

Table 3
Associations between Knowledge Score of Risk Factors of Cervical Cancer and the Uptake of Cervical Cancer Screening

Variable	Ever screened		Recently screened	
	OR	95% CI	OR	95% CI
Crude	1.05	0.95, 1.15	1.06	0.96, 1.16
Adjusted*	1.06	0.94, 1.19	1.06	0.96, 1.18

* Adjusting for age and years lived in New Zealand that were independently associated with the uptake of cervical screening programme.

DISCUSSION

Our findings have significant implications for health promotion and prevention. While more than half the respondents recognized some cervical cancer risk factors associated with sexual activities such as having a sexually transmitted disease, having multiple sexual partners and having sexual activity with a man who has had multiple sexual partners, it was of concern that the major risk factors (human papillomavirus infection (33.8%) and not having regular 3-yearly smear tests (42.3%)) were not widely known in this group of women. Studies in North America showed 72% to 84% Chinese immigrants recognized the importance of obtaining regular smear tests in reducing a women's risk of cervical cancer (Hislop et al., 2004; Ralston et al., 2003). This knowledge gap could be attributed to a number of factors such as the lack of a targeted programme for Chinese and other Asian groups in New Zealand and that most women from mainland China are not exposed to the concept of an organised population health programme in China (personal communication). If screening does occur it is facilitated by their employers in the form of an annual health examination In the course of the project many respondents expressed their desire to obtain relevant information and knowledge about cervical screening through such mechanisms as workshops and having pamphlets in Chinese.

We found those that were tertiary educated and above and those who had high levels of English language proficiency had more knowledge than those who were less well educated or those who could not converse in English. However, having more knowledge did not lead to an increase in the uptake of cervical cancer screening. This finding contradicts the results of other studies in the USA general population or Chinese women living in North America, where greater knowledge of cervical cancer was associated with receiving adequate cervical smear testing compared to women with lower knowledge of cervical cancer risk factors (Hislop et al., 2004; Mamon et al., 1990; Pearlman et al., 1999; Ralston et al., 2003), but is similar to a South African study (Yu & Rymer, 1998). Yu and Rymer (1998) argue that women see the smear test as irrelevant in terms of their behaviour, therefore those who do not perceive themselves to be at risk will see no reason to go through with the test. Our findings suggest

that although women may be aware of some risk factors for cervical cancer, they may not fully comprehend the purpose or benefits of routine screening, thus highlighting the importance of educating on Chinese women as to the importance of routine smear tests.

It is envisaged that in North America, extensive and tailored educational programs and research to target underserved communities may have played a major role in reducing the gap across ethnic communities (Sent, Ballem, Paluck, Yelland, & Vogel, 1998; V. M. Taylor et al., 2002; Tu et al., 2005). A study of randomized controlled trialled interventions to promote cervical cancer screening has found that culturally and linguistically appropriate outreach and direct mail interventions can be effective in enhancing cervical screening participation among Chinese women in North America (V. M. Taylor et al., 2002). While another study of Asian women in the UK demonstrated that health education increased the number of women who sought screening for cervical cancer, with the most effective methods being visits and showing a video. Receiving written information in the mail was found to be ineffective (McAvoy & Raza, 1991). While such international research is helpful, we believe that there is a need for further research among New Zealand's Asian populations. The feasibility of conducting community trials to examine the efficacy of different types of interventions should be explored.

In New Zealand, the first-time national campaign to encourage women to have regular cervical smears as part of the NCSP was launched in September 2007 (Ministry of Health, 2007). It is hoped that the campaign will arouse women's awareness of the programme so that the coverage rate of the programme can be increased toward to the target of 75% coverage among all population groups. An education programme that works well for the majority population might not work well for ethnic minorities. In order to achieve this national goal for Chinese population, a tailored, conceptually equivalent and culturally appropriate educational programme should be incorporated into the national screening programme.

In Auckland, WONS has an established women's health service for the new migrant and refugee communities. Health promoters from China, Hong Kong and Korea are available for language appropriate services. Resources in different languages are available on a wide range of women's health services. WONS has also assisted with the establishment of the Chinese and Korean Women's Wellness Community Groups as well as the Asian Health Foundation of New Zealand. The effectiveness of this service model should be evaluated and promoted to maximize its utilization.

This study is significant in that it contributes to our increased understanding of cervical screening practice among Chinese women in New Zealand, the largest Asian subpopulation. The strengths of this study include the community-based sampling method that included Chinese community services providers. However, several limitations should be acknowledged. First, we only included women living in Auckland regional area, where there is a high density of Chinese residents. It is unknown to what extent our findings can be generalised to other geographic areas, where there are fewer Chinese residing. Second, our principal method of recruitment via CNSST networks could have caused a selection bias. It is possible that our respondents had different uptakes of cervical screening compared to those who are not engaged with an ethnic community organisation and were less visible or to those who were approached but refused to participate. Third, there may have been measurement error as a result of using a self-reported assessment of screening. A previous study found that there was a concordance of 78% between the patient report and medical record. Most discordance was from women who reported having had a test but had no record of testing (Gordon, Hiatt, & Lampert, 1993). The possible bias could partly explain the higher uptake rate in our sample compared to government statistics (Ministry of Health, 2005). Last, as a pilot study, our sample size was small, which limited the power to identify the independent effects of some important factors.

Despite these limitations, this study has identified a significant issue which is that the majority of Chinese women in the study did not recognise the importance of regularly cervical screening to prevent cervical cancer. Our findings suggest there is a need to educate Chinese women to increase awareness and understanding of cervical cancer and the benefits of cervical screening.

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FACILITATING AND INHIBITING FACTORS IN ELDERLY HEALTH CARE IN IRAN: A QUALITATIVE STUDY

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ABSTRACT

As the proportion of older persons in the Islamic Republic of Iran is increasing and is expected to be about 10% of the total population by end of the 21st century, health policy makers are seriously concerned about what more services to offer the elderly. A qualitative research was conducted that aimed at identifying their needs and the development of an appropriate health care model for the elderly in Isfahan as well as other areas in Iran. Purposive sampling was used to recruit elderly men and women, their families, health care providers and managers. This paper presents views of the respondents relating to factors that might facilitate or inhibit the process. Seven categories were identified; concept of health, lifestyle, spiritual belief, personal and family factors, economic and social factors, health care services factor, and supportive context. These themes affect elderly health care as facilitators and inhibitors factors by interaction relations. The data is based on a doctoral thesis submitted to the University Putra Malaysia.

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BACKGROUND

In similarity with the global trend of an increase in the proportion of older persons, the Islamic Republic of Iran is witnessing a rapid rise in the number of the elderly. The Iranian Ministry of Health 2002 reported that in 1996, 3.97 million aged 60 and over lived in Iran, which constituted 6.6% of its total population. In year 2000 it increased to 7.8%. By the end of the following decade it would have risen to 10%, and by the year 2050 it would be 21.5%. Along with these there are changes affecting family structure and roles, labor patterns, migration, as well as health care needs of the growing population. Iranian health policy makers are particularly concerned over what health care facilities to be provided, especially for the elderly persons, as at present there are no specific programs for them. Given the situation, the Iranian government is aware of the social, economic and health implications affecting the elderly group of the country. Much attention is given to the topic and it is anticipated that a more appropriate health care model to cater to the needs of the elderly be developed.

An appropriate model would be something based on the real and anticipated needs of the affected group. In reviewing the present situation and planning future activities, it would be necessary for the health planners to have relevant data concerning the issues. A qualitative

study was carried out to gather data. Particular concern addressed in the study was factors that would influence the elderly health care. Thus, the purpose of the study was to investigate factors associated with elderly health care.

METHODOLOGY

Aging, health and quality of life have been studied quantitatively as well as qualitatively. While quantitative analyses have pointed to the functional needs of the aged, the qualitative analysis revealed the deeper insights from the perceptual and emotional aspects of aging and is widely accepted in health and old age research (Fry & Keith 1986; Sokolovsky & Vesperi 1991, Hutchinson 2001, Pope & Mays 1995). One of the approaches used by researchers is Grounded Theory, initially developed by Glaser & Strauss (1967), and has been developed and applied extensively since (e.g. Strauss & Corbin 1998). In this research, the method was adopted in view of the fact that very little data existed on the topic, and also because there was a need to gather current insight into the elderly's health problems. Through a systematic approach to data collection and analysis of social processes within human interactions the researcher aimed to discover the concepts, categories and themes related to the topic. There might be a theory emerging from the empirical data that could explain the underlying social processes and structures.

Sampling was purposive, in that informative cases were actively located and sought during the research process (theoretical sampling). Fifteen elderly women and men 60 years and above were interviewed in-depth. Four persons who were spouses of the respondents were also interviewed. To represent the health authority, three health care providers and four health care managers in Isfahan were interviewed also. They were included to provide views of those having the experience in dealing with the health care of the elderly.

Three methods of data collection were used; unstructured interviews, observation and focus group discussions. All interviews were audio-recorded and transcribed. Thus data comprised of transcripts from tapes, field notes and analytic and process memos. The constant comparison method was used to discover the categories from the data. Three coding processes, i.e. open, axial and selective coding were applied in data analysis.(Strauss & Corbin 1998). Assurance of confidentiality and anonymity in the research process and reporting was given to all respondents in compliance to the ethical requirement of the study.

FINDINGS

Seven categories were identified; (i) concept of health (ii) lifestyles (iii) spiritual belief (iv) personal and family factors (v) economic and social factors (vi) health care services factor, and (vii) supportive context. These will be briefly defined, described and illustrated in turn.

Concept of Health

A range of meanings were associated with the term 'health'. From the disease aspect, it was a kind of "freedom from disease". Conveying the emotional side of respondents were expressions like "being content", "being cheerful", "not being alone" and "having a good caregiver". Meanings associated with the spiritual needs were seen in the respondents responses as "being free of need of God's creatures (which means being in need of God)". Evidently there were expressions denoting the physical ability, i.e. "being active", "having the ability to work", and "having good support and economical procurement". Although the responses were expressed as single statements, the idea of 'health' actually incorporated various aspects of the person. Being independent, active, having a family and getting the social and economic support all contributed to the person's health and wellbeing. These are manifested in their attitudes and behaviors. An example illustrates this point:

> *"At this stage of life I believe that disease is one part of our life. If I have some support I think I'm healthy. I can be active and hopeful. To be healthy we should*

satisfy God and get his help. That's why I always give food and money to the needy. I pray to God and try to do some thing for others. If I do this God would support me too"(participant 3)

Lifestyle

This category includes all behaviors that relate to their nutrition, physical activity, adherence to medications, and compliance to health recommendations. Lifestyle as a direct agent is influential in promoting the level of health in the elderly. Most respondents feel that their day-to-day activity, nutrition and health care practices contribute to their health conditions. Those who said they had a good level of health thought that it was not necessary to do anything different. They did not feel they were vulnerable to any health risks, and therefore there was no reason to promote themselves to a better level of health.

Any change in the respondents' lifestyle was likely to be influenced by factors that include their level of knowledge, economic status, cultural beliefs, present illness, religious beliefs and perception about health. These factors could either act to facilitate or inhibit their health status. Another important factor was the extent of relatives' control over the individuals

"I know how to be healthy,- eat good things, for sure. But when I don't have enough money I can only eat something just not to be starved" (participant 10)

"After all is said and done, we are Moslems…By tolerating pain and having a life of hardship I shall lead to a good end, I mean in the other world. Because of this it is not important for me to change my conditions" (participant 3)

Spiritual Beliefs

Spiritual beliefs include dependence on the occult power and performing religious duty. Spiritual beliefs affected the elderly health care either positively or negatively. If they could use them to counter negative psychic effects of ageing, the elderly could increased their satisfaction of life. On the other hand the beliefs could lead to passive reactions if they were not directed at overcoming their physical constraints.

"I believe my life evolves during this period. I gain so many things, I have so many abilities… I should use my abilities to promote my life and give my experiences to others too (participant 7)".

"I think our conditions such as disease, problems and so on in old age are retributions of our actions when we were young. We have to respond to our actions - everyone is responsible for his own actions. Now is too late …we cannot do anything but to accept these conditions (participant 12)".

Personal and Family Factors

Personal and family factors are intertwined. Attitudes toward lifestyle, whether positive or negative, and the willingness to adopt behavioral change were partly determined by family support in coping with the aged. These categories are further divided into three sub-categories - adaptation mechanism, self-confidence, and family role in care. Most respondents resort to the use of emotive-based mechanism. They talked to family members and friends to gain their affective supports. They also attempted to focus on minor tasks so that they could forget their personal and health problems. However, these mechanisms had temporary effect. The problems remained.

The choice of adaptive mechanism depended on their knowledge and awareness about the needs of the elderly. Most influential was the individual's self-confidence in their ability in

initiating and sustaining desired lifestyle changes. Yet despite their awareness and self-confidence, very little attention was given to elderly care. Explained by the following respondent, the reasons relate to personal problems:

"After retiring I faced many problems. Although I have good experiences and abilities I have to stay at home. Everyday I go to the park to visit my friends and talk with them. This way I can forget my problems" (participant 17).

"…last year one of my relatives told to his mother that he was going to take her to her relative house. They took, yes but only to release her at a charity old people's home. They never visited since then" (participant 11).

Economic and Social Factors

This category includes all issues related to the elderly's various social problems arising from economic, and other societal problems. This appeared to be the most influential factor in elderly health care. Lack of financial and social support hindered most of the old people from complying with their medical treatment and adopting healthy behavior. The following expressions relate to this category:

"I suffer from the pain in my knee, I need medical care but I cannot go to get medical care because I don't have enough money, no insurance and financial support"(participant 1).

"…there is not any special place for the elderly in our city such as a cultural or social center…concerning transportation services in the city - there is no facilities for old people there. Because of this I have to spend my time at home and waste my time and life. I feel bad…I wait for dying" (participant 2).

Health Care Services Factors

Health care services include health planning related factors, human resources issues and limitations of health care system. Under the country's program of elderly health, care of the elderly is the responsibility of the health care network in Iran. Present situations reveal that the system is incomprehensive, there is lack of intersectoral cooperation, lack of knowledge on elderly's needs, management and administrative problems in health care centers, multiple issues related to accessibility, professionals, and human resources.

As voiced by twp respondents:

"I came to this center (health center) because I have several problems. When after they checked my blood pressure they told me that they could not do anything for me. They told me I should go to a private clinics as there is not any specialist in this center to attend to my problems" (participant).

"…there isn't any health care center near my house. To come to this center I have to pay too much money and I have to come with one of my child because I cannot come here alone. So I cannot come here if I need to and I cannot come regularly"(participant 5).

From one of the health care managers these statements were said:

"To provide health care for the elderly we need sufficient and trained staff. In health care centers we don't have facilities to provide care for the elderly. There is not enough staff and because of some limitations in hiring human resources our health care workers have several tasks to do, and because of this they attend according to priorities. They don't see old people as a priority".

Supportive Context

This category involves issues in supportive contexts with the properties in terms of respect, love, kindness, pecuniary support, and information and knowledge. Old people received three

kinds of supports - affective, instrumental and informational supports. More often they received affective support through family members. This domain of support not only provided comfort but was able to reduce the respondent's stress and anxiety. These led to their having a sense of being mentally and emotionally healthy. Although this factor could stimulate the elderly to adopt a healthy lifestyle it was not sufficient and influential enough.

Most respondents' views stressed on the need for instrumental support in the form of pecuniary needs, and health and treatment care from the family and society. Among barriers for instrumental support were factors related to economic, family and society, insurance services, accessibility to health care team and services, organization. Informational support was another category.

Respondents expressed their feelings about the issue:

> *"…in this age of new generations every thing are changed. They don't show respect for grandmothers and grandfathers. My wife passed away one year ago, and I am alone…my son don't pay attention to me. Till today it's one year now that my son don't open my house's door (visit me). It isn't important for them what happen to me. I think it is due to their problems - they have so many problems in their life…"(participant 11).*

As one of the managers said:

> *"Conditions of insurance for almost 50% of the elderly is not clear …almost four million of them don't have financial provision…"(participant 18)*

DISCUSSION

The analyses have led the researcher to identify seven major categories that were influential in elderly health care; concept of health, lifestyle, spiritual believes, personal and family factors, economical and social factors, health care services factors, and supportive context. The elderly's concept about health was found to be key factors and was similar to the findings from Pullen (2001) and Mahasneh (2001) wherein it was shown that the individual's definition of health strongly influence their health behaviors.

In this study it was shown spiritual beliefs had a supportive role in effecting mental health, yet the factor tended to play a negative role due to the social and cultural conditions in Iran. Rather it acted as a barrier to better life style for the elderly. Similar findings were shown in Rowe et al (2003) study.

Much remained lacking at the personal, family and societal levels. Despite having the self-confidence and the ability to adopt psychological and behavioral mechanisms to deal with limiting situations the individuals could not overcome the lack of facilities and efficiency at the organizational and larger economic levels. Shortage of health staff and related resources were beyond their understanding and control. While the elderly were in dire need of information and knowledge the existing facilities were not conducive for them to think more about promoting their health. Much was to be expected if they could access to places where they could increase their awareness through information and knowledge. As illustrated by Pat and Mapp (1999) and Speck and Harrell (2003) studies, problem-based adaptation mechanisms were used by individuals who had a higher level of information and awareness, hence leading to their having more interest to change their lifestyle.

In conclusion, this qualitative study has enabled the collection of in-depth data on the elderly's perception and views on their health and the factors that influence their health care. The data is being further analyzed to explore emerging theory. So far, much has been gained

from both the recipients and provider of elderly health care. The findings would be very useful to Iran health planners' effort to improve the quality of life of its elderly population.

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ORAL HEALTH SERVICE NEEDS AND BARRIERS FOR CHINESE MIGRANTS IN WELLINGTON AREA

Zhang Wei

ABSTRACT

BACKGROUND INFORMATION

Chinese migrants form an increasing percentage of the New Zealand population. Their general and oral health is thus becoming more important for the health sector. However, basic data in New Zealand showed Chinese have very low access to dental services. No matter whether Chinese initially have generally better oral health due to the 'healthy immigrant effect', a regular check-up is still important to keep good oral health. There has been no further study to find out the reasons behind the low access rate.

METHOD

This is a small-scale qualitative research, as part of the author's Master of Public Policy study. 21 Chinese migrants, two private dental surgeons and two community-based dental providers in the Greater Wellington region were interviewed. Tape records were transcribed to screen emerging themes.

RESULTS AND DISCUSSION

The information gathered showed low access to dental services, and eight barriers were identified: 1 cost of dental fee, 2 language barrier, 3 lack of knowledge of dental health, 4 low priority of dental treatment, 5 dental relationship barrier, 6 lack of information, 7 difficulties in making appointments, and 8 transportation impediments. The study also confirmed the existence of anecdotal 'Holiday Treatment Plan' among migrants. A Dynamic Model is created along with four case studies to demonstrate the complication of Chinese migrants' dental behaviours.

CONCLUSION

Findings fail to show whether Chinese migrants have benefited from government health policies. Further investigation is needed.

Although the study was small in scale, the findings would be useful to oral health policy makers in New Zealand.

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INTRODUCTION

The New Zealand 2006 Census (Statistics New Zealand) shows 26.5% of people who live in New Zealand were born overseas, and the Asian population is 9.2% of the total population. The newly released information from Statistics New Zealand shows Asian populations is

projected to make up 16% of the New Zealand population by 2026. Chinese are almost half (42%) of the Asian population and 3.8% of the 2006 New Zealand population, a 1% increase from 2001 Census (Statistics New Zealand, 2002). This means Chinese migrants are becoming a more important part of the New Zealand society. The health of Chinese migrants should not be neglected.

World Health Organisation (Petersen, 2003) emphasised the relationship between oral health and general health, and stated "oral health is integral and essential to general health, and oral health is a determinant for quality of life". The oral health service contributes to better oral and general health of the population. However, basic data in New Zealand show Asians and in particular Chinese have low access to dental services (Ministry of Health, 2004; Badkar et al., 2006; Scragg & Maitra, 2005;).

This is a concern. No matter whether Chinese initially have generally better oral health due to the 'healthy immigrant effect' (McDonald & Kennedy, 2004), a regular check-up is better than going-when-there-is-toothpain to keep good oral health (Thomson, 2001). But there is very little further research to investigate the factors which lead to the low access rate. The Asian Public Health Project Report (McDonald et al., 2003) noted cost and lack of information as barriers to access. A study by Clark et al. (2004) surveying low-income people in Wellington identified cost, lack of dental knowledge, dental fear, and transport as the main barriers. However, there is no detailed study for Chinese migrants.

This was a small scale research within the Chinese migrant community in Wellington, as part of the author's Masters of Public Policy study in Victoria University of Wellington in 2007. The objectives of this study are:

- to find out the barriers to access dental services for Chinese migrants
- to understand the dental behaviours of Chinese migrants
- to provide evidence to policy-makers to understand the issue

METHODOLOGY

This is a qualitative study interviewing 21 Chinese migrants and four dental clinics in the Greater Wellington area. It was decided to include Chinese from all Asian countries, whose mother language is Mandarin or Cantonese. Because New Zealand government provides free school dental services, people younger than 18 years old might have different views and dental habits. Thus only adults who migrated here when they were older than 18 years old were recruited in this study.

Advertisement emails were sent to personal networks and local Chinese associations to recruit Chinese migrants. Dentists were approached personally. Respondents were sent an information sheet (for Chinese speaking participants, the Chinese translation was attached) and consent forms were signed before the interviews and stored for reference. Respondents were interviewed in peer support clusters in their preferred language (Mandarin, Cantonese or English) e.g. wife and husband, neighbourhood friends, or workmates. After the interview, each migrant received a tube of tooth paste as a token of appreciation.

The interviews with dental providers were carried out in English at dental clinic premises. The interviews normally included a dentist and a manager/administrator to collect data. When the dentist was not available, dental assistants were interviewed.
Interview question samples are attached in the Appendix.

All interviews were tape-recorded and transcribed. A systematic process was used to analyse the content of the transcripts. (Interviews carried out in mandarin or Cantonese were translated into English by the researcher.) Chinese migrants and dental providers' transcripts were analysed separately but collaboratively. For each transcript of Chinese migrants,

emerging themes were screened. Common themes were grouped together. Dental providers' opinions were compared and matched with findings from migrants' interview analysis.

Summary of Participants

Participant	Home Country	Age	Sex	Income	Clinical symptom	Self-reported oral health	Regular checkup
1	P R China	Middle	F	Middle	Abscess, bleeding while brushing	Diagnosed periodontitis	No
2	P R China	Middle	M	Middle	Bleeding while brushing	OK	No
3	P R China	Elderly	F	Pensioner	Dentures	OK	Yes
4	P R China	Elderly	M	Pensioner	Dentures	OK	Yes
5	P R China	Middle	F	Middle	Caries	OK	No
6	P R China	Elderly	F	Pensioner	Loose teeth	Diagnosed periodontitis	No
7	P R China	Elderly	M	Pensioner	Loose teeth & caries & black front tooth	Eating difficulty & tooth pain	No
8	P R China	Elderly	F	Pensioner	Caries	Tooth pain	No
9	Malaysia	Middle	M	Mid-High	Denture	OK	Used to
10	Malaysia	Middle	F	Middle	-	OK	Yes
11	P R China	Middle	F	Low	-	OK	No
12	Malaysia	Middle	F	Middle	-	OK	Yes
13	Malaysia	Middle	M	Middle-business	Caries	OK	No
14	Malaysia	Middle	M	Middle	Cracked crown	OK	No
15	Singapore	Middle	F	Low-Middle	-	OK	No
16	Hong Kong	Elderly	F	Pensioner	Bleeding while brushing	OK	No
17	Hong Kong	Elderly	M	High-business	-	OK	Yes
18	P R China	Middle	M	High-business	Black front tooth	OK	Yes
19	P R China	Young	M	Middle	-	OK	No
20	P R China	Elderly	F	Pensioner	Denture	Loose teeth	No
21	P R China	Elderly	M	Pensioner	Whole denture	OK	No

FINDINGS

Many participants have reported long lasting symptoms and some of them have had a degree of tooth discomfort in the last 12 months. Periodontal diseases and caries are the most prevalent diseases. Tooth pain, bleeding gum, inflammation of gum, abscesses, and loose teeth are the common symptoms.

Chinese migrants perceived the need to seek dental treatments to relieve these symptoms, but normally they did not see a dentist until the discomfort had affected their eating to an unbearable stage. Many migrants reported they have had the symptoms for 10 or even over 20 years. In general, no health action was taken promptly and they lived with the symptoms.

It is very obvious that most interviewees have the 'no pain, no problem' belief, which means when teeth are functioning, there is no need to see a dentist. Currently, only six out of 21 participants have regular check-ups.

Why Don't They Visit A Dentist?

Eight barriers in accessing dental services emerged from the interviews of Chinese migrants and were endorsed by dental providers as well.

1 The cost of dental treatment is the greatest barrier. All interviewed Chinese migrants complained about the expense of seeing a dentist in Wellington and said the high cost was the dominant barrier to them.

> *"If I did not save any money, suddenly I suffer tooth problem and $80 just gone…for a person with low income, $80 less in a week might mean no food for the family in that week." (1[4], F)*
> *"Too expensive. What can you do about your teeth?" (7, M)*

Two female migrants simply sought self-treatment - taking some antibiotics (brought over from China) to treat their periodontitis. One participant rejected the necessity to see a periodontist and the other suffered serious side-effects.

For prevention treatment, Chinese migrants expressed similar opinions.

> *"I wish to have such habit, but too expensive… Just too expensive, solely the issue of money. I know I should have regular dental check-up." (1, F)*

A few participants expressed that they would visit a dentist everyday if the service were free. The preferred price of dental treatment is quite low: relief of pain should cost as little as $10, the charge when Community Services Card holders visit a doctor.

Dentists acknowledged the cost barrier but said that although prevention treatment is not expensive, migrants tend to delay treatment to the stage where treatment is complex, and the fee would be higher.

2 Language is a specific barrier for Chinese migrants, especially those older migrants who came to New Zealand to join their adult children after retirement. It is difficult for them to express themselves and communicate with dentists for treatment. The language barrier can even stop them from approaching an English speaking receptionist.

> *"Language is the main problem. No matter seeing a doctor, or a dentist, in general, seeking medical service is the same. Language problem has stopped me seeing anybody here. It was not until about last year, I started to see a doctor once or twice. It is not because I was never sick, but because of language." (6, F)*

This could be a danger, as the disease was present, but no treatment was done, and the morbidity might deteriorate to mortal danger.

The language might also affect the transportation or accessing the dental service when migrants do not know the location.

> *"Everything is in English. We don't know how to ask other people [for directions], not sure how to find a dental clinic…It comes back as a language issue, not sure how to find the dental clinic…I even don't know how to get a taxi. This is the fact." (6, F)*

Another thing about the language barrier is related to the specialised vocabulary of dental treatment.

> *"Of course Chinese dentists can explain things clearer….there are so many jargons in medicine. Language issue." (11, F)*

For the participants who cannot communicate efficiently in English, friends or family members' help is needed.

> *"I have to ask friends to go with me…very difficult…there is no interpreter, so seeing a dentist is troublesome." (6, F)*
> *"In 2005, my oldest daughter took me to the hospital to check it." (8, F)*

[4] The number refers to the Participant number in the Summary of Participants table.

They have to rely on their children or friends to translate for them, but this was not always convenient.

> *"Children all work. They have to take time off work to help me. It is so troublesome…It is not worthwhile. So I don't see dentist again."(8, F)*

For these vulnerable migrant groups, their children's help is vital for access to dental service but it is not available all the time. Quite often, their adult children migrate to Australia or go back to China for better jobs or business, and leave the elderly parents in New Zealand for a peaceful retirement life. This is quite common among Chinese migrants (no statistics, but an observation through experiences and conversations with Chinese community leaders).

> *"When our son lived here, we could see the local doctor. But he went to Australia. No language, what can we do?" (7, M)*

Even for migrants whose English is competent, the experience sometimes could be frustrating through cultural differences and lack of understanding of dental terminologies.

> *"He explained things to me, but I think his English is not native… he is not Asian, maybe Mediterranean… so I guess he did not understand what I really wanted to ask, and I couldn't fully understand his explanation." (5, F)*

Less-than-efficient communication made one female migrant reluctant to take further dental treatment.

Although there are interpreter and translation services in the Wellington area, some people have no information about how to get that. Some have a concern about the interpretation cost. It is common that interpreting services charge about $100 per hour, plus transportation mileage. The free Language Line established by the Office of Ethnic Affairs is not known to some migrants. Wellington People's Centre has to pass the interpretation cost on to patients. If the patient is a member of SECPHO[5], there is a fund to use and charge back to SECPHO. The government language line is not a free service for them. It was said that the public Hospital pays for interpreters. The patients do not need to pay anything for the interpretation service. Nevertheless, there is no interpreter service at private clinics. Thus the interpretation services for Chinese migrants are not adequately supplied.

3 Lack of knowledge of dental health is very common among migrants, thus they do not see the importance of oral prevention and having regular check-ups.

> *"No problem with my teeth…Never been to any dental service, because there is no discomfort." (19, M)*

They do not know that bleeding gum after brushing is abnormal. *"I have the bleeding gum, just rinse a lot and spit out…I think maybe just my brushing hurt part of the gum." (13, M)*

They do not know the difference between caries and periodontitis. One female participant complained the extraction of her pure white no-caries teeth and distrusted the dentist afterwards, although the extraction was necessary for the periodontal treatment.

Dentists agreed that Chinese migrants not only have little dental knowledge, but if they have any, they have the wrong knowledge. Migrants do not believe bacteria are the cause of caries, but insist the 'Qi'<air> inside their body is the cause; some migrants have religious beliefs not to fill or extract teeth for teenagers. In general, dentists have negative perception of Chinese migrants as patients and have more difficulties treating them.

[5] South East and City Primary Health Organisation, which includes the Wellington People's Centre to provide dental treatments to low-income people in Wellington.

4 Dental care has a low priority in Chinese culture. Chinese migrants compared oral health with general health and treated oral health as of minor importance. They believe dental diseases are never fatal. They do not know the link between gum infections and blood poisoning.

> *"Oral health is all about minor problems…not like the disease inside your body, dangerous…….of course, oral health is not as important as general health. It will not deteriorate to too serious." (11, F)*

Migrants also point out that they have to put oral health as low priority when they migrated to New Zealand. They need to settle down first before they can look after health.

> *"Life is not settled, impossible to pay attention to your teeth…New settlers have to consider survival issues, everything has to be done, you haven't considered the oral health yet." (19, M)*

Currently the Chinese saying 'tooth pain is not a disease' is widely accepted among the migrants.

5 The relationship between dentists and migrants is complex. Some Chinese migrants believe that New Zealand trained dentists do not have enough practice or experience, due to the much smaller population. So they do not want to be the next experiment of local dentists. One migrant had very bad experience in the New Zealand primary health system. Thus she lost confidence of local dentists consequently. However, some migrants have reservations about the conduct of Chinese dentists instead. *"If it were me, I definitely use the Chinese dentist, for easy communication. If my English is good enough, I will prefer a Kiwi dentist…I always think Kiwi dentist is more principled." (6, F)*

This is a bit unexpected to the interviewer. Because language has been identified as a big barrier for Chinese migrants, elderly Chinese should want to have Chinese dentists. Two studies about Cambodian and Vietnamese women in America showed that the same-ethnicity physicians could have negative effects on breast cancer screening. It seems that such an anti-Chinese-dentist attitude in this research is unexpected to the researcher, but is not unusual for migrants' health behaviours. It appears trust is a strong factor affecting migrants' health behaviour.

6 Lack of information has hindered people's access to dental services. Chinese migrants are new to the health system in New Zealand and they do not know where to go and what to do, they do not know the relationship among GPs, hospitals and dentists.

> *"I feel after we came here [New Zealand], we are not familiar with the dental service system. We have a lot of dealings with GP…but the[health] system is strange to us…I just can't understand one thing… tooth pain, if it happens at night, where should we go, dentist, GP, or hospital? Maybe nobody in the three departments will help you, then what can you do? This is really a problem."*

Only few migrants know the public hospital has dental clinics. However, none of interviewees was aware of the existence of the community based low-price dental clinics in Wellington city. Thus, postponing expensive dental visits become their first choice.

7 Making an appointment is difficult for some Chinese migrants. Chinese migrants complain they have to wait for days for their treatment.

> *"All dentists were booked for another 10 days. I could not wait…I got the pain on Friday night, but I had to wait until Monday to make phone calls, it was not guaranteed that I could see a dentist on Monday, what could I do? I tried many dentists, only the third dentist could make an appointment; however it was not in the morning, but afternoon appointment. This is a worry." (1, F)*
>
> *"Their available appointment times don't suit me. I have to work." (9, M)*

In general, the difficulty in making appointments with dentists is universal, which is confirmed by dental providers. Thus, migrants have no incentive to contact dentists when pain recurs as they still will not be treated immediately and they had to suffer the pain for days in either ways.

8 Lack of transport is a barrier for a few elderly Chinese migrants. Some elderly migrants have to rely on pubic transport, but the English map, timetable and the location of the clinic might not be easy for them. The language barrier could confound the transportation barrier.

> *"It comes back as a language issue, not sure how to find the dental clinic from Yellow Pages…I even don't know how to get a taxi. This is the fact." (6, F)*

Migrants who work tend to choose dental clinics on their way to work or close to their work.

Holiday Treatment Plan—Is It the Only Way?

An interesting phenomenon among Chinese migrants is the Holiday Treatment Plan to tackle their dental problems. They put off any dental treatment, endure the discomfort, and wait for a trip back to their hometown. Such practice applies to both prevention and emergency treatment, among migrants from China and Malaysia. The main driving force is the cheaper dental cost in home countries. For example, a complex denture will cost NZ$5000 in Wellington, but the same denture will only cost them RMB$2000 (NZ$350) and NZ$1500 airfares. When they were asked how they weigh the opportunity cost (delay of treatment, enduring the pain for a long period, affecting eating ability, negative consequence of untreated inflammation), they reported they did not think about it that much, and they could cope with these as long as necessary. The other factor favouring the Holiday Treatment Plan is the language barrier for some Chinese migrants. The respondent who complained that she could not communicate with the dentist, had difficulties finding the place, and was not be able to go to any dental services in Wellington, talking in Chinese and having treatment in her home country seems like the only option.

DISCUSSION

The findings of this research provide further evidence to confirm the existence of barriers in accessing dental service for migrants which are identified in the international literature (Martin & Smith, 1991; Widstrőm, 1985; Williams & Gelbier, 1988; Williams et al., 1995) and New Zealand research (Jamieson & Thomson, 2002; Clark et al., 2004; Makowharemahihi, 2007; Petelo et al., 2004). However, there are new developments.

The British study (Williams & Gelbier, 1988) found almost all migrant mothers are aware of available health services, while the majority of Chinese migrants in this research are not aware of available dental services in Wellington. A New Zealand research (Clark et al., 2004) marginalised language as a barrier in the survey, possible because that sample population was low-income people, instead of migrants. Another New Zealand study (Petelo et al., 2004) looked at Pacific people's oral health in Christchurch and the findings did not suggest that many Pacific people return to their homeland to obtain dental care at a fraction of the cost of New Zealand services. However, such a 'Holiday Treatment Plan' is very common among Chinese migrants in this study.

Dynamics Model -A Way to Understand Dental Behaviours

From the previous analysis of all interviews, it is clear that barriers do exist in accessing dental care for Chinese migrants and many factors could affect their decisions on accessing dental services. If we can model their behaviour, a better policy analysis might be carried out to target a specific barrier.

Andersen created a behavioural model in 1968 using multivariate analysis to define determinants of health services access. These include

- Predisposing characteristics (demographic, social structure and health beliefs)
- Enabling resources (including the financial ability to pay and the availability of care)
- Perceived need for dental treatment (e.g. symptoms, disability days)

This model is still widely applied (Davidson & Andersen, 1997; Lai & Hui, 2007; Jang et al., 2007). However, the model only focused on a path analysis, a linear relationship among all factors: Predisposing→Enabling→Need→Use. From the interviews of Chinese migrants, the dental behaviours are far more complicated. Thus, a dynamic model is created here trying to demonstrate the dental health behaviour of Chinese migrants in the Wellington area.

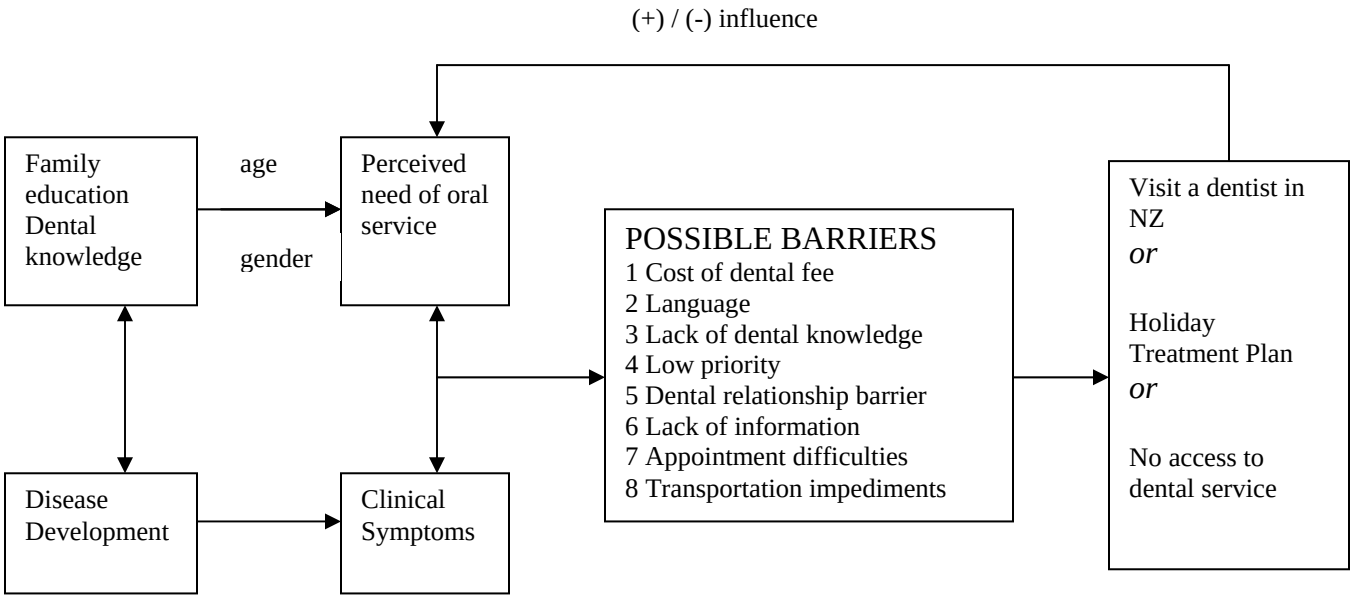

Figure 1. Dynamic Model to explain Chinese migrants dental behaviours.

As the model shows, clinical symptoms do not solely determine the perceived needs, which might vary for different age and sex. Own culture and family education play an important role here as well. Migrants in Wellington have eight barriers to face. Their decisions could be visiting a dentist, holiday treatment or no action. Each action could have either a positive or a negative influence on their perceived needs, plus the change of clinical symptoms, they might try to go through the dynamic circle and make a second decision on their dental behaviours.

FOUR CASE STUDIES

Four representative cases drawn from the interviews are used to prove that the Dynamic Model does help understand the behaviours of Chinese migrants.

Case 1: (5) She is working full-time with a good income. The tooth chip was not treated for over 20 years because the symptoms were not painful enough for her to see a dentist. One day, she suddenly felt a sensitive shock and the perceived need of treatment increased over her threshold. There is no cost or language barriers for her, but lack of dental knowledge had hindered treatment over 20 years. However, the results of the first treatment were not satisfactory, because the dentist did not explain the consequences to her clearly before hand. During her root canal treatment, the dentist cleaned her teeth, but failed to explain the

possibility of exposure of sensitive tooth root. She felt the discomfort of root canal treatment and the sensitivity of her teeth. The experience had negative influence on her perceived future needs for dental treatment. The bad relationship with her dentist led to no more dental visits.

In the meantime, she learns how to look after teeth from her daughter's school dental programme, and applies brushing, dental floss and mouth wash every day. She believes she looks after her teeth very well, thus her perceived need of dental check up is low.

With this lowered perceived need, along with bad dental relationship barrier, she went back to the 'no access to dental service' group.

Case 2: (6) She is a retired pensioner. Through her family education she believes oral problems are not diseases and not as life threatening as other health problems. When she was in China, she had been diagnosed with periodontitis with very serious clinical symptoms, but she had a very low perception of treatment need. So she lives with loose teeth for many years. For her, there were eight barriers in accessing dental services and she was in the 'no access' group.

Luckily, she met a Chinese dentist in church who had a clinic in the neighborhood, when her clinical symptoms got worse and she had a higher perceived need. So she went to the Chinese dentist which removed her language barrier. The good experience had a positive influence on her and she realised teeth were important for health. But when it came to the denture issue, cost was a big barrier, so she waited and went back to China for denture treatment. Later her other teeth became loose and the increased perceived need of treatment tried to push her through the barriers but failed, because the Chinese dentist had left Wellington. Language, transportation and cost barriers put her in 'wait and go back to China' group.

Case 3: (12) She is working part-time with medium income. She had relatively good family education with high perceived need for dental treatment. Because of cost barrier, she used to go back to Malaysia for treatment. During her pregnancy, her oral health deteriorated a lot, because she could not stand brushing her teeth and the smell of tooth paste. The perceived needs increased, while cost had become less of a concern, she chose a dentist close to her work for treatment. The good treatment result had influenced her dental relationship positively and she has kept the regular check-up habit. Although there are no more clinical symptoms, she still believes in the need to see a dentist. And she never goes back to Malaysia for dental treatment, but keeps the appointment here in Wellington for prompt services. She had changed from 'wait and go home' to 'visit a dentist in New Zealand'.

Case 4: (18) He is middle aged earning high income. His family education did not include much dental knowledge and he lived with the injured front tooth for over 20 years, even though it turned black. His perceived need of dental treatment is very low, although the clinical symptoms are very obvious. After he came to New Zealand and got to know many local European friends, he observed their good oral health, clean teeth and better appearance of the teeth. During his acculturation process, he started to realise the importance of oral health. So he started to have regular dental hygienist cleaning and check-up. For him, the barrier to prevention treatment is just the lack of dental knowledge. Once he felt the positive influence of regular cleaning, which helps him in social life, he kept the habit and even tried to introduce the habit to his friends.

However, the front black tooth was still not treated until the dentist warned him about inflammation. His perceived need increased so he passed through the barrier block and let the dentist treat it. However, his Chinese culture made him think it was not necessary to whiten

the tooth as only actors need to be good looking, so he remained in the 'no action' category for whitening treatment.

The above four representative cases show Chinese migrants dental health behaviours are dynamically changing. The Dynamic Model tries to summarise all the factors that could influence Chinese migrants' dental behaviours and to emphasise the complications when all factors are interwoven The model incorporates predisposing factors, clinical symptoms, perceived needs, identified barriers and three possible health actions, which are all drawn from the qualitative research findings. Any government intervention policy should take into account all of the factors.

CONCLUSION

This is a small scale study. The purpose is to raise the awareness of the dental service needs of Chinese migrants in Wellington. The study identified eight barriers to accessing dental services and tried to understand their dynamic dental behaviours. The 'Holiday Treatment plan' was also confirmed in this research.

The Government needs to have a comprehensive policy package to improve the situation. Further study on policy options should be carried out and implemented to improve the access to dental services for Chinese migrants.

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APPENDIX: Interview Questions samples

Table 1 – Chinese migrants interview questions sample

1	Have you suffered any pain, bleeding, trouble eating or other inconvenience in the last 12 months?
2	What did you do about it?
3	Do you think oral health is important? Why or why not?
4	When was the last time you visited a dentist? For what?
5	Why don't you regularly visit a dentist?
6	What do you think about dental services in Wellington? What is good? What is bad?
7	What do you want the Ministry of Health to do to improve oral health service?

Table 2 – Dental providers interview questions sample

1	Do you have Chinese-speaking staff?
2	On average, how many Chinese patients do you treat in a week?
3	What are their normal symptoms?
4	Do you want to have more Chinese patients? Why or why not?
5	From your point of view, why don't Chinese migrants access dental services?