SCHOOL OF POPULATION HEALTH
FACULTY OF MEDICAL AND HEALTH SCIENCES

THE INAUGURAL INTERNATIONAL
ASIAN HEALTH CONFERENCE

ASIAN HEALTH AND WELLBEING:
NOW AND INTO THE FUTURE

CONFERENCE PROCEEDINGS

4 - 5 November 2004
Auckland, New Zealand
Asian peoples make up the third largest and the fastest-growing ethnic group in New Zealand and estimated to double to nearly 14% of the nation’s resident population by 2021. About 65% live in the wider Auckland area and nearly one in five people in Auckland City identify themselves as “Asian”.

New Zealand’s Asian peoples have diverse languages, cultures and health needs. Key health challenges include mental health concerns, road and water safety, domestic violence, problem gambling, barriers to health care, sexual health issues including unwanted pregnancies, ischaemic heart disease, stroke, obesity, diabetes, cancer.

To address these issues and the absence of reliable, quality data about the extent and severity of Asian health problems in New Zealand, the School of Population Health at The University of Auckland has launched the Centre for Asian Health Research and Evaluation (CAHRE) in May 2004. With a vision to develop a Centre of excellence of both national and international repute, the goals of CAHRE are to improve understanding of health and social issues affecting Asian peoples in New Zealand and the wider Asia-Pacific region; cultivate an interdisciplinary approach to studying Asian health; and provide evidence-based information to strengthen the capacity of health systems to deliver effective and culturally-responsive health care.

Research projects currently undertaken by CAHRE include among others, a study of family violence in Chinese and Indian communities, use of Strengths Model in Chinese mental health, use of interpreters in mental health, training module on Asian culture for health practitioners, and provision of assistance to establish a public health school in the Asian region. With sufficient support from governmental and private sources, CAHRE’s future projects will include: Mental health, cardiac rehabilitation, cancer treatment and palliative care, complementary ethnic medicine, and the development of population health approach to injury prevention and rehabilitation for Asian peoples in New Zealand.

The Inaugural International Asian Health Conference on November 4 and 5 is hosted by CAHRE

For further information about CAHRE, please contact:
Dr Samson Tse
Director, Centre for Asian Health Research and Evaluation
Associate Dean International, Faculty of Medical and Health Sciences
Phone: 64-9-373 7599 ext 86097
Fax: 64-9-303 5932
Email: s.tse@auckland.ac.nz

Members of Centre Steering Committee
CHAIR, Dr Samson Tse, CAHRE Director
Dr Peter Adams, School of Population Health
Ms Yvonne Bray, School of Population Health
Ms Janet Chen, Auckland Regional Public Health Service
Dr Lorna Dyall, School of Population Health
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Ms Gigi Lim, School of Nursing
Associate Professor John Raeburn, School of Population Health
Dr Yogini Ratnasabapathy, Clinical Senior Lecturer, University of Auckland; Waitemata District Health Board
Professor David Thomas, School of Population Health

Members of Advisory Committee (external)
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Mr Naing Thein, Community Manager, Auckland Refugees as Survivors Centre
Mr Richman Wee, Project Manager, Human Genome Research Project, Faculty of Law, University of Otago
Dr Kenneth Tong, General Practitioner, Senior Lecturer, University of Auckland

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Review and Editorial Committee:
Dr Samson Tse, School of Population Health, The University of Auckland
Mr Anil Thapliyal, Chief Executive Officer, Assured Directions
Associate Professor Sanjay Garg, School of Pharmacy, The University of Auckland
Ms Gigi Lim, School of Nursing, The University of Auckland
Dr Madhumati Chatterji, Public Health Physician, Ministry of Health

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Kia ora, members of the Conference Organising Committee and Editorial Committee are pleased to welcome you to the Conference and this Book of Proceedings.

It is very important for you to know how this Book of Proceedings has been organised to accomplish its goals, and why these goals are worthwhile. Conference like this is often seen as a “bubble phenomenon” that a burst of activities went to the event, yet there is little attention paid to capture what have been presented in the Conference. Furthermore New Zealand has very limited research-based information and systematic study on Asian health and wellbeing.

Every presenter in the conference was invited to contribute to this Book of Proceedings. All submitted manuscripts were double-blind peer-reviewed to ensure that they are of publishable standard. I would like to thank authors for their effort and commitment. Publishing an article is quite like weaving, which is a common heritage in Asian region and New Zealand Maori culture. Both publishing and weaving start with rough thoughts and ideas. The process from planning to completion is not always easy and straightforward in particular we have to acknowledge research on New Zealand Asian people’s health and wellbeing is a new discipline and most of us are emerging researchers in the sector.

In the realm of research, the pain and suffering of human participants with whom we work, easily fades into the background and becomes just a “statistic” or “research finding”. Adequately factoring research findings into better health and social services, or policy changes still presents a significant challenge to us.

Finally Ms Yanbing Li from the School of Population Health and Ms Lynda Booth from the Centre for Continuing Education should receive special thanks for their help in formatting the manuscripts and putting this Book of Proceedings together within a very tight time frame. Also my heartfelt appreciations go to members of the Editorial Committee for reviewing the manuscripts in the midst of their already very busy schedule. Enjoy reading this Proceedings of the Inaugural International Asian Health Conference: Asian health and wellbeing, now and into the future.

Dr Samson Tse
Chair of the Editorial Committee
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OVERARCHING FRAMEWORK FOR ASIAN HEALTH
IS “ASIAN” A USEFUL CATEGORY FOR HEALTH RESEARCH IN NEW ZEALAND?

Kumanan Rasanathan, David Craig, and Rod Perkins

ABSTRACT
This paper examines the increasing use of a novel conception of “Asian” as an ethnic group in New Zealand health research. This definition of “Asian” includes peoples with origins in East, South and Southeast Asia, but not from the Middle East or Central Asia. Potential methodological problems due to this aggregation of a diverse group of peoples are identified. Potential problems that this definition may cause for peoples who are excluded and the general problems of ethnicity in research are also considered. The paper concludes by highlighting some issues that require particular clarification in this nascent field.


Dr Kumanan Rasanathan
Public Health Medicine Registrar
The University of Auckland
Email: kumananr@hotmail.com

Dr David Craig
Senior Lecturer
Department of Sociology
The University of Auckland

Dr Rod Perkins
Senior Lecturer in Health Management
School of Population Health
The University of Auckland
INTRODUCTION

Chinese and Indian peoples have settled in New Zealand for almost 150 years, but historically they have been marginal groups. They have been the subject of xenophobia, resulting in measures such as the poll tax applied to Chinese settlers (Murphy, 2002), and, more recently, they have been constructed as “model minorities” (Ip, 1996). Prior to the last decade, little research has been conducted into their health status.

From 1991 to 2001, the New Zealand census shows that the population of people resident in New Zealand considered “Asian” increased from 99,759 to 237,459 people (Statistics New Zealand, 2004). This significant increase was the result of increased migration from East, South and Southeast Asia as a result of the removal of bias in immigration policy which occurred in 1987. There is also a growing fee-paying student population from Asian countries, which in 2002 was estimated to number almost 70,000 students (Education New Zealand, 2004).

This increased population has provoked interest in investigating the health of these peoples. Much of this research, reflecting varying popular and governmental usage, has grouped a range of minority peoples together as “Asian”. The following paper investigates the rationale behind this agglomeration of several peoples, and identifies potential problems with this usage in health research in New Zealand. The discussion concludes by noting particular issues that need to be resolved and providing recommendations for the use of “Asian” as a category in health research.

WHO IS “ASIAN”? 

The term “Asian” in its simplest sense refers to someone with origins in the Asian continent. However, in New Zealand, the term is increasingly used to refer to persons with origins in East, South and Southeast Asia – that is, excluding peoples from the Middle East, Russia and Central Asia (McKinnon, 1996). A line is generally drawn at either Pakistan or Afghanistan. Countries north or west of this line are excluded.

This definition is used by Statistics New Zealand and reflected in the census questionnaire – thus the Asian population referred to above does not include Middle Eastern peoples. This definition is also increasingly used in the health sector. Recent reports on “Asian” health in New Zealand (Asian Public Health Project Team, 2003; Ho, Au, Bedford, & Cooper, 2003; Ngai, Latimer, & Cheung, 2001; Walker, Wu, Soothi-O-Soth, & Parr, 1998) use this definition. One of these reports makes the assumptions explicit when it comments that the quota for refugees in New Zealand ‘includes a proportion of people from non-Asian countries (e.g. Iran and Iraq)’ (Asian Public Health Project Team, 2003, p. 39).

This definition has increasing currency in New Zealand, but it is a novel definition of “Asian”. In Asia itself, “Asian” lacks specificity as a term of description. However, the New Zealand definition of “Asian” identified above is dissimilar to other western countries. In the United States, Asian peoples have often been grouped with Pacific peoples as “Asian/ Pacific Islander”. East Asians are sometimes described as “Orientals” and Indians as “East Indians” to differentiate from the Native American “Indian” population. In the United Kingdom, “Asian” can denote varying meanings but
often refers to people with origins in the Indian sub-continent (Aspinall, 2003). In Australia, “Asian” is often used to denote peoples from Southeast and East Asia.

The crucial point is that the New Zealand definition of “Asian” is novel and specific in that it excludes some peoples who are palpably of Asian origin (such as those from the Middle East). It also groups together peoples in New Zealand who in the popular perception have traditionally been seen as separate groups, such as Chinese and Indians.

IS “ASIAN” AN ETHNICITY?

Most users of the term “Asian” in New Zealand allow that it includes an extremely diverse group. However, it is currently loosely used to suggest an ethnic group in New Zealand. The website for this conference asserts that “Asians are the fastest-growing ethnic group in New Zealand today” (University of Auckland, 2004) before going on to describe the large diversity within this group.

However, it is problematic to talk of “Asians” in New Zealand as a single ethnic group. Ethnicity is a complex concept, but it is generally agreed that ethnicity is a psychocultural rather than genetic identity. The criteria for ethnicity described in Table One are typical. Ethnic groups are generally conceived as meeting these criteria. It is difficult to see how the diversity of peoples currently included as “Asian” in New Zealand would fit these criteria to form a specific ethnic group. It is highly unlikely, for example, that many Indians would feel part of the same ethnic group as, or feel a “unique collective solidarity” with, Chinese (and vice versa), notwithstanding the fact that even these broad terms – “Indian”, “Chinese” – may not in fact describe ethnic groups in New Zealand given the diversity they themselves contain.

Table 1. Criteria for ethnicity (Ministry of Health, 2001).

- Sense of shared common origins
- Common and distinctive history and identity
- Collective cultural individuality
- Sense of unique collective solidarity

Ethnicity is not static. It is possible that the continued use of “Asian” in New Zealand will result in the ethnogenesis of an “Asian” ethnic group. Young New Zealanders of, for example, Chinese and Indian origin may begin to identify themselves as being of a common “Asian” ethnicity. It may be argued that a similar phenomenon is beginning to occur within Pacific peoples in New Zealand. However, given the tremendous diversity and difference within the Asian peoples in New Zealand, this may still be unlikely in the future.

THE USE OF “ASIAN” AS A CATEGORY IN HEALTH RESEARCH

“Asians” may not, as yet, constitute an ethnic group in New Zealand. However, it can not be denied that the agglomeration of a range of peoples as “Asian” in New Zealand has facilitated much of the initial research into the health status of these
peoples. In doing so, a critical mass of people has been achieved to warrant funding and interest. The recent reports on “Asian” health have given attention to the health needs of various small communities that may otherwise be ignored, such as the Cambodian, Sri Lankan and Vietnamese communities, let alone the larger Chinese and Indian communities.

However, there are two potential practical problems with the current usage. Firstly, the inclusion of such a diverse group of peoples in a common category may result in an averaging effect such that areas of disparity or need are masked. For example, analysis of Auckland New Zealand Health Information Service (NZHIS) data has shown that “Asians” have lower rates of hospitalisations and death than other ethnic groups, and that causes of death are similar to other ethnic groups in New Zealand (Asian Public Health Project Team, 2003). These findings are not surprising given the relative youth of the populations that make up the “Asian” category.

However, this can give the misleading impression that there are no particular concerns for “Asian” health. This is not the case. More specific research has identified particular issues in particular populations, for example, high abortion rates in Chinese students (Goodyear-Smith & Arroll, 2003). It is not clear how summary statistics for “Asian” people are useful. It is not surprising that averaging a population that includes both affluent and deprived socio-economic groups and includes both recent migrants and long established communities, with varying levels of education and English-speaking ability, will result in statistics not dissimilar to the mainstream. But such an approach runs the risk of ignoring groups with high needs related to ethnicity or culture.

This approach also runs the risk of homogenising the approach to a diverse group of people by implying that they are the same. This is certainly not the case for “Asian” peoples even in terms of crude risk factors. For example, Indian peoples seem to have a greater susceptibility to type two diabetes than many other populations (Liew, Seah, Yeo, Lee, & Wise, 2003). This susceptibility seems to be borne out in higher rates of diabetes in Indian New Zealanders (Simmons, Harry, & Gatland, 1999) than other groups, apparently including Chinese New Zealanders. Such differences can easily be lost if the emphasis is placed on “Asian” as a category.

This problem is compounded by the fact that the increasing use of “Asian” can mean that even studies which identify results on specific populations are encouraged to present their findings in terms of “Asian” as a whole. For example, the aforementioned study on abortion rates (Goodyear-Smith & Arroll, 2003) presents its results in terms of “Asians” despite the report identifying that the majority of women so described were Chinese. In fact, the number of “Asian” women who were not Chinese was negligible (Goodyear-Smith, 2004).

Secondly, if the use of “Asian” is justified by its facilitation of marginal groups, its specificity is problematic. That is, if “Asian” is being used in lieu of “Other” or “Migrant” (these are of course separate but intersecting populations), it would seem strange to exclude some of those who constitute “Other” or “Migrant” groups. The most obvious example is the exclusion of Middle Eastern peoples such as Iraqis and Iranians. It is difficult to argue that Chinese and Indians (both counted as “Asian”)
share some ethnic identity that Pakistanis (counted as “Asian”) and Iraqis (“non-Asian”) do not.

Some of the members of groups included as “Asians” obviously share similarities. But many of these similarities are due to being migrants with different cultures to the mainstream European and Maori cultures of New Zealand. If “Migrant” is the group facing similar problems that is aggregated as “Asian”, it is counterintuitive to exclude other migrants such as Somalis and Ethiopians. These excluded groups often have large refugee populations with particularly high health needs. It is a concern that in the quest for recognition for “Asians”, such peoples may become further marginalised.

There is the further concern that the relative good health of established “Asian” communities (such as some sectors of the Chinese and Indian communities) may divert the focus away from the health needs of migrants if they are all included together as “Asian”. Again, this may occur because the averaging effect of including all of these peoples together may mask the poor health status of some migrant groups.

ETHNICITY IN HEALTH RESEARCH

There is a considerable body of literature which examines the use of ethnicity in health research. The consensus is that ethnicity is an important variable that warrants investigation but that there are particular concerns that need to be accounted for when pursuing such research.

Senior and Bhopal (1994) point out that for ethnicity to be a sound epidemiological variable, it must be able to be measured accurately; it must differentiate populations in some way relevant to health; and that observed differences should lead to aetiological hypotheses or potential changes in health care. The problems of measurement of ethnicity are multitude but relate to the fluidity of ethnicity, the difficulty in collecting data and the temptation to use overly large, but inexact, categories.

To remedy this, an important guideline is the need to define the ethnicity of subjects in health research as specifically as possible (Anonymous, 1996; Aspinall, 2003; Kaplan & Bennett, 2003; McKenzie & Crowcroft, 1996; Senior & Bhopal, 1994). That is, as the British Medical Journal identifies in a style directive, “Asian” [is] less accurate than “UK born individuals of Indian ancestry” or “French born individuals of Vietnamese ancestry” (Anonymous, 1996) – data on self-assigned ethnicity, country of birth, and years in country of residence should all be collected and considered. Furthermore, researchers should explain the logic behind their categorisations (Anonymous, 1996; Senior & Bhopal, 1994) and in particular the manner in which participants were assigned to these categories (Kaplan & Bennett, 2003).

A further problem with the use of ethnicity in health research is that it is almost always confounded by socio-economic status (SES) (Senior & Bhopal, 1994). As such, it is important that SES data is also collected so that needs based on SES are not explained by ethnicity. That said, ethnicity of itself has a definite impact on health,
particularly health services access, so it is important that it is considered accurately by adjusting for SES.

The British experience with the use of “Asian” shows the problems of adopting a term for a group of people who do not identify themselves in the same way. As alluded to above, “Asian” in Britain often denotes persons with origins in the Indian subcontinent, but it can also refer to persons deriving from the whole of the Asian continent (Aspinall, 2003). The 2001 census in England and Wales included separate categories for “Asian British” and “Chinese or other”. However, there is little evidence that the multitude of ethnicities in Britain with South Asian origins greatly identify themselves as “Asian” (Aspinall, 2003). Moreover, the conception of “Asian” has fluctuated in even official usage (such as censuses) over the last twenty years.

If we relate this overseas experience to the current state in New Zealand, the guidelines for the presentation of ethnic data seem particularly salient, especially with regard to “Asian” New Zealanders. Few studies justify their choice of the novel New Zealand conception of “Asian” as subject, except to refer to the census categories. Rare justifications for the specific determination of only South, Southeast and East Asia as “Asian” point to the fact that ‘New Zealand “faces” the southern and eastern side of the Asian continent...these are the areas of most substantial population and of greatest contact with New Zealand’ (McKinnon, 1996, p. 82). But even these accounts allow that ‘Indians, the second most populous Asian community, would be called “Indian” more often than they are called Asian’ (McKinnon, 1996, p. 83).

PROPOSITIONS

The above discussion has highlighted some concerns with the current usage of the “Asian” category in health and health research. The intention is not to disparage the pioneering research that has occurred in the last decade into “Asian” New Zealanders (much of the primary research does focus on particular groups and, as such, is exempt from the bulk of the above criticism). The increased population and their collective consideration as “Asian” has certainly played an important part in the recognition of the health needs of “Asian” New Zealanders. The elevation of “Asian” as a category has provided some tangible hope for “Asian” New Zealanders of being considered as full citizens of New Zealand as opposed to marginal “Other” aliens. This inaugural conference itself is an example of the recognition of the health needs of “Asian” New Zealanders that may not have been possible without the consolidation of “Asian” New Zealanders as a large, growing population group that demands attention.

However, this discussion has attempted to identify potential problems that the use of the current conception of “Asian” may pose. This can be identified in terms of two strands. Firstly, there are methodological concerns with the use of “Asian” which may undermine further research if care is not taken with the use of ethnicity as a variable. Secondly, there is the concern that in the desire to provoke attention for a disparate group of marginal peoples as “Asian”, other peoples who are excluded on a questionable basis (such as Middle Eastern peoples), and thus continue to occupy the peripheries as “Other”, may be further marginalised.
This topic requires further debate, and the above discussion is an attempt to propose some of the issues involved. The following propositions identify issues that this author feels warrant particular attention.

“Asian” is not a coherent ethnic identity in New Zealand, but this may change

“Asian” does not describe the lived experience of any ethnic group in New Zealand currently. It is possible that this may change, particularly if the category continues to receive governmental backing. It may become an identity for New Zealand-born Asian New Zealanders whose parents come from a variety of ethnicities. But this is not the case at present, and as such its use for practical purposes should acknowledge the artificiality of the category.

Diversity within peoples must be acknowledged

It is important that the diversity of peoples is acknowledged and that they are not reduced to stereotypes of their ethnic groups. Even beyond the use of “Asian”, ethnic communities such as Chinese or Indian are extremely diverse. India is the origin of as many languages as Europe. There are also significant differences between new migrants and established communities. These differences should be acknowledged and research should not attempt to over-generalise.

Health research into “Asian” peoples in New Zealand should describe the participants involved rather than attempting to use a catch-all phrase

Given the problems with the precision of the term “Asian”, health research, even if focused on “Asian” peoples, should describe in some detail the participants involved. This information should attempt to include self-identified ethnic group, place of birth, length of residence in New Zealand, and proficiency in English. This data is essential in de novo studies and should be included in published results. In studies which use existing data, this is more problematic. However, the issue remains, and standard collection sources (such as NZHIS data) should be lobbied to be as precise as is practicable.

Researchers must justify why they are including particular peoples in their studies and why these peoples are included together

As discussed above, there are reasons why “Asian” peoples are considered together. However, the onus is still on researchers to justify why they are including “Asian” peoples together. The above discussion has argued that given the diversity of the populations contained within the current conception of “Asian” in New Zealand, summary findings for “Asians” are not particularly useful. If researchers want to present findings for “Asians”, they need to justify why their findings relate to “Asians” as a whole. Alternatively, they need to specifically identify which particular populations of “Asian” peoples they are referring to.
If “Asian” is to be persisted with in health research in New Zealand, a standard definition may be useful, so that studies are comparable

The current conception of “Asian” as discussed above has growing currency, but its exclusions are debatable. Furthermore, it differs from international usages. As such, it may be useful for debate to produce a standard definition which is adopted by researchers in New Zealand. The current definition follows census usage. There is considerable input into the way census categories are formed, with a review having been recently completed. However, there are particular issues for health research in the use of ethnicity and as such, debate and consensus as to what should constitute “Asian” in New Zealand health research is required – if such a term is adjudged useful at all. Standardisation is important as more research occurs to allow comparison between studies.

Why are these peoples grouped together as “Asian”?

The fundamental question is, why are we grouping these peoples together as “Asian”? It must not only be because these peoples are marginal. To study people’s health together, they must have some common experiences that shape their health similarly. Ethnicity shapes health therefore studying ethnic groups is valid. “Asian”, however, is not as yet a valid ethnic group in New Zealand. The consolidation of researchers into “Asian” health may provide valuable collegial and logistical benefits. But such pragmatism does not justify the research itself following similar paths. A critical mass of “Asian” health research and researchers in New Zealand can surely be built up without ignoring specific communities and resorting to “Asian” as subject. The aim of such research is surely to inform the health of the range of peoples who, whilst they may be able to be classed as “Asian” New Zealanders, deserve to have health research and, moreover, their health needs unobsured by an expedient construct.
REFERENCES


A FRAMEWORK FOR REDUCING INEQUALITIES IN ASIAN HEALTH THROUGH HEALTHY PUBLIC POLICIES

Madhumati Chatterji

ABSTRACT

There is growing evidence on the significant inequalities in health among the Asians in New Zealand. According to Census 2001, the Asian population in New Zealand currently at 7 percent is projected to reach 604,000 in 2021, that is 13 percent of the country’s population. Significant health and socio-economic needs exist for Asians that require an intervention framework to assess the approach to developing responsive healthy public policies. This paper examines Asian health and social inequalities through a comprehensive intervention framework, and proposes a broad direction to developing healthy public policies. The intervention framework drawn from Reducing Inequalities in Health, Ministry of Health 2002 identifies four comprehensive levels of intervention. Level 1 includes structural aspects such as social and economic policies, power relationships, occupation, income, and housing. While many Asians hold a tertiary education, there are high unemployment and underemployment rates. Level 2 includes behaviour and lifestyle, the physical and psychosocial environment, access to material resources and internal control and empowerment. While Asians belong to diverse groups, they have a sense of belonging to their cultural heritage. Gambling, suicide, car crashes, communicable diseases, smoking, language barriers, diabetes and ischaemic heart diseases are some of the lifestyle dependent conditions affecting Asians in Aotearoa. Level 3 examines the health and disability services where access, awareness and health information both for the provider as well as the provided are issues for Asian people. Asians in Aotearoa have been documented to be ready and willing to participate in improving their communities’ health. Level 4 deals with the negative impact of death, disability and illness, and for Asians there are significant issues with refugees, international students, Accident Compensation Corporation (ACC) and carer support. The intervention framework offers an appropriate structure to explore various dimensions to develop approaches to healthy public policies. Further research on Asian health needs and the responsiveness of healthy public policies for Asian people may be undertaken using the intervention framework.


Dr Madhumati Chatterji
Public Health Physician
Ministry of Health
Auckland
Email: madhumati_chatterji@moh.govt.nz
INTRODUCTION

One of the most significant global challenges facing us today is inequalities in health and social well-being. When coupled with migration experiences the challenge is compounded. There is growing evidence on inequalities in the health and social well-being of the Asian people in New Zealand. This paper aims to examine the health and social inequalities facing the Asian people through a comprehensive intervention framework and recommend broad strategies to developing healthy public policies to reduce these inequalities.

THE INTERVENTION FRAMEWORK DEVELOPED BY THE MINISTRY OF HEALTH IN REDUCING

Inequalities in Health (Ministry of Health, 2002) provides an excellent template to examine the determinants that contribute to the inequalities in the health and social well-being of Asian people in New Zealand. The source of the data that is analysed was taken from various publications, including the Asian Public Health Report (Ministry of Health, 2003).

According to Census 2001, the Asian population in New Zealand currently at 6 percent (Figure 2) is projected to reach 604,000 in 2021, that is 13 percent of the country’s population. Significant health and socio-economic needs exist for Asians that require an intervention framework to assess the approach to developing responsive healthy public policies.

Figure 1. Population by ethnic group in New Zealand (Census 2001). Source: Statistics New Zealand.

Total 3,737,322

The following table shows a projected population distribution for 2021.
Figure 2. Table showing the Ethnic distribution of New Zealand’s population in 2001 and estimated projections for 2021. Source: Statistics New Zealand Media Releases

<table>
<thead>
<tr>
<th>Ethnic group</th>
<th>Estimated population at 30 June 2001</th>
<th>Estimated NZ population projections for 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>European</td>
<td>3.07 million</td>
<td>3.12 million</td>
</tr>
<tr>
<td>Māori</td>
<td>586,000</td>
<td>Almost 750,000</td>
</tr>
<tr>
<td>Pacific People</td>
<td>262,000</td>
<td>Over 400,000</td>
</tr>
<tr>
<td>Asian People</td>
<td>272,000</td>
<td>Over 600,000</td>
</tr>
</tbody>
</table>

The number of Asian people in the Auckland region is expected to grow by 173 percent (or about 190,000 Asian people) by the year 2021.


In 2001, 7.2 percent of the Asian population were unemployed nationally compared to 4.8 percent all people aged 15 years and over. About 22 percent of the Asian people aged 15 years and over received income support nationally, compared to 33 percent for all people. Asian unemployment and income support rates are lower than Māori and Pacific peoples. Just 17 percent of Asian people aged 15 years and over in New Zealand had an income of $30,000 or more compared with 27.3 percent for the whole population. Asian people aged over 15 years have the lowest percentage use of the Domestic Purposes Benefit among all ethnic groups.

Almost 31 percent of Asian people New Zealand have had tertiary education compared to a national average figure of 27.7 percent. The Asian ethnic group had the lowest percentage (12.2 percent) of people with no qualification compared with any other ethnic groups.
About 68 percent of the households in New Zealand either owned their own home or occupied it rent-free compared to 58.6 percent belonging to Asian households. Among all ethnic groups Asian households had the lowest percentage of households without car (8.4 percent). About 92 percent of the households had a telephone with the European ethnic group having the highest percentage of households with a telephone (96.8 percent), followed by Asian households (94.4 percent). About 11 percent of all households have superannuitants with Asian households having the lowest percentage (3.1 percent) of superannuitants of all ethnic groups.

A FRAMEWORK TO EXAMINE INEQUALITIES IN THE HEALTH AND WELL-BEING OF ASIAN PEOPLE IN AOTEAROA

The intervention framework (figure 1) developed by the Ministry of Health in *Reducing Inequalities in Health* (Ministry of Health, 2002) identifies four comprehensive levels of intervention. Level 1 includes structural aspects such as social, economic, cultural and historical factors that determine the macro-environment for determining the inequalities. Level 2 describes the intermediary pathways that mediate the various social, economic, cultural and historical factors. Level 3 examines the health and disability services where access, awareness and health information issues are considered. Level 4 explores the impact of the inequalities and recommends how the different aspects of the impact can be minimised.

Figure 4. Intervention Framework to examine inequalities in health and social well-being. Source: Ministry of Health.
**Level 1**

Wider comprehensive strategic direction addressing the wider needs of Asian people is yet to be developed. Initiatives are underway across the sectors at different organisational levels and capacities, some for migrant groups, some for refugees and asylum seekers and some specific to Asian people. The Asian Public Health Project (APHP) Report, commissioned by the Ministry of Health, February 2003 undertook a needs assessment of the Asian people in New Zealand, with a focus on those usually residing in the Auckland region. An evaluation of the project was subsequently undertaken by the University of Auckland (Chen, 2003). In *A Snapshot of Health: Provisional results of the 2002/03 New Zealand Health Survey* (Ministry of Health, 2003) analyses of ethnic specific data included, where appropriate and feasible an ‘Asian’ ethnic group. Other agencies and initiatives that undertake Asian-specific activities include:

- Asia 2000 Foundation and Seriously Asia
- New Zealand Asia Institute
- The School of Asian Studies
- New Zealand Asian Studies Society
- The Centre for Asian Health Research and Evaluation
- Asia Studies Institute at the Victoria University of Wellington
- Problem Gambling Foundation of New Zealand
- Waitemata District Health Board (Asian Health Support Services)
- Auckland Migrant Resource Centre
- Auckland Refugee and Asylum Seekers Service
- Auckland Regional Public Health
- The Asian Network Incorporated (TANI).

An initiative aiming to address ethnic inequalities is the recent policy and directive by the Department of Ethnic Affairs’ to all government policy to include ethnic perspectives in policy.

**Level 2**

Intermediary pathways include material, psychosocial and behavioural factors, including lifestyle, diet, internal control and empowerment.

Asian health issues can be related to social, cultural and economic status. The migration experience produces alarming psychological problems, depression and stress. A lack of social support, stigmatisation and discrimination stress induced by migration compounded by disruptions in the family unit (separation) and settlement/integration frustrations lead to deteriorations in physical, mental and social well-being. A strong determinant is changes in the dietary habits and lifestyle.

Cigarette smoking is very common in many Asian countries particularly among the males where it is part of socialisation rituals. In their homeland, many Asian people rely on public transport and rarely on private vehicles. Sport, recreation and leisure facilities in Asia are popular. However, after migrating to New Zealand, Asian
peoples are generally reluctant to undertake physical activity partly because of a change in the lifestyle (easy access to transport and essential commodities) and partly through a lack of awareness of its importance. Other causes include alcohol abuse, lack of injury prevention and health promotion programmes for Asian people, poor hygiene and environmental factors such as sub-optimal housing conditions for some Asian people.

Language is identified as a major barrier facing Asian communities. Asian people find accessing health care services problematic because they find it difficult to describe their health problems to the health professionals. This problem is compounded by the current scarcity of Asian-speaking health professionals.

A lack of Asian health professionals in mainstream services means that many services are not perceived as being culturally appropriate. Asian people living in New Zealand may have different perceptions, interpretations, needs and expectations of health and the health system. Moreover, not knowing the New Zealand health system also poses a significant hurdle for Asian people, as they do not know how and where to seek help when health problems arise.

Traditional medicine and practices are often lost and not acknowledged by Western medicine. Differences in child-rearing practices, different cultural norms and different interpretation of mental health issues can hinder the effectiveness of prevention and intervention programmes for Asian people. For example, a lack of cultural sensitivity in antenatal classes, differences in techniques practised by Asian people and the mainstream often lead to miscommunication and inefficiencies.

An important barrier identified is the misconception that Asian people are self-sufficient and have the means to take care of themselves. The reality is that many a time affluent international students and immigrants bring with them an initial amount of settlement resources that lead to self-sufficiency in the shorter term. Sustainability becomes an issue and this is where comprehensive relocation strategies have a significant role to play.

The lack of a holistic approach to health care provision is perceived as another barrier. Health professionals and health care services often fail to acknowledge factors other than health symptoms in their assessment and treatment. Knowledge of wider factors such as Asian family life and Asian medical practice and treatment, are essential components in developing a more culturally-appropriate health care system for Asian communities.

**Level 3**

At this level, aspects of health and disability services are examined. Regional collection and analysis of ethnic-specific data was undertaken in Auckland. The six top potentially avoidable deaths for Asian in Auckland are heart disease, motor vehicle incidents, stroke, lung cancer, diabetes and suicide, and the six leading causes of preventable hospitalisations are angina, gastroenteritis, respiratory infections, road traffic injuries, dental conditions and asthma. Although generally
considered healthy, age-specific death rates for Asian people were similar to Pacific and Maori populations, with a large proportion of deaths in the 25 to 64 years age group.

Figure 5. Age specific deaths in the Auckland region by ethnic groups, 2000 to 2001. Source: Asian Public Health Report, 2003.

A large number sought traditional health therapy especially with chronic illness and regarded Western medicine as effective largely for acute illnesses. Specific dietary beliefs, health care beliefs and practices, and a different family decision structure may have contributed to the under-utilisation of mainstream health services. This may, in addition, be due to socio-economic issues, systemic barriers (high cost and fragmentation of health care systems), migration factors (new migrants not aware of local systems) and transport difficulties.

In summary gambling, suicide, car crashes, communicable diseases, smoking, language barriers, mental illness, diabetes and ischaemic heart diseases are some of the lifestyle dependent conditions affecting Asian people in Aotearoa and Asian specific services or culturally appropriate services are evolving, largely as initiatives by the decision makers at the local and regional levels.

**Level 4**

Level 4 explains the aspects to minimising the impact of the inequalities in health and social well-being of Asian people in New Zealand. Literature from overseas identifies a number of effective strategies to minimise the negative impact of the health inequalities that face Asian immigrants to the United States, United Kingdom, Canada and Australia. These include offering cultural sensitive and appropriate health services, providing appropriate health education and resources, providing medical interpretation and translation service, acknowledging different cultural
attitudes and beliefs, e.g., suffering is inevitable and one's life-span is predetermined (Uba, 1992), reinforcing positive traditional dietary habits while encouraging the adaptation of healthy Western food items (Kim, Yu, Chen, Cross, Kim & Brintnall, 2000), reorienting health services, recognising multi-ethnic culture, collection of disaggregated data, more funding for specific studies (Srinivasan & Guillermo, 2000), researching collaboration between universities, community-based organisations and ethnic communities (Chen, Kuss, McKeirnan & Gleason, 2001) and supporting community advocacy and raising community awareness, including cultural issues and ethnic health components in the training of health professionals (Williams, Godson & Ahmed, 1995).

The following mainstream as well as Asian-specific agencies and organisations active in reducing the impact of inequalities are:

- Medical Associations – Chinese and Indian
- The Asian Network Incorporated
- Shakti, Shanti Niwas
- Well Women’s Nursing Service
- Ministry of Health
- District Health Boards
- Auckland Regional and City Councils
- Citizens’Advisory Bureau
- Land Transport Safety Authority
- Accident Compensation Corporation
- Centre for Asian Health Research and Evaluation
- Problem Gambling Services and traditional healers.

Participants at the consultation and key informants meetings of the Asian Public Health Project (Asian Public Health Project, 2002) suggested several solutions to improve the current health status of Asian communities focusing on education, resource development, workforce development and service reconfigurations. The education approach needs to include the development of Asian publications (such as pamphlets composed in the various languages of the main Asian ethnic groups), greater use of Asian media (such as Asian radio and television) and Asian community outreach services delivering health messages; the need for an Asian advisory group to be set up to provide advice to the government, local authorities, researchers and policy-makers was also expressed; service reconfigurations recommendations included Asian-specific health centre, support groups, an Asian health council and an Asian hotline. Workforce development needs are significant, which included:

- Providing training and a professional development curriculum for mainstream health professionals on Asian medical knowledge and practices.
- Establishing health policies that include workforce development strategies and recruitment of qualified Asian health professionals to ensure Asian communities are better served.
- Considering innovative recruitment policies such as employment of Asian mentors or elders (e.g. recruit through churches or temples) to work closely on matters regarding interpretation, dissemination of information and health promotions work.
Creating a consultation network of Asian community leaders to be trained on health issues and provide relationship-building interfaces with mainstream health services.

Ethnic perspectives in policy should be considered essential. A counter-argument to a comprehensive Asian initiative could be the ‘diverseness and the apparent ‘self-sufficiency. Specific health issues, causes, barriers and solutions are therefore not considered a priority. Policy planning, development, implementation and evaluation should be at central government, local authority, and community levels cascading down to the local and individual levels. Moreover, policy formation should include ongoing consultation with Asian community leaders, service providers and practitioners.

CONCLUSION

Current evidence indicates that issues include a lack of a comprehensive national focus, a lack of awareness to Asian people’s health inequalities and the need to address them. It is reassuring to know that Asian communities are ready and willing to participate in improving their communities’ health.

Demographic changes anticipated over the next decade magnify the importance of addressing inequalities in Asian health and social well-being. The intervention framework offers an appropriate structure to examine the various dimensions and develop approaches to healthy public policies. Further research on Asian health needs and the responsiveness of healthy public policies for Asian people may be undertaken using the intervention framework as Asian people are not just immigrants, sojourners or refugees, but New Zealanders who make significant contributions to the growth of the multicultural heritage of New Zealand and who have the same wants, needs, expectations and desires as everyone else.
REFERENCES


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SPECIFIC HEALTH ISSUES CONCERNING ASIAN POPULATIONS
DISPARITIES IN THE INCIDENCE OF STROKE IN ASIAN POPULATIONS, IN AUCKLAND, NEW ZEALAND

Kristie Carter, Maree Hackett and Craig Anderson

ABSTRACT

Aims
We determined: 1) age-, sex- and ethnic-specific rates for major pathological stroke subtypes and 2) trends of stroke, in Auckland, from 1981 to 2002.

Methods
All stroke events occurring in Auckland were registered during 12-month periods in 1981-82, 1991-92, and 2002-03.

Results: The proportion of Asian/other ethnic groups having strokes increased from 1.5% in 1981-1982 to 10.7% in 2002-2003. The Asian population had higher risk of haemorrhagic stroke and lower risk of infarction than Europeans.

Discussion
People of Asian descent are at high risk of stroke and account for an increasing number of patients with this major cardiovascular illness.


Kristie Carter
Research Fellow
Clinical Trials Research Unit
The University of Auckland
Email: k.carter@ctru.auckland.ac.nz

Maree Hackett
Research Fellow
Clinical Trials Research Unit
The University of Auckland

Dr Craig Anderson
Director
Clinical Trials Research Unit
The University of Auckland
AIMS

Stroke is a major non-communicable disease of increasing global importance, with an estimated 3.5 million of the 5.5 million deaths from stroke each year occurring in developing countries, and many more millions of people living with residual stroke-related disability around the world (World Health Organisation, 2000). Stroke is the leading cause of death and disability in China and eastern Asian countries, with higher rates of ischaemic and haemorrhagic strokes compared with Western populations (Eastern Stroke and Coronary Heart Disease Collaborative Research Group, 1998). The burden of stroke in the entire eastern Asian region is predicted to increase, both in absolute terms and as a proportion of total disease burden, due to rapid population ageing and adverse lifestyle changes. Although the reasons for the greater burden of stroke among Asian populations remains unclear, a steeper association of blood pressure levels and stroke in Asians compared to non-Asians is well recognised (Lawes, Bennett, Feigin, & Rodgers, 2004; Lawes et al., 2003).

Auckland is one of the largest (≈940,000 people (aged ≥15 years; 12% ≥65 years) and fastest growing urban centres in Australasia (34% increase in size from 1981). It also contains one of the most culturally diverse populations in the region, having undergone considerable growth in the numbers of migrants into the city, with 64% and 92% increases in the proportions of Pacific Island and Asian/other people, respectively, from 1981 to 2001. Auckland has a diverse ethnic mix (with 63% NZ-European, 11% Maori, 13% Pacific Island, 13% Asian, and 1% ‘other’ ethnic groups, according to the 2001 Census), in comparison to New Zealand as a whole, where Asian people now comprise about 6.6% of the population (up from 3.0% in 1991). Given the Asian population is at higher relative risk of stroke, and that they are undergoing rapid epidemiological transition, their contribution to the future burden of stroke in our community is potentially large.

Given that stroke is a heterogeneous disorder that consists of three major pathological types (cerebral infarction, primary intracerebral haemorrhage [PICH], and subarachnoid haemorrhage [SAH]), population-based incidence studies of the stroke subtypes are needed to quantify the burden of stroke attributable to specific mechanisms of the disease and to explore sex and ethnic differences in stroke risk. Such information may lead to insights into aetiology of stroke subtypes and new methods of prevention and management.

SUBJECTS AND METHODS

The ARCOS study used a prospective population-based register to ascertain all new first-ever (incident) and recurrent strokes that occurred among the ‘usual resident’ population of Auckland over a 12 month period, beginning 1 March 2002. The study used standard diagnostic criteria and multiple overlapping sources of notification however, slightly different methods of case ascertainment to those of the previous studies undertaken over similar calendar periods in 1981-1982 and 1991-1992. The design of the earlier two studies has been described (Bonita, Beaglehole, & North, 1984; Bonita, Broad, Anderson, & Beaglehole, 1995; Bonita, Broad, & Beaglehole, 1993). Briefly, the study of 1981-1982 used a 50% cluster sampling method, based on identified general practitioners (GPs), to register strokes to produce a random sample of half of all stroke events in the population, 703 strokes in 680 patients (Bonita, Beaglehole, & North, 1983; Bonita et al., 1984). The study of 1991-1992 used a register of all cases of acute stroke managed in hospital and a cluster sample of 25% of all GPs to estimate the number of ‘out-of-hospital’ events, for a total of 1803 strokes in 1761 patients (after adjustment for sampling) (Bonita et al., 1995).

Stroke was defined according to the World Health Organisation (WHO) definition, as “rapidly developing clinical signs of focal (or global) disturbance of cerebral function lasting more than 24 hours (unless interrupted by surgery or death) with no apparent cause other than of vascular origin (WHO MONICA Project Principal Investigators, 1988). This definition excludes cases of ‘silent stroke’ detected by neuroimaging without appropriate clinical features, and cases of transient ischaemic attacks (i.e. neurological deficits lasting <24 hours). Any stroke that developed <28 days of a previous event was considered as ‘progressing stroke’ and was not recorded as a new event, but deficits that developed ≥28 days were regarded as a recurrent event. Classification of pathological types of stroke – cerebral infarction, PICH and SAH - were based on results of investigations including CT/MRI or brain. Cases without pathological confirmation of stroke subtype were classified as stroke of undetermined type.

Ethnicity was defined by ‘self-identification’, as used in each national Census, although the definition used changed slightly across studies; we used the groupings of ‘New Zealand-European’, ‘Maori’, ‘Pacific’, and ‘Asian’ and ‘Other’ for the purposes of this paper.

Crude annual incidence (first-ever events) rates per 100,000, together with 95% confidence intervals (CI), were calculated for each study period after adjustment for the sampling procedure. These rates were age standardised by the direct method to the WHO ‘world’ population (Ahmad et al., 2003). To improve the power of the study for trend analyses Asian ethnic groups were grouped with ‘other’ ethnic groups, as the numbers of patients in these groups were very small in the 1981-1982 study.

Incidence rates of stroke subtypes were calculated using the denominator from the 2001 New Zealand census for the Auckland region (Statistics New Zealand, 2001). Sex-, age- and ethnic-specific rates of major pathological stroke subtypes were calculated and standardised to the WHO world population using the direct method. For ethnic comparisons, rate ratios (RRs) were calculated with the incidence in Asian populations used as a reference variable. Analyses of stroke subtypes were
conducted using Maori and Pacific people and the Asian population analysed a unique cohorts, with “Other” ethnic groups grouped with New Zealand European because of small numbers.

RESULTS

A total of 1030, 1305 and 1423 first-ever strokes were registered in the 1981-1982, 1991-1992 and 2002-2003 ARCOS studies, respectively. The proportion of all strokes from New Zealand-European people decreased (92% in 1981 to 74% in 2002) over the study period, as the proportion of Pacific (2% to 10%), and Asian and other (2% to 8%), ethnic groups increased in line with the changing structure of the population of Auckland.

Table 1, and Figure 1, show ethnic-specific trends in stroke incidence and attack rates over the three studies. A major finding was the significant heterogeneity in the trends in incidence and attack rates across the ethnic groups. Rates among New Zealand-European people declined over the 20 years, (RR 1981-1982 to 2002-2003 incidence 0.81, 95% CI 0.69-0.95; attack rates 0.82, 95% CI 0.71-0.94), whereas there were upwards trends in rates for Maori and Pacific people, with total event rates for Pacific populations, increasing two-fold from 1981-1982 to 2002-2003 (RR 2.16, 95% CI 1.18-3.96). Although the estimates for Asian and other ethnic groups are complicated by small numbers, particularly for the 1981-1982 study (n=20), there was a significant decrease in incidence rates from 1981-1982 to 2002-2003 (RR 0.46, 95% CI 0.23-0.93), which is influenced by a large decrease in rates females (Figure 1).

Among the different stroke subtypes proportional frequencies of cerebral infarction, PICH, SAH and undetermined strokes were 73%, 10%, 6% and 10% in European and Other ethnic groups, 80%, 6%, 12% and 2% in Maori patients, 67%, 24%, 4%, and 4% in Pacific patients and 68%, 25%, 5% and 3% in Asian patients, respectively. The Asian population Auckland in 2002 had significantly fewer strokes due to cerebral infarction than Maori and Pacific people (RR 0.62, 95% CI 0.42-0.90; 0.70, 95% CI 0.50-0.98) but significantly more haemorrhagic strokes than European and Other ethnic groups (RR 2.39, 95% CI 1.49-3.82). The Asian population had less strokes overall than the Pacific population (RR 0.67, 95% CI 0.51-0.89), due to larger proportions of cerebral infarctions.
Table 1. Ethnic-specific attack rates of stroke (per 100,000 populations) by ethnic group, age-standardised to the WHO world population.

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<td></td>
<td>Rate</td>
<td>(95% CI)</td>
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<td>(194-215)</td>
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<td>(163-310)</td>
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<td>(185-702)</td>
<td>273</td>
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**DISCUSSION**

People of Maori, Pacific and Asian descent are at high risk of stroke and are accounting for an increasing proportion, both in relative and absolute terms, of the burden of this major cardiovascular illness in the population of Auckland. These changes are consistent with the demographic and structural changes of the Auckland population over the last 20 years, particularly within the last decade. In the current study, modest declines in stroke rates were evident for New Zealand-European people. However, these positive trends were counterbalanced by markedly increased rates in Maori and Pacific people, as well as ongoing high rates in Asians.

This study also confirms the findings from most other population-based stroke incidence studies that cerebral infarction is the dominant pathological stroke subtype in all ethnic groups (Feigin, Lawes, Bennett, & Anderson, 2003). However, these data also confirm a higher risk of PICH in Asian people compared with European, Maori, and Other ethnic groups (Hu, Sheng, Chu, Lan, & Chiang, 1992; Kay et al., 1992; Lawes et al., 2003). We have also shown that the Asian population had similar rates of haemorrhagic strokes to that of the Pacific population in Auckland, which is in line with an American study which found that death rates from intracerebral haemorrhage were higher among “Asians/Pacific Islanders” than Whites (Ayala et al., 2001).

The three stroke registers in Auckland are recognised as meeting the ‘ideal’ criteria for a stroke incidence study of Malmgren,(Malmgren, Warlow, Bramford, & Sandercock, 1987) but reliable data on temporal trends still requires there to be consistency in the methods and quality of the data across studies. Similar multiple overlapping sources of notification of cases and diagnostic criteria were applied to the three studies to ensure that any variation could not be attributed to registration.
artefacts. There were high proportions of cases admitted to hospital and with close cooperation from general practitioners, other health professionals and agencies providing confidence of the completeness of stroke ascertainment in the studies. One limitation of the trends analysis is the small numbers of strokes in the 1981 study, leading large confidence intervals and variability around the estimates by ethnicity.

The pathological diagnosis of stroke subtypes in the most recent study was confirmed by CT/MRI scanning in over 90% of cases and attempts to ensure accuracy of diagnosis of stroke subtypes were augmented by reviewing all the cases by the study neurologists. These methodological strengths of the study minimized possible selection and misclassification biases. However, the relatively small number of Maori, Pacific, Asian and other ethnic group patients, especially with regard to patients with PICH and SAH, makes the estimates less precise. Differences in risk factor profiles between the different ethnic groups may in part explain the difference in the incidence of cerebral infarction and PICH, but more analyses of this data are required to address this issue.

We recognise that the Asian population is very diverse and is made up of many different ethnic backgrounds, which means that it may not be appropriate to generalise the needs of the Asian population as a whole. Given the large and increasing numbers of Asian populations within New Zealand, more ethnic specific is required to plan appropriate future health needs and requirements. Overseas studies indicate that effective public health strategies for Asian people require the development of culturally-appropriate programmes (Macbeth & Shetty, 2001). A specific issue that has been identified in New Zealand research relates to new immigrants and proficiency of the English language, which relates to the access of health care (Ministry of Health, 2003).

In summary, as the Asian population is increasing in Auckland and New Zealand, new public health strategies are required to meet their diverse and increasing needs. Such strategies should be culturally appropriate and include the promotion of healthy lifestyle programmes that cover the prevention of stroke and other cardiovascular events through the modification of risk factors.
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ASIAN AND OTHER SKILLED IMMIGRANTS’ SELF-REPORTED ILLNESSES IN THE FIRST FOUR YEARS OF SETTLEMENT IN NEW ZEALAND

Nicola North, Andrew Trlin and Anne Henderson

ABSTRACT
While the stress of migration and impact on health is well recognised, there has been little New Zealand research on the health of “high quality” skilled immigrants. This paper reports on data collected in five annual interviews in a longitudinal study involving panels of immigrants from China, India and South Africa. Self-reported illness episodes are compared across the three panels, and explanations for differences sought by examining employment experiences, residential moving and ownership, reasons for migrating, and how settled they feel in New Zealand.


Dr Nicola North
Associate Professor
School of Nursing
The University of Auckland
Email: n.north@auckland.ac.nz

Associate Professor Andrew Trlin
New Settlers Programme
School of Sociology
Social Policy and Social Work
Massey University

Dr Anne Henderson
New Settlers Programme
School of Sociology
Social Policy and Social Work
Massey University
INTRODUCTION

In common with other Western nations, New Zealand attracts skilled immigrants seeking new opportunities, and benefits from immigrants economically and socially. Prior to 1986 the selection of occupational category immigrants to New Zealand favoured traditional source countries to minimise differences between the population and immigrants in such characteristics as ethnicity and language, so as to smooth the settlement process and assimilation into New Zealand society. In 1986 the institution of the “points” system that aimed to attract high quality immigrants (Burke, 1986) set in train an inflow of immigrants from many non-traditional source countries, rapidly resulting in a more diverse population mix not previously seen. Although there were intermittent adjustments to the points system (New Zealand Immigration Service, 1991 & 1995), the system continued to reward higher qualifications and younger age. An implicit assumption was that young, well educated and skilled voluntary immigrants would be employable, adaptable and settle well.

Successful settlement of immigrants is an outcome of a complex of factors: employment, a source of both income and status; suitable housing, giving both shelter and entry to neighbourhood; an ability to communicate with members of the new country, enabling new settlers to participate in society; and good health, both physical and mental. Pre-migration health requirements ensure that immigrants are in sound health. Studies show, however, that while most voluntary immigrants are in good health prior to their migration, health problems regularly occur as a result of the upheaval of migration, which often has a dramatic impact on overall well-being. Illness, especially in the case of migrants, is often connected with change, stress and loneliness. Adjustment to a new, often different environment, in conjunction with a lack of human relationships and possible communication barriers make immigrants are more susceptible to illness, both mental and physical (Berry et al., 1992).

Referring to Asian peoples’ migration experiences in New Zealand it has been observed that combined with the stress of migration to a culturally different country, difficulties in finding employment and underemployment can create significant economic and health problems for Asian people (Abbott et al., 2000; Ho et al., 2000). This was demonstrated by the Asian Public Health Report (2003) that found that migration was recognised by key informants as playing an important role in the prevalence of stress, mental and physical health issues:

… Migration leads to changes in the family unit (separation of family members), entails a change in social status (unemployment and underemployment), which can cause psychological problems such as stress and depression. There is also often increased access to alcohol and gambling. Key informants pointed out that migration alone does not necessarily cause major health issues such as diabetes, coronary heart disease and hypertension, as some new arrivals bring these conditions from their homelands. Migration … (eg. associated stress or lifestyle changes) can act as a catalyst for health issues. (Asian Public Health Project Report, March 2003).

In ‘A Snapshot of Health’ (Ministry of Health, 2003) 88 percent of Asian females and 86.4 percent of Asian males rated their health in the category of ‘good, very good or
excellent’. This suggests that as a whole the Asian community in New Zealand are happy with their health and presumably then, the care they receive for it. It is to be expected, however, that new immigrants are likely to have different health needs to Asian people who have either been born or lived for a longer time in New Zealand, generally revolving around language and cultural issues. Lack of English language competency has been identified by a number of authors (Holt et al., 2001; Ngai, Latimer & Cheung, 2001; Ping, 2001; Kudos Organisational Dynamics, 2000; Walker, 2001; Wang, 2000) as the key barrier to new Asian immigrants in accessing health and other services, and is likely to be a key factor in poor adjustment to New Zealand (Abbott et al., 1999).

The Asian Public Health Project (Ministry of Health, 2003) reported that Asian people tend to have an unemployment rate similar to Maori and Pacific peoples, i.e. higher than the population as a whole. Several studies have shown that skilled immigrants from non-traditional source countries have been unable to enter their professions and unable to find employment commensurate with pre-migration experience (for example Ethnic Affairs Service, 1996; EEO, 2000; Henderson, 2002). According to Kudos Organisational Dynamics Ltd (2000), unfulfilled employment expectations lead to a return to country of origin or further immigration. This point is further strengthened by statistics from the 2001 census, which stated that while just over 5.0 percent of people aged 15 years and over in the Auckland region were unemployed in 2001, 7.4 percent of Asians were unemployed at this time. This percentage is only slightly higher than the unemployment rate for Asians nationwide, and while the number of Asians on student visas account for some unemployment, the statistics clearly reflect the lower employment levels in New Zealand for Asians.

The above studies identified unemployment and underemployment as migration-related factors related to ill-health. Yet independently of migration, employment and unemployment/underemployment has been shown to be related to poor health (Wilson, 1999). There is fairly good evidence that unemployed people have lower levels of psychological wellbeing and higher rates of depression and anxiety (Bartley, 1994; Shortt, 1996) and suicide (Rose et al., 1999), and higher rates of mortality associated with cardiovascular disease (Wilson, 1999). With many skilled immigrants experiencing difficulty in gaining employment to a level they are accustomed to they have a higher risk of increased mental and physical ill health.

For recent immigrants, the well-documented negative impact on psychological well-being of moving country and culture (e.g. Abbott et al., 1998) is potentially exacerbated by high residential mobility post-arrival. Research shows that frequent residential movement is related to poor health. Kearns and Smith (1994), in a New Zealand based study looking at the residential mobility experiences of marginalised populations suggest that moving can be a stressful process. This research, along with others, suggests that moving can affect mental health and well-being, e.g. Magdol (2002) found that moving had a significant effect on depression, particularly in women. Additional to this are several studies in Britain (e.g. Goldblatt, 1990; Filakti & Fox, 1995) that illustrate the effect of housing tenure on health, with those in the publicly rented sector having higher death rates (Goldblatt, 1990; Filakti & Fox, 1995). Filakti & Fox (1995), found more marked differences in health between owner-occupiers and tenants in any specified occupational social class, than the presence of differences between social classes of either tenants or owners. In a Scottish study
people in rented accommodation were shown to have higher rates of cardiovascular and all-cause mortality than those who own their own homes (Woodward, Shewry, Smith et al., 1992; Sundquist & Johansson, 1997). In a study to assess the impact of residential stability in childhood on adults’ self-rated health at midlife, Bures (2003) notes that, while residential stability is strongly associated with positive global and mental health in adults, high residential movement can negatively affect self-rated health.

While in recent years there has been some New Zealand research on the health of refugees, and on identified ethnic communities such as Asians (e.g. Abbott et al., 1999; Abbott et al., 2000; Holt et al., 2001; Ngai et al., 2001), irrespective of their residential status in New Zealand, there has been little research on the health of skilled immigrants as a class. This paper provides evidence that such immigrant populations are also an at-risk population, but that the risk differs on ethnic lines. The paper describes the self-reported illness episodes of three panels of skilled immigrants settling in New Zealand. Two of the panels were of Asian origin, the People’s Republic of China and India, and a third panel from South Africa. Inclusion of data from the South African panel, the panel of immigrants most similar in characteristics to the host population, allows comparisons of the experiences of Chinese and Indians, who are conspicuously different. Using self-reported illness as an indicator of stress related to migration (Berry et al., 1992), the study provides evidence that contrary to expectations (implicit in pre-1986 immigration policy), immigrants from non-traditional source countries were no more likely to suffer during the early settlement period. When other factors related through research to illness, namely employment and housing experiences, were analysed in relation to self-reported illness, a paradoxical relationship was found, where the panel with both highest employment rates and the most positive housing trajectories also demonstrated the highest rates of self-reported illness.

**METHODS**

The longitudinal study that produced the data reported in the present paper began in 1998. A total of 107 Principal Applicants (PAs) and their families from China (PRC), India and South Africa were recruited through letters from Immigration Services, advertisements in Chinese newspapers and networking. Due to recruitment methods used, it is not possible to say how many eligible PAs chose not to participate. All were approved as skilled immigrants under the General Skills, and its predecessor, General categories (New Zealand Immigration Service 1991, 1995). Five annual researcher-completed interviews, most of them face-to-face, were conducted with the principal applicant (PA) and other family members, the first interview taking place within a few months of arrival and thereafter near the anniversary of the interview, covering their first four years of permanent residence in New Zealand. The study was approved by the Human Ethics Committee, Massey University in 1998.

At the first interview the Chinese and Indian panels each comprised 36 PAs and the South African panel 35 PAs. While the size of the South African panel remained steady with 35 PAs participating in the study every year until the fourth and fifth annual interviews, when the sample numbers fell to 34 and 30 respectively, the Chinese and Indian cohorts both dropped during the study period with 24 Chinese
and 27 Indian PAs remaining in the fifth year of the study. The drop in participants in both the Chinese and Indian cohorts can be attributed to families either returning home, onward migrating e.g. to Australia, withdrawal from the study and loss of contact.

The annual questionnaire was extensive, and included sections on: contact with family and friends in the country of origin, employment and study, accommodation, language and communication, social participation and health. In the first interview PAs were asked about their reasons for immigrating, and in later interviews were asked about decisions regarding taking out New Zealand citizenship. Questions concerning health in each annual interview included the SF-36 health questionnaire, questions relating to illness episodes, encounters with the health system, and home-sicknesses.

An analysis of the longitudinal data on self-reported episodes of illness for each of the three panels, Chinese, Indian and South African, indicate differences in both level of episodes and trends over the five interviews among the panels. The results are then related to two proxy indicators of successful settlement: accommodation and employment, and to motivation for immigrating.

RESULTS
Illness episodes and injuries affecting participating households.

At each annual survey the PAs were asked if they, or a member of their family, had been ill since the previous interview. Reported episodes of illness by household, not verified medically, provide a subjective indication of a stressful event, illness, during a stressful period, migration and adjustment. These are presented in Figure 1.

Figure 1. Total incidence of illness episodes.

These results raise the question of why the South African cohort consistently report the highest incident of illness episodes, a pattern that remained high, at about 80%, declining only at the final interview? Participants were asked in each annual interview
about the nature of the reported illness, and from the second interview, they were also asked about homesickness. In the final interview only, they were asked to review the relationship of health and their migration/settlement experiences.

Not surprisingly, minor illnesses accounted for the majority of illness episodes reported. Most frequent were symptoms such as those connected with colds, ‘flu’ and tummy bugs, often affecting more than one person in each household (Figure 2). In the Chinese panel there were between 8 – 11 households affected each year, in the Indian panel between 3 – 16 and in the South African panel between 10 – 23 households. As with reported levels of illness overall, South African households had the highest level of minor illnesses. Interestingly, all three panels reported the highest level of illness in the second interview, after one year of residency in New Zealand. This suggests that the ‘honeymoon period’ of migration was over at this stage and the reality of settling into a new country and culture was setting in. Or that there was a nasty ‘flu’ virus in 1999. The results showed that while there was a downward trend in reported minor illness among both Indian and South African panels, the reverse was true for the Chinese.

![Percent of households self-reporting transient/minor illness](image-url)

**Figure 2. Transient/Minor illnesses.**

Overall lower levels of infections such as bronchitis, kidney infections and skin infections were reported (see Figure 3). Among the Chinese 0 – 3 households reported such an infection, among Indians 1 – 6 households and among South Africans 1 – 9 households reported that at least one household member had suffered an infection. In addition there were two reported incidents of infections acquired in the home country, in both cases India, reported as malaria and hepatitis A. In the case of both Chinese and Indian panels, no trend was evident, while the South African panel reported consistently higher levels of infections in all except the fourth interview.
Participants also reported chronic conditions, some of them serious, including arthritis, thyroid disease, anaemia, back pain, kidney stones, cancer and heart disease (Figure 4). Again the level of episodes reported by Chinese and Indian households affecting at least one household member was low with no trend apparent. In the case of the South African households there were a significant number of reported chronic illnesses in the first two years of residency, and these levels declined to rise again in the final interview, a similar pattern as for infections.

In addition to minor illnesses, infections and chronic conditions, households reported on illnesses that had either first developed or worsened following their arrival in New Zealand, illnesses that many participants attributed to the New Zealand environment. Such illnesses included allergic and environment related conditions such as asthma, hay fever, eczema and rashes. In this category, as in all others, in the first year of settlement South African households reported the highest number of episodes, with often more than one family member affected. In contrast to the other illnesses, these
episodes declined successively over the years, possibly as the migrants became more acclimatised to New Zealand, and possibly because of effective preventative treatment. This decline is most marked in the South African cohort (Figure 5).

![Percent of households self-reporting illness attributed to New Zealand environment](image)

**Figure 5.** Illnesses attributed to New Zealand environment.

Another group of illnesses reported were those that participants themselves attributed to stress, such as anxiety and one case each of peptic ulcer and dislocated jaw (through jaw clenching), as well as major mental illnesses including depression and psychosis. Reported levels were overall low and largely absent in the Chinese and Indian cohorts. The South African cohort was most likely to report such illnesses, with an upward trend evident in South Africans’ reported episodes over the five interviews (Figure 6).

![Percent of households self-reporting illness attributed to stress and depression](image)

**Figure 6.** Illnesses attributed to stress and depression.

Reported accidents and injuries demonstrate a similar pattern with noticeable differences among the panels. While injuries reported by Chinese and Indian participants were low and stable over the period, each year between a fifth to a third
of South African households reported accidents and injuries, sometimes involving more than one household member (Figure 7).

![Percent of households self-reporting Accidents/Injuries](chart1)

**Figure 7. Accidents and injuries.**

Reflecting the levels and trends of both injuries and chronic conditions, the South African cohort reported a higher level of uptake of surgery, compared with nil or low surgery uptake by both Chinese and Indian cohorts. Both minor surgery such as the removal of a skin lesion, and major surgery including heart surgery were reported. Surgery was carried out both as day cases and as inpatients, and in a few cases the participant returned to the country of origin in order to have the procedure carried out (Fig 8).

![Percent of households self-reporting surgical procedures](chart2)

**Figure 8. Surgical procedures.**

Pregnancy related episodes were also reported, with Chinese households reporting such episodes the most: over the first three interviews each year there were two, and
in the fourth interview one, households receiving maternity or pregnancy-related care. Only one Indian household reported a pregnancy and no South Africans reported a pregnancy.

Finally in the last interview participants were asked: ‘On reflection, has there been any particular event or feature with respect to your health since taking up residence that sticks in your mind as a difficulty with regard to migration and settlement in New Zealand? (Figure 9)

![Graph: Particular health difficulties related to Migration and Settlement](image)

Figure 9. Reporting of numbers of PAs and spouses of any particular event with respect to health perceived as a difficulty with regard to migration and settlement.

The main problems encountered by the Chinese panel were language barriers and difficulties in accessing health services: ‘Language problems with doctors, cultural differences’ ; ‘Can't describe problem to doctor, very few Chinese doctors.’ The majority of the Indian participants who had problems with their health complained of the cost of health care in New Zealand, one comment referring to the ‘financial barrier’ to getting care, and the inconvenience of long waits to get appointments. Others felt their health had worsened due to the development of asthma and allergies. The main concerns from the South African panel were those related to cost. ‘Dental very expensive’, ‘Private health insurance not tax deductible’ and ‘Cost of dentistry’ were two comments made.

Participants were then asked: ‘On reflection, has there been any particular event or feature with respect to your health since taking up residence that sticks in your mind as a positive event or feature with regard to migration and settlement in New Zealand?’ (Figure 10).
The majority of all participants in each panel agreed that there had been positive events since their residency in regard to their health, the exception being Chinese spouses who were split on whether there were positive events related to health. One Chinese participant commented ‘New Zealand medical system good, connected to income – community services card’, and another that ‘They [health professionals] are very patient and friendly and nice. Equipment is good and advanced.’ A member of the Indian panel remarked on the excellent hospital staff. Comments about the improvement in environment were frequent among both Chinese and Indian participants with the majority feeling the cleaner environment in New Zealand was beneficial to their health: ‘Lack of pollution – less tired. Travelling comfort when commuting’. South African participants complimented the school dental system again: ‘Dentistry for children is excellent’. Another enjoyed ‘being able to speak Afrikaans with doctor.’ Additional South African participants commented on the good access to health care and the ‘subsidising of medicine.’

Overall feedback about the impact on immigrant health since arrival in New Zealand was positive. Positive impacts were largely connected to a cleaner, less polluted and less stressful environment, but for some participants the environmental impacts were seen to be negative, as when asthma and other allergic conditions developed. The positive impacts of health services were reported: access to and standard of health services, the manner of health professionals and access to particular services, e.g. children’s dental care, screening programmes. Negative impacts of health services were also reported, particularly in relation to communication difficulties in the case of the Chinese, cost barriers and waiting times.
Explaining illness & injury differences in the contexts of settlement experiences

Age

There are marked differences between self-reported illness episodes among each of the three cohorts that are not easily explained when other factors related to migration and settlement are considered. All participating families were approved in the General Skills/ General migrant category, under the “points” system that rewards younger age and higher skills. It can be assumed that the process would iron out strong differences in age and levels of education, qualifications and skills among migrants from different countries of origin. The mean ages of the PAs at the first interview vary, at 34 years for Chinese, 37 years for Indians and almost 41 years for South Africans. These differences, along with the one child policy in the country of origin, might account for the higher uptake of pregnancy related services by Chinese compared with no reported pregnancies among South Africans. Older mean age might also account for some of the chronic illnesses reported by South Africans, e.g. cancer and cardiac conditions, but as many of the illness episodes and injuries concerned their children, age differences also do not satisfactorily explain differences among the cohorts’ health experiences. However, the average age differences across the three panels were not so great as to predict the differences found in self-reported illness episodes.

Employment

The participants as a whole were a highly qualified group: 94.4% of Chinese held a Bachelor’s degree or higher – almost 39% of the Chinese PAs held post-graduate degrees – mainly in the science/technical disciplines. Similarly 97.2% of Indians held a Bachelors degree or higher, with over 61% of Indians holding postgraduate qualifications. The South African cohort demonstrates a lower level of qualifications, with 65.7% having either a Bachelors degree or postgraduate degree/diploma as their highest qualification.

Employment trends did not directly reflect levels of qualification: at the time of the first interview, within a few months of arriving in New Zealand, 82.9% of South African PAs were employed full-time, compared with 25% of Indians and 11.1% of Chinese employed full-time. Full-time employment of South African PAs remained at 90 – 94.3% each year, while that for Indians increased slowly each year to reach just over 96% in the fifth and final annual interview, while the highest full-time employment rate for Chinese was just over 58% in the fifth interview, with others working part-time or “astronauting” (working in China while their families remained in New Zealand). For the Chinese and to a lesser extent the Indians, employment was seldom in their pre-migration field. Unemployment levels at the first interview for Chinese, Indian and South African panels were 80.6%, 63.9% and 8.6% respectively, and in the fifth and final interview 16.7%, 3.7% and 3.3% respectively. When examining self-reported illness and injury rates in the context of unemployment/employment, the highest levels of the former occurred in the panel with least unemployment and highest employment, the South African panel, while the reverse held true for the Chinese who demonstrated the greatest difficulty entering the labour market. The present
longitudinal study found, therefore, an inverse relationship between self-reported illness and employment.

**Housing**

The longitudinal study also investigated housing, including the time taken for new settlers to rent or own satisfactory housing, another factor related to health and to successful settlement. Those suffering from stress related illnesses associated with underemployment or unemployment may also suffer from health issues related to housing and residential location as the income gained from the former will affect the latter.

The great majority of immigrants participating in the study started their new lives in New Zealand living in rental accommodation, which may have contributed to settlement difficulties. As with employment, there was an inverse relationship between self-reported illness and home ownership plus residential stability. The panel with the highest rate of self-reported illness and injury also demonstrated the highest levels of home ownership and lowest rates of moving. Between the second and fifth annual interviews (1 to 4 years after arrival in New Zealand), home ownership rose from 40 to 80% (n=1 to 18 PAs) among South Africans, compared with 0 to 44% (n=0 to 11) of Indians and 9 to 54.2% for Chinese (n=2 to 11). In the first year of living in New Zealand 72.7% of both Chinese and Indian participants had moved house at least once during the previous year (mainly to other rental accommodation), compared with 62.9% of South Africans who had moved (mainly to their own home), and in the fifth and final year 33.3% Chinese, 39% Indians and 26.7% South Africans had moved. Looking now at the number of moves made between each of the five annual interviews, The South African panel was the most stable, with 17 moving at least once in the first period dropping to seven or eight moves thereafter. The Indians moved the most, from 19 moving in the first period and ten moving in the final period. While 17 Chinese moved in the first period, this dropped rapidly to 7 to 8 Chinese moving at least once in a year.

Examined in the context of settlement experiences generally, then, the higher levels of reported illness and injury among the South Africans cannot be explained by housing experiences, when compared with the Indian and Chinese panels.

**Reasons for emigration**

A possible explanation is the extent to which the migrants felt forced to leave their home country, and the extent to which they wished to leave to establish a new life for themselves in the new country. At the first interview only, PAs were asked to indicate their reasons for leaving the country of origin, and their reasons for immigrating to New Zealand; they could select up to three of a list of possible reasons. The most frequent reasons the Chinese left were a lack of opportunities (19), wanting a change/challenge (19), because of environmental factors (13) and for political/institutional reasons (10). The Indians left because of environmental factors (18), a lack of opportunities (15), for lifestyle/culture (10) and political/institutional reasons (9). While the Chinese and Indian panels were fairly similar in their
motivation being related to environmental factors and lack of opportunities, in contrast the South Africans were mainly motivated to leave because of political/institutional factors (39), for the children’s future (25) and because of a lack of opportunities (16). These results suggest that there was a clear push factor at play for the South Africans, not evident in the case of the two Asian panels. Negative experiences after taking up residency in New Zealand provoked strong reactions, for example this comment made by South Africans: ‘Wife is stressed and concerned about the sons, especially the oldest who is very anxious. Did we do the right thing coming to New Zealand?’ Another possible explanation is the extent to which migrants feel positive about their new country, as one South African commented: ‘Because we are not welcome here….’. In contrast are remarks such as this made by a Chinese: ‘In New Zealand the life span is longer, it is easier to stay healthy, the air is clean’. In the fifth and final interview, when decline in the level of reported illness among the South Africans was first seen to drop, these comments were recorded: ‘Missing family but not wanting to go back’; and ‘Not homesick any more’.

Feeling Settled in New Zealand

In the first interview, a few months after participants took up permanent residence in New Zealand, PAs were asked to indicate their reasons for moving to New Zealand, up to three reasons from a list of possibilities. The principal reasons selected by Chinese in order of frequency were: opportunities (15), lifestyle/culture (13), environmental and change/challenge (both 12), and because they had contacts (11). In the case of the Indians these were: children’s future (16) opportunities (15), environmental and lifestyle/culture (14 each). While both Asian panels were fairly evenly spread across a range of reasons, most the South Africans, in contrast, selected lifestyle/culture (28), and also opportunities (12), political/institutional and children’s future (11 each). Other reasons selected by a few in each panel included New Zealand’s immigration policy and climate/location.

In the fifth and final interview, participants were asked if they made the right decision to come to New Zealand and how settled they felt. The majority felt that they had made the right decision, with only two saying they had not made the right decision. However, one quarter each of Chinese and of Indians were unsure, compared with only one of the 30 South Africans. Similarly, South Africans were likely to feel completely settled at the fifth interview, while Chinese and, especially, Indians were more likely to feel unsettled. The Chinese and Indian participants, generally the more unsettled, left their countries and chose New Zealand for better opportunities and lifestyle, suggesting that expectations were disappointed. These findings coincide with a decline in reported illness among South Africans, but no decline—and in some cases an increase—in illness rates among Indians and Chinese.

Noting that New Zealand’s environment was a major attraction (and the environment in the country of origin a major reason for leaving among Asian panelists), participants also commented on the effect of New Zealand’s environment and lifestyle on the health of those in the sample. For example Indian participants referred to the unhealthy environmental pollution and crowding in India. Generally the Chinese and Indian panels were positive about the effect of New Zealand’s environment on their health. A Chinese participant commented that that ‘in New
Zealand very healthy because of the environment, compared with China, so less likely to get ill’, and an Indian confirmed he was ‘healthier in New Zealand’. As well as improved health due to the environment were the added benefits from increased levels of exercise, e.g. a Chinese said it was ‘easy to do exercise, so many activities and so easy. New Zealand very good situation for sports.’ In contrast to positive feedback from many in the Chinese and Indian panels regarding New Zealand’s environment, many in the South African panel did not find New Zealand’s environment to have a positive effect of their lifestyles and health, e.g. the comment ‘warmer weather would help’.

DISCUSSION AND CONCLUSIONS

There has been little New Zealand research on the health of “high quality” skilled immigrants, those highly qualified and relatively young immigrants for whom countries including Australia and Canada compete, and who are expected to settle well and contribute to the economic and social fabric of the new country. New Zealand immigration policy favouring immigration from like societies was, until 1986, based on the implicit assumption that both social cohesion and successful settlement would be supported where differences between the immigrant and New Zealand society were least. Immigration policy relating to skilled migrants since 1986 assumes that settlement should be straightforward for those with desired qualifications and levels of English language skills. The present analysis raises questions about both assumptions, where it appears neither the most similar background in particular, nor desirable immigrant status in general, assumed an illness and stress free settlement process.

The results of the analysis of longitudinal data comparing three cohorts of skilled immigrants are surprising in demonstrating that of the three, the South Africans indicated significantly higher levels of self-reported illness and injury, including serious illnesses such as cancer, cardiac disease and major mental illness. When analysed in the context of employment/unemployment experiences and housing, the panel with the most negative trends, the Chinese, reported the lowest level of illness and injury, homesickness, and a reasonable level of satisfaction with the health system. Only in the final interview did the pattern reverse, when self-reported illness and injury among South Africans decline dramatically, while that for the Indians and particularly the Chinese rose slightly.

The Asian Public Health Report (2003) recognises the act of migration as instrumental in the development of stress, mental and physical illnesses. Such conditions could be impacted when the decision to migrate is more forced than voluntary and not necessarily carried out with the prospect of an exciting future ahead (see also Abbott et al., 2003; Berry et al., 1992). The declining rates of self-reported illness and injury, particularly among South Africans, support a conclusion that as the new immigrant adjusted to the new country and felt settled, so too did illness reduce. However a parallel picture was not seen in either the Chinese or Indian panels where rates of some reported episodes rose slightly after three year in New Zealand, particularly in the case of the Chinese.

Also after three years in New Zealand, the two Asian panels, particularly the Chinese, reported the greatest difficulty in entering the labour market, suggesting that
as initial optimism on getting suitable employment faded, more illness episodes were reported. However, although the high unemployment/underemployment rate shown in the study for the Asian immigrants, (in particular the Chinese followed by the Indian cohort), reflects the Asian unemployment rate described in other documents (e.g. The Asian Public Health Project, 2003; Kudos Organisational Dynamics Ltd., 2000; Ethnic Affairs Service, 1996), research demonstrating a relationship between unemployment and underemployment with health (Wilson, 1999) was not reflected in the first four years of data collection: the South Africans with the highest employment levels among the three panels reported the highest levels of illness.

Neither was research relating poor health with high residential mobility and tenurial arrangements (e.g. Kearns & Smith, 1994; Filakti & Fox, 1995) reflected in the study, where the South Africans who experienced lowest mobility and highest home ownership at every interview also reported the highest rates of illness.

It is to be expected that new immigrants are likely to have different health needs to Asian people who have either been born in or lived for a longer time in New Zealand. These needs are identified in the study and generally revolve around language and cultural issues, and access to services. Lack of English language competency has been identified by a number of authors (Holt et al., 2001; Kudos Organisational Dynamics, 2000; Walker, 2001; Wang, 2000) as the key barrier to accessing health and other services for new Asian immigrants, and is likely to be a key factor in poor adjustment to New Zealand (Abbott et al., 1999).

The question remains: how can we explain the differences among the cohorts in illness and injury levels? Assuming that the stress and illness relationship is true the answer is likely to lie in such issues as the extent to which migrants wanted to leave the home country (push factors), the extent to which they were attracted to the new country (pull factors) and the extent to which their expectations of the new country were met (satisfier factors). Moreover, comparisons between the old and new countries will affect satisfaction, whether immigrants are better or worse off, perceive better or worse opportunities. When after some four years in New Zealand, the hopes and expectations of the Chinese, and to a lesser extent the Indians, were disappointed, particularly in relation to employment, self-reported illness began to rise. However, in the first three to four years the two Asian panels were not better off than the South Africans; indeed the reverse held true, yet rates of illness among the latter were much higher. A possible explanation lies in cultural patterns of coping behaviour and help-seeking behaviour, issues that were not included in the study, and the subjects for future research.
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HIV/AIDS PREVALENCE AND RISK BEHAVIOURS AMONG CAMBODIAN LABOURERS ALONG THE THAI-CAMBODIAN BORDER

Nawarat Suwannapong, Chaweewon Boonshuyar, Nopporn Howteerakul and Danaiya Amnuaysombat

ABSTRACT
To estimate the prevalence of HIV infection, this study used the voluntary-blood-test specimens of the 2000 Thai-Cambodian HIV/AIDS surveillance, followed by a cross-sectional study. Eight hundred and four eligible Cambodian labourers, aged 15-44 years, who commuted along the Thai-Cambodian border at 4 checkpoints in Sakaew Province, Thailand, were interviewed to assess their HIV/AIDS risk behaviours and to identify associated factors. Overall, 4.52% of blood specimens were HIV-positive. Six determinants of HIV/AIDS risk behaviours were: male labourers, less perceived benefits, more perceived severity of HIV/AIDS, having knowledge of HIV/AIDS and working as a farm worker with an older age.


Dr Nawarat Suwannapong
Faculty of Public Health
Mahidol University
Bangkok, Thailand
E-mail: adnsw2000@yahoo.com

Chaweewon Boonshuyar
Faculty of Public Health
Mahidol University
Bangkok, Thailand

Dr Nopporn Howteerakul
Faculty of Public Health
Mahidol University
Bangkok, Thailand

Danaiya Amnuaysombat
Planning Section,
Provincial Health Office
Sakaew Province
Ministry of Public Health
Thailand
INTRODUCTION

The HIV/AIDS pandemic is an important problem for all countries in the world. At the end of 2003, between 4.1 and 9.6 million adults and children in South and Southeast Asia were living with HIV/AIDS. Approximately 430,000 to 2.0 million adults and children were newly infected with HIV during 2003 (UNAIDS, 2003). There were two primary foci of HIV/AIDS in Asia: 1) India; and 2) Cambodia, Myanmar, and Thailand. According to UNAIDS (2003), the HIV/AIDS epidemic in Cambodia is spreading faster than any other place in Asia. Sakaew Province is contiguous with Cambodia, about 170 kilometers along the border. Daily population movement between the countries is at 4 checkpoints, Klongleuk, Ban Nongpreu, Ban Beungtakuan, and Ban Kaodin checkpoints, which are connected with Banteay Meanchey Province of Cambodia and have become tourist attractions. About 180,000 Cambodians were infected with HIV in 1999. Of these, 25,000 became AIDS-infected patients (WHO, 2001). Since 1999, Sakaew Provincial Health Office has collaborated with the Cambodian authority to conduct surveillance of Cambodian labourers working along the border, and started taking blood tests in 2000. HIV, STD, and risk-behaviour surveillance are essential tools to explain trends, transmission, the impact of the epidemic, and the effects of interventions designed to reduce HIV incidence over time (Pisani & Winitthama, 2001; USAID, 2003), as little study has been done of the behavioural and epidemiological patterns of this mobile group. Furthermore, this group can serve as “bridges”, creating the potential for widespread diffusion of HIV. Therefore, this study aimed to estimate the prevalence of HIV infection among Cambodian labourers who commuted along the Thai-Cambodian border and to determine the factors affecting HIV/AIDS risk behaviour.

MATERIALS AND METHODS

This study was part of the evaluation of HIV/AIDS surveillance among Cambodian labourers and the Thai population along the Thai-Cambodian border of Sakaew Province. First, 974 voluntary-blood-test specimens collected in February and August 2000 were examined. Second, a cross-sectional study was done. 804 eligible Cambodian labourers, aged 15-44 years, who commuted along the border at 4 checkpoints were interviewed from December 2001- February 2002.

The research protocol was approved by the Joint Committee of the Thai-Cambodian Authority. The Cambodian health officers cooperated and managed on their side by getting verbal consent from their people for voluntary HIV blood-testing. After interview, each respondent received a brochure and an explanation of HIV/AIDS prevention and control in the Cambodian language from volunteers. Although there was no written agreement between Thailand and Cambodian authorities regarding the blood test of the Cambodians who crossed the border to work in Thailand, it has been well understood by both countries that the practice had been requested by the Cambodian authority. The Thai health personnel followed the guidelines for HIV surveillance under the routine sentinel surveillance, which can only be implemented on the Thai side.
INSTRUMENTS

HIV testing

Voluntary blood-testing for HIV was conducted with the cooperation of the Cambodian authority. All anonymous blood specimens were tested at Sakaew Provincial Hospital using ELISA.

Questionnaire

The survey instrument, which consisted of 4 parts, was translated into the Cambodian language: Part 1 was a closed-ended questions regarding the characteristics of the respondents. Part 2 contained 15 items for knowledge of HIV/AIDS. Dichotomous measurement was used by answering “Yes” or “No”. Cronbach’s alpha was 0.791. Part 3 was perception of HIV/AIDS, divided into perceived susceptibility, perceived severity, and perceived benefit. Altogether, 12 items with a 3-point Likert scale, were rated as 3=agree, 2=uncertain, and 1=disagree. Cronbach’s alpha was 0.702. Reverse scores were given for negative items. Part 4 was HIV/AIDS risk behaviours, consisting of 13 items about activities related to sex, alcohol consumption, substance use, sexual experience, sex partner, and condom use. They were dichotomous items, with “Yes” or “No” responses. Answers for more frequent activities were divided into “regularly/frequently”, “sometimes/once a week” and “no/occasionally”. Scores ≥80% of the possible total score were classified as “good/high” group, scores 60-79% “moderate” group, and <60% “need for improvement/low” group.

Statistical analysis

Stepwise multiple linear regression was used to identify the determinants of HIV/AIDS risk behaviours. The significance level was set at $P < 0.05$.

RESULTS

HIV prevalence

Among 974 collected blood specimens, 4.52% (44) were HIV-positive. The proportion of HIV-positive increased from 4.02% (27/672) in February to 5.62% (17/302) in August, 2000. The HIV-positive rate was high in Klongleuk checkpoint, Aranyaprapheth Districts (5.00 and 7.47%), as shown in Table 1.
Table 1. Prevalence of HIV infection among 974 Cambodian labourers living along the Thai- Cambodian border in Sakaew Province in February, and in August, 2000.

<table>
<thead>
<tr>
<th>Checkpoint</th>
<th>HIV testing February 2000</th>
<th>HIV testing August 2000</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. tested</td>
<td>No. infected</td>
<td>%</td>
</tr>
<tr>
<td>Klongleuk</td>
<td>260</td>
<td>13</td>
<td>5.0</td>
</tr>
<tr>
<td>Ban Nongprue</td>
<td>171</td>
<td>4</td>
<td>2.3</td>
</tr>
<tr>
<td>Ban Beungtakuan</td>
<td>28</td>
<td>2</td>
<td>7.1</td>
</tr>
<tr>
<td>Ban Kaodin</td>
<td>213</td>
<td>8</td>
<td>3.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>672</td>
<td>27</td>
<td>4.0</td>
</tr>
</tbody>
</table>

**General characteristics of the respondents**

Of the 804 respondents, 50.9% were male, with 46.9% aged 15-24 years. The mean age was 27.6 years. 44.0% finished primary school, 40.9% were farm labourer, and 32.8% were street venders. The average monthly income ranged from 100- 5,000 Baht with a mean of 3,494 Baht (approximately US$90).

**Knowledge and perception of HIV/AIDS**

Overall, 72.9% of Cambodian laborers had a good knowledge of HIV, while 14.2% needed improvement in perception of HIV (Table 2).

**HIV/AIDS risk behaviours**

Overall, 6.7% were at high risk, and the remainder at moderate risk, of HIV infection. For individual items, 36.3% of the Cambodian labourers wandered around at night-time and 17.4% visited brothels. Concerning alcohol consumption and drug abuse behaviours, 39.9% drank alcohol, 22.1% took amphetamines, and 3.9% used injected drugs. About 58.8% (473/804) of the respondents had sexual affairs. Of the 473 Cambodian labourers who had sexual experience, 17.8% always changed partners, 58.8% reported never using a condom, 31.7% used a condom occasionally, and 36.6% had sexual affairs with Thais (Table 3).
Table 2. Level of HIV/AIDS knowledge and perception among 804 Cambodian labourers.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge of HIV/AIDS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Good</td>
<td>586</td>
<td>72.9</td>
</tr>
<tr>
<td>Fair</td>
<td>120</td>
<td>14.9</td>
</tr>
<tr>
<td>Need for improvement</td>
<td>98</td>
<td>12.2</td>
</tr>
<tr>
<td>Perception of HIV/AIDS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Good</td>
<td>126</td>
<td>15.7</td>
</tr>
<tr>
<td>Fair</td>
<td>564</td>
<td>70.1</td>
</tr>
<tr>
<td>Need for improvement</td>
<td>114</td>
<td>14.2</td>
</tr>
</tbody>
</table>

Table 3. Risk behaviours for HIV infection among 804 Cambodian labourers.

<table>
<thead>
<tr>
<th>Risk Behaviour</th>
<th>Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wander around at night time</td>
<td>292</td>
<td>36.3</td>
</tr>
<tr>
<td>Visit brothel</td>
<td>140</td>
<td>17.4</td>
</tr>
<tr>
<td>Watch pornographic VDs</td>
<td>255</td>
<td>31.7</td>
</tr>
<tr>
<td>Read pornographic cartoons</td>
<td>192</td>
<td>23.9</td>
</tr>
<tr>
<td>Drink alcohol</td>
<td>320</td>
<td>39.9</td>
</tr>
<tr>
<td>Take amphetamine</td>
<td>178</td>
<td>22.1</td>
</tr>
<tr>
<td>Addicted to marijuana</td>
<td>114</td>
<td>14.2</td>
</tr>
<tr>
<td>Use injected drug</td>
<td>31</td>
<td>3.9</td>
</tr>
<tr>
<td>When having sexual intercourse</td>
<td>473</td>
<td>58.8</td>
</tr>
<tr>
<td>Always change partners</td>
<td>84</td>
<td>17.8 b</td>
</tr>
<tr>
<td>Never use a condom</td>
<td>278</td>
<td>58.8</td>
</tr>
<tr>
<td>Use a condom occasionally</td>
<td>150</td>
<td>31.7</td>
</tr>
<tr>
<td>Have sex with Thai a</td>
<td>173</td>
<td>36.6</td>
</tr>
<tr>
<td>b Percentage from 473 respondents</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Stepwise multiple linear regression was utilized for the causal model of risk behaviours among the Cambodian labourers. The factors that were selected into the model were sex, perceived benefit, age, perceived severity, occupation, and knowledge of HIV/AIDS, respectively. These six variables could explain 21.6% ($R^2 = 0.216$) of the variation in risk behaviours. These variables equated with the following factors: being a male labourer, having less perceived benefit but more perceived severity of HIV/AIDS, better knowledge of HIV/AIDS, working as a farm worker, and older age (Table 4).

Table 4. Result of stepwise multiple linear regression model to predict HIV/AIDS risk behaviours among 804 Cambodian labourers.
### DISCUSSION

The 4.52% HIV-positive prevalence was high among the Cambodian labourers. The result was similar to the 4.04% in the UNAIDS report (2000), since both data sets were from a high-risk group (adults 15-49 years). However, it was higher than the report of 2.6% from the Cambodian National Center for HIV/AIDS (2002), since that was the HIV prevalence among the general population. The HIV prevalence may be overestimated, since 1) the sample size used in this study was quite small, and, 2) all HIV-positive samples were not confirmed by Western Blot or other more accurate test to conclude a case HIV-positive.

Knowledge of HIV/AIDS among the Cambodian labourer was high (72.9%). This may have resulted from the continuity of the AIDS surveillance project, which organized many HIV prevention and control activities along the border, both government and NGO, since the early 1990s, for example, the 100% condom use program for entertainment establishments, implemented in 1998 (WHO, 2001). In addition, Cambodians living with HIV/AIDS openly communicated among themselves, to share their experiences, how it happened, and what changed in their lives, which resulted in increased HIV/AIDS knowledge and awareness. This confirmed the findings of the studies by Ittithamvinij and Jirarojwatana (1995) and Prybylski and Alto (1999).

Overall, 15.7% of respondents had a good perception of HIV/AIDS and 70.1% had a fair perception. For individual items, 65% had an incorrect perception that people would not get HIV infection if they only had sex with their partners (data not shown). The possible explanations were, first, they were confident that their partners would have sex with them only. They did not realize that everybody was at risk. In Asian culture, women usually thought or assumed that their husbands or partners were being honest and would not have sex with others. Therefore, they did not realize that they were actually at risk. Second, the majority of Cambodian labourers were Buddhists. They were not supposed to have extramarital sex. Therefore, most of the wives or women trusted their husbands or partners. The results were consistent with the findings of Boonsong (1999) and Taengjuang et al. (1993).

With regard to HIV/AIDS risk behaviours, 6.7% of Cambodian labourers had high-level risk behaviours and the remainder at moderate risk. Border areas and trade and travel routes have become entertainment places and the sex industries there serve mobile populations (USAID, 2003). The current study areas were 4 checkpoints in

<table>
<thead>
<tr>
<th>Variable</th>
<th>R²</th>
<th>R² adj</th>
<th>B</th>
<th>S.E(b)</th>
<th>b adj</th>
<th>t</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>0.216</td>
<td>0.210</td>
<td>3.516</td>
<td>0.342</td>
<td>0.325</td>
<td>10.271</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Perceived benefit</td>
<td>-1.021</td>
<td>0.157</td>
<td>-0.209</td>
<td>-6.499</td>
<td></td>
<td></td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Age</td>
<td>0.109</td>
<td>0.020</td>
<td>0.173</td>
<td>0.0173</td>
<td>2.981</td>
<td>0.003</td>
<td></td>
</tr>
<tr>
<td>Perceived severity</td>
<td>0.258</td>
<td>0.081</td>
<td>0.101</td>
<td>3.167</td>
<td></td>
<td></td>
<td>0.002</td>
</tr>
<tr>
<td>Occupation</td>
<td>1.061</td>
<td>0.356</td>
<td>0.096</td>
<td>2.981</td>
<td></td>
<td></td>
<td>0.003</td>
</tr>
<tr>
<td>Knowledge</td>
<td>0.160</td>
<td>0.058</td>
<td>0.088</td>
<td>2.759</td>
<td></td>
<td></td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>(constant)</td>
<td>4.196</td>
<td>1.332</td>
<td>3.151</td>
<td></td>
<td></td>
<td></td>
<td>0.002</td>
</tr>
</tbody>
</table>

Note. Male=1, Female = 0; Perceived benefit, age, and perceived severity and knowledge = continuous data; Occupation: farm worker = 1, others = 0.
the countryside, which had few entertainment places, except Banteay Meanchey Province on the Cambodian side, which was home to many gambling places, brothels, and nightclubs. Cambodian labourers came to Thailand in the early morning and left in the late evening. They lived a simple countryside lifestyle, like Thai rural people, and most of them were low-income labourers with low education levels. After working in the Thai countryside for a while, they could afford to spend time in entertainment places and engage in high-risk behaviours, such as injecting drug use or unprotected sex.

Of the 473 respondents having sexual experience, 58.8% had never used a condom (Table 3), since condoms were believed to be used with commercial sex workers only, not with wives or regular partners. In Asian culture, many countries reported that the belief mentioned above was rather strong. Once the man used a condom with his wife or regular partner, it insulted her, as though she were a commercial sex worker. Second, many organizations have encouraged people to use condoms every time they have sex but the provision of subsidized condoms did not cover all those needing them (UNAIDS/WHO, 2002). The price was rather expensive compared with their daily incomes. The finding of condom non-use corresponded with many previous studies (Taengjuang et al., 1993).

In the present study, male labourers were at higher risk than women. This was consistent with the UNAIDS report (2002), that the ratio of male to female of HIV/AIDS cases was about 1.2:1. Cambodian labourers aged 35-44 years were found to have a higher risk behaviour than other age groups. This is similar to Thai people. It was estimated that, of AIDS-infected cases in Thailand from 2000 to 2020, 90% were aged 20-44 years. This age group is sexually active (UNAIDS, 2002). The Cambodian labourers who completed high school had higher risk behaviours than other groups. As the majority of this labourer group was male, they could get a better job and earn more income. They could afford their relaxation and the things they desired, which exposed them to high-risk situations. Those Cambodian people crossing the border to work as labourers in rice fields had higher risk behaviours than other occupations. This confirmed the report of Intibal et al (1996), that 60.9% of HIV-infected persons were labourers.

Knowledge of HIV/AIDS was one of the determinants of the Cambodians’ risk behaviours. It was observable that most had good knowledge, especially about causes and prevention, but still had high-level risk behaviours. Perhaps, the education campaigns by various organizations did not emphasize the indirect causes or “cues to action” but rather over-emphasized sexual transmission. People were not educated properly about other potential effects on their family members.

Perception was also identified as a determinant of Cambodian risk behaviours, which specified less perceived benefit and greater severity of HIV/AIDS. This result agreed with that of the study by Panyadee (1995)- the behaviour of a person was determined by his/her perception. People tended to practice only what they were interested in or things that would provide them benefits, and avoided things that caused feelings of dissatisfaction.
The limitations of the study included: 1) the HIV-positive specimens were not confirmed by other accurate tests. We just gave health education regarding HIV/AIDS prevention to every respondent, and shared HIV/AIDS information with the Cambodian authority. It was not possible to provide appropriate medical care to HIV-positive cases; 2) identification of HIV/AIDS risk behaviours relied on face-to-face interview. Although the Thai Village Health Volunteers (VHVs) who were fluent in the Cambodian language interviewed most of the respondents, there might have been some miscommunication among them; 3) we used a cross-sectional approach rather than a longitudinal design; accordingly, it is difficult to elicit cause and effect.

In conclusion, the prevalence of HIV infection and its risk behaviours among Cambodian labourers along the Thai-Cambodian border remains high. The Thai Ministry of Public Health should work closely with Cambodian health authorities to continue the education campaign. Health education programs should be interaction-based. Proactive services should be provided at workplaces and free or subsidized condoms should be distributed.
REFERENCES


**ACKNOWLEDGEMENT**

This study was successfully completed with the kindness and cooperation of many health personnel of the Provincial Health Office, Sakaew Province, and the Cambodian authorities, which involved many agencies, including the military. The authors are deeply grateful for their support and valuable guidance. The authors would like to express their sincere thanks to all the respondents who were voluntarily blood-tested and who provided us with the opportunity to interview them.
ABSTRACT
This study examined the level of knowledge and understanding of sexual wellbeing (contraceptive choices, cancer screening and sexually transmitted infections) among Chinese women living in New Zealand and the common and cultural barriers to service utilization.

Seventy-nine Chinese women from Hong Kong, China and Taiwan were recruited through personal networks to complete a survey.

Age was the significant predictor of respondents' sexual wellbeing knowledge and their likelihood to seek further information. Age and length of residency were significant predictors of the importance of cancer screening knowledge. Cultural variables were not seen as barriers to service utilization.


Ms. Polly Ho Yi Yeung
Research Assistant
Hong Kong Polytechnic University
Department of Rehabilitation Sciences
Hong Kong
Email: p_yeung@xtra.co.nz or fatcatslover@hotmail.com

Dr Mark Henrickson
Senior Lecturer
School of Social and Cultural Studies
Massey University
INTRODUCTION

The Asian population is currently the fastest growing minority group in New Zealand and is expected to continue to increase mainly through further immigration (Ministry of Health, 2003; Statistics New Zealand, 2001). About 65 percent of all Asian people in New Zealand live in the Auckland region, with the current Auckland Asian population being over 146,000 people. Due to the distinct sub-groups within the Asian population, stemming from differing cultural values are varied health beliefs, which may influence how they interact with western medicine. Of the different Asian groups within the Auckland region, Chinese are the largest Asian group with about 45 percent of all Asian people, followed by Indian (27%) and then Korean (9%). Over the past decade, the size of the Chinese population in New Zealand has more than tripled, from 26,616 in 1986 to 105,057 in 2001, which is 2.8% of the total New Zealand population (Statistics New Zealand, 2001).

An Asian population like the Chinese brings diverse cultural experiences which are often very different to New Zealand mainstream society. However, the immigration experience is quite different for each individual. The experiences of Asian migrant women in New Zealand are very diverse, to the extent that those in ‘astronaut’ family structures whose husbands have returned to their country of origin to work and left their spouses and children in New Zealand; those who were in professional jobs prior to migration who have experienced considerable difficulty in changed occupations; those from traditional cultural and religious backgrounds and with limited English language ability who have to cope with considerable personal social and cultural upheaval in their new country. These experiences of Asian migrant women are extremely important and can have serious implications for their own wellbeing, as well as for their families (Ho, Au, Bedford & Cooper, 2002).

A consultant’s report on the health of women by the Health Funding Authority (1998) suggested that the top health priorities for Chinese women were cancer screening, depression, sexually transmitted diseases and family planning. The report Sexual and Reproductive Health Strategy by Ministry of Health (2001), continued to highlight the need to focus on increasing awareness and understanding of sexual and reproductive health, increasing individuals’ understanding and skills of personal values and teaching them healthy sexual and reproductive health choices.

Lack of knowledge or skills to practice safe sex may contribute to high numbers of sexually transmitted infections and to unintended pregnancy. Young people are a special concern because this population group is experiencing issues relating to growth and development e.g., puberty, peer pressure and sexual identity formation. It seems that most Asian adolescents are not well informed about safer sex practices. Latest figures from Statistics New Zealand show that in 2001, abortions accounted for 364 of every 1,000 known Asian pregnancies compared with 226 abortions for every 1,000 pregnancies in the whole population and that little or no sex education amongst new immigrants is a likely risk factor (Gregory, 2002). During 1999/2000, abortion was the leading hospital discharge condition for Asian people in the Auckland District Health Board area amongst the 25-64-year-old age group with 192 discharges or 5.3 percent of the total, and the second leading discharge for the 15-24-year-old age group with 23 discharges of 4.5 percent of the total (Auckland District Health Board, 2001). Such dramatic figures may reflect the lack of knowledge or skills to practice safe sex and access health clinics.

The recent study on Asian Health indicated that cancer has become a leading cause of death for Asian people in New Zealand (Ministry of Health, 2003). A US study found that overseas-born Asians do not utilize cervical or breast screening services as frequently as non-Asian populations (Strong, Trickett & Bhatia, 1998; Taylor, 2002). Unfamiliarity with western culture and the biomedical concepts of prevention, the perception that gynecological examinations are embarrassing, and the lack of
English proficiency are thought to have contributed to low levels of screening (Jackson, Taylor, Chitnarong, Mahloch, Fischer, Sam & Seng, 2000).

Although a considerable amount of contemporary research on Asian immigrants has been done in New Zealand, there was a concentration on adaptation problems and difficulties (Abbott, Wong, Giles & Au, 2002; Abbott, Wong, Williams, Au & Young, 1999; Abbott, Wong, Williams, Au & Young, 2000; Acumen, 2001; Friesen and Ip, 1997; Henderson, Trlin & Watts, 2001; Ho, 1995; Ho, 2002; Ho, Ip & Bedord, 2001; Jones and Ainsworth, 2001; Kudos Organizational Dynamics, 2000; Ngai, Latimer & Cheung, 2001; Pakuranga Chinese Baptist Church Employment Action Group, 1998; Pernice, Trlin, Henderson & North, 2000; Walker, Wu, Sooth-O-Soth & Parr, 1998). No previous New Zealand studies of Chinese women’s knowledge of and access to sexual wellbeing services were located. However, many overseas studies found that known barriers to Chinese women’s knowledge and use of sexual wellbeing services linked to cultural barriers, language difficulty, limited access to health care, socio-economic background, embarrassment, fear, anxiety, cost and lack of knowledge with regard to risk factors and help-seeking behaviours (Calle, Flanders, Thun & Martin, 1993, Ma, 2000, Mo, 1992; Okazaki, 2002; Stein, Fox & Murata, 1991; Tang, Solomon & McCracken, 2000).

The emergence of this pilot research project was a response to the lack of data on Chinese migrant women’s sexual health in order to provide a preliminary overview of factors associated with Chinese migrant women in interaction with sexual wellbeing issues and services. The purpose of the present study was to identify the level of understanding of sexual wellbeing among Chinese women who are new to New Zealand, to examine common and cultural barriers to service utilization, to examine the relationships of acculturation to their awareness of sexual wellbeing and to determine predictors of their help-seeking behaviours.

**METHODOLOGY**

This study is a one-time descriptive cross-sectional survey design. A seven-page, 50-item, self-administered questionnaire concerning Chinese women’s knowledge of contraceptive choices, cancer screening, sexually transmitted infections and perceived barriers to accessing sexual wellbeing services was developed for the study. Given the nature of the survey and its target group, the information sheet and questionnaire were made available in both the Chinese and English languages in order to minimize language difficulties and increase response rates.

The survey consists of the following items:

*Socio-demographic detail (QQ. 1-6).* This section included information about the respondent’s country of origin, first language used, age, length of time resident, years of education achieved and transportation usage.

*Self-rated adjustment (QQ. 7-8).* In reference to recent literature (Abbott et al., 1999; Abbott et al., 2000), two questions were developed using a 4-point Likert-like scale ‘not at all difficult’ = 1, to ‘extremely difficult’ = 4 to measure respondent’s self-perceived English ability and their adjustment to living in New Zealand.

*Sexual wellbeing scale (QQ. 9-23).* In order to avoid the complexity of defining the concept of ‘sexual wellbeing’, three main headings i.e., contraceptive choices, cancer screening and sexual transmitted infections were used as indicators with the support of previous studies (Lee, 1998; Meston, Trapnell & Gorzalka, 1998; Okazaki, 2002; Schuster, Bell, Petersen & Kanouse, 1996; Yu & Rymer, 1998). The 15-item were developed using a 4-point scale to measure (1) respondent’s level of knowledge of sexual wellbeing; (2) respondent’s sense of the importance of knowing sexual wellbeing; (3) respondent’s willingness to discuss sexual wellbeing with numbers of
people; and (4) respondent’s likeliness to seek further information on sexual wellbeing.

**Sexual wellbeing utilization scale (QQ. 24-39).** This scale was designed to assess what prevents Chinese women from accessing sexual wellbeing services. The scale consisted of 16-items which were adapted from recent literature (Abbott et al., 2000; Ashing, Padilla, Tejero & Kagawa-Singer, 2003; Ho et al., 2002; Ministry of Health, 2003; Mo, 1992; Ngai et al., 2001; Sadler, Wang, Wang & Ko, 2000; Schuster et al., 1996; Tang et al., 1999; Tang, Solomon, Yeh & Worden, 2000; Walker et al., 1998). A 4-point scale was used here ranging from ‘not at all useful’ = 1 to ‘extremely important’ = 4 to measure how important the 16-item affected each respondent in seeking sexual wellbeing services.

**Future service improvement and development scale (QQ. 40-50).** This part of the survey was based on a similar survey developed and fielded in 1998 (Walker et al., 1998) and 2000 (Ngai et al., 2001) and included a series of additional items concerning sexual wellbeing issues. The 11-item section was developed using a 4-point scale ranging from ‘not at all useful’ = 1 to ‘extremely useful’ =4 to measure the usefulness in enhancing future sexual wellbeing.

Respondents were recruited through personal networks such as friends and colleagues who had contacts with Chinese women living in Auckland. Ethical considerations for this study were reviewed within the framework of the Massey University Human Ethics Committee guidelines for research involving human subjects.

The personal networks were informed about the availability of the two survey versions, Chinese and English, and then requested to choose which version and how many they would like to obtain for distribution. One hundred survey packets were first distributed or sent out via personal networks in July 2003. Each packet contained an information sheet describing the purpose of the study in general and inviting the recipient to complete the enclosed survey and return it in the stamped addressed envelope that was provided. A list of resources providing Chinese/Asian health services was also included in each pile for respondents in case they had concerns about their health that arose in the process of completing the survey. The information sheet, survey and the resource list were written in both Chinese and English. Ten more copies were requested and sent out in mid-August so a total of one hundred and ten surveys were eventually distributed to the community.

The **criteria for inclusion** were (1) Chinese women who came from Mainland China, Hong Kong and Taiwan; (2) currently resided in Auckland New Zealand; (3) aged 18 and above; and (4) had English as their second language. Chinese in Auckland represent a range of nationalities that include people from Hong Kong, Taiwan, Mainland China, Singapore, and other nationals of Southeast Asia. People from Mainland China, Taiwan and Hong Kong, however, constitute the largest subset of the Chinese population in Auckland and seemed to share more of a similar cultural background so they were selected as the focus of this study.

Analyses were undertaken using the statistical software SPSS for Windows Version 10.0 with the level of significance set at the α=0.05 confidence level. Descriptive statistical analysis is used to provide a concise summary of data accumulated about and from those persons that were studied. A cross-tabulation statistical method and Chi-Square test were used to cross-test the relationship between variables and to determine whether or not there is statistically significant association between variables respectively.
RESULTS
Response rate

While one hundred and ten surveys were sent out for distribution, seventy-nine Chinese women living in Auckland New Zealand responded to the study with the surveys completed. Thus, the estimate response rate is 72%.

Since this study was purposive sampling in nature, randomization was not possible. The survey’s objective was to study Chinese women living in Auckland and their knowledge of and access to sexual wellbeing services. Our sample, thus, would not be representative of the population. Nonetheless, this survey can be viewed as a preliminary study for health services in other areas.

Demographics characteristics of respondents

Table 1 shows the main demographic characteristics of the respondents. The majority of the respondents identified their country of origin as Hong Kong Chinese (53.2%).

Among the 79 respondents, nearly one-third (30.4%) of the respondents were in the age group 18-25. The majority (58.2%) of the respondents in the present study appeared to have lived in New Zealand for less than 5 years.

The respondents in the study were quite well educated, with 74.7% reporting having more than 12 years of education. This may be due to the fact that the majority of these respondents originated from the New Zealand immigration policies of ‘entrepreneur’ or ‘points system’ during the early the mid 1990s and hence this group tended to be better educated and skilled.

<table>
<thead>
<tr>
<th>Variables</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Country of Origin</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hong Kong</td>
<td>42</td>
<td>53.2</td>
</tr>
<tr>
<td>Mainland China</td>
<td>24</td>
<td>30.4</td>
</tr>
<tr>
<td>Taiwan</td>
<td>11</td>
<td>13.9</td>
</tr>
<tr>
<td>Somewhere else</td>
<td>2</td>
<td>2.5</td>
</tr>
<tr>
<td><strong>Age Group</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-25</td>
<td>24</td>
<td>30.4</td>
</tr>
<tr>
<td>26-35</td>
<td>21</td>
<td>26.6</td>
</tr>
<tr>
<td>36-45</td>
<td>14</td>
<td>17.7</td>
</tr>
<tr>
<td>46 and above</td>
<td>20</td>
<td>25.3</td>
</tr>
<tr>
<td><strong>Length of Residency</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 years or less</td>
<td>33</td>
<td>41.8</td>
</tr>
<tr>
<td>More than 5, up to 10 years</td>
<td>24</td>
<td>30.4</td>
</tr>
<tr>
<td>More than 10 years</td>
<td>22</td>
<td>27.8</td>
</tr>
<tr>
<td><strong>Education Levels</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-6 years</td>
<td>3</td>
<td>3.8</td>
</tr>
<tr>
<td>7 to 12 years</td>
<td>17</td>
<td>21.5</td>
</tr>
<tr>
<td>More than 12 years</td>
<td>59</td>
<td>74.7</td>
</tr>
</tbody>
</table>
Significant predictors for sexual wellbeing issues

Table 2 shows the significant predictors of age in knowledge of contraceptive choices, cancer screening and likelihood to seek further information on all sexual wellbeing issues. Age was not a predictor for the importance of any of the sexual wellbeing questions and cultural barriers to services. There were only two significant relationships found between education levels and importance of cancer screening and cultural barriers in preference for traditional medicine. Education levels were not a predictor on any of the knowledge and likelihood to seek information on sexual wellbeing. Two significant relationships were also presented between length of residency and knowledge of cancer screening and cultural barriers on shame. Length of residency was not a predictor on any of the importance and likelihood of sexual wellbeing.

Table 2. Significant predictors for sexual wellbeing issues.

<table>
<thead>
<tr>
<th>Knowledge</th>
<th>Age</th>
<th>Education Levels</th>
<th>Length of Residency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contraceptive choices</td>
<td>d.f. 3, p-Value 0.010</td>
<td>d.f. 2, n.s.</td>
<td>d.f. 2, n.s.</td>
</tr>
<tr>
<td>Cancer screening</td>
<td>d.f. 3, p-Value 0.001</td>
<td>d.f. 2, n.s.</td>
<td>d.f. 2, 0.005</td>
</tr>
<tr>
<td>Sexually transmitted infections</td>
<td>d.f. 3, n.s.</td>
<td>d.f. 2, n.s.</td>
<td>d.f. 2, n.s.</td>
</tr>
<tr>
<td>Importance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contraceptive choices</td>
<td>d.f. 3, n.s.</td>
<td>d.f. 2, n.s.</td>
<td>d.f. 2, n.s.</td>
</tr>
<tr>
<td>Cancer screening</td>
<td>d.f. 3, n.s.</td>
<td>d.f. 2, 0.008</td>
<td>d.f. 2, n.s.</td>
</tr>
<tr>
<td>Sexually transmitted infections</td>
<td>d.f. 3, n.s.</td>
<td>d.f. 2, n.s.</td>
<td>d.f. 2, n.s.</td>
</tr>
<tr>
<td>Information-seeking</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contraceptive choices</td>
<td>d.f. 3, p-Value 0.003</td>
<td>d.f. 2, n.s.</td>
<td>d.f. 2, n.s.</td>
</tr>
<tr>
<td>Cancer screening</td>
<td>d.f. 3, p-Value 0.001</td>
<td>d.f. 2, n.s.</td>
<td>d.f. 2, n.s.</td>
</tr>
<tr>
<td>Sexually transmitted infections</td>
<td>d.f. 3, 0.040</td>
<td>d.f. 2, n.s.</td>
<td>d.f. 2, n.s.</td>
</tr>
<tr>
<td>Cultural barriers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Culture values and taboo</td>
<td>d.f. 3, n.s.</td>
<td>d.f. 2, n.s.</td>
<td>d.f. 2, n.s.</td>
</tr>
<tr>
<td>Ashamed of not knowing</td>
<td>d.f. 3, n.s.</td>
<td>d.f. 2, n.s.</td>
<td>d.f. 2, 0.026</td>
</tr>
<tr>
<td>Family burden</td>
<td>d.f. 3, n.s.</td>
<td>d.f. 2, n.s.</td>
<td>d.f. 2, n.s.</td>
</tr>
<tr>
<td>Preference to traditional medicine</td>
<td>d.f. 3, n.s.</td>
<td>d.f. 2, 0.031</td>
<td>d.f. 2, n.s.</td>
</tr>
</tbody>
</table>

n.s. = not significant

Age and knowledge of sexual wellbeing

To show these significant relationships, the 4-point scale of knowledge and likelihood was recoded into 2-point (more or less). Table 3 shows that the highest knowledge level of contraceptive choices came from women who were aged ‘36-45’ (85.7%) and ‘46 and above’ (75.0%). Women who were aged ‘18-25’ had the lowest level of contraceptive knowledge (37.5%), followed by (47.6%) from those aged ‘26-35’.

Meanwhile, the highest level of cancer screening knowledge came from women aged ‘46 and above’ (80.0%), followed by (78.6%) from ‘36-45’. Similar to the contraceptive knowledge, women aged ‘18-25’ reported the lowest score (20.8%) and (47.6%) from ‘26-35’.

No significant relationship was found between age and sexually transmitted infections knowledge. In general, Chinese women who were older in this study tended to have more knowledge about contraceptive choices and cancer screening.

Age and information seeking

Table 3 shows that Chinese women aged ‘26-35’ had the highest likelihood to seek further information on contraceptive choices (85.7%), cancer screening (85.7%) and sexually transmitted infections (81.0%), followed by those aged ‘36-45’ on
contraceptive choices (78.6%), cancer screening (78.6%) and sexually transmitted infections (71.4%). Those who were aged ‘46 and above’ reported 78.0% on likelihood to seek more cancer screening information but only 40.0% on sexually transmitted infections and 35.0% on contraceptive choices.

On the other hand, those aged ‘18-25’ reported the lowest scores on their likelihood to seek more information on cancer screening (33.3%), contraceptive choices (50.0%) and sexually transmitted infections (54.2%). The overall trend suggested that the more mature the Chinese women, the more likelihood they would be interested in learning more about sexual wellbeing.

Table 3. Age and levels of knowledge and likeliness to seek information on sexual wellbeing.

<table>
<thead>
<tr>
<th>Factors</th>
<th>18-25</th>
<th>26-35</th>
<th>36-45</th>
<th>46 and above</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contraceptive choices</td>
<td>More</td>
<td>Less</td>
<td>More</td>
<td>Less</td>
</tr>
<tr>
<td>Cancer screening</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contraceptive choices</td>
<td>37.5</td>
<td>62.5</td>
<td>52.4</td>
<td>47.6</td>
</tr>
<tr>
<td>Cancer screening</td>
<td>20.8</td>
<td>79.2</td>
<td>47.6</td>
<td>52.4</td>
</tr>
<tr>
<td>Information-seeking</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contraceptive choices</td>
<td>More</td>
<td>Less</td>
<td>More</td>
<td>Less</td>
</tr>
<tr>
<td>Cancer screening</td>
<td>50.0</td>
<td>50.0</td>
<td>85.7</td>
<td>14.3</td>
</tr>
<tr>
<td>Sexually transmitted infections</td>
<td>33.3</td>
<td>66.7</td>
<td>85.7</td>
<td>14.3</td>
</tr>
</tbody>
</table>

Length of residency and knowledge of sexual wellbeing

There was a significant relationship found between residency and knowledge of cancer screening. Table 4 shows that Chinese women who had lived in New Zealand for more than 10 years had the highest level of cancer screening knowledge (77.3%), followed by more than 5 years, up to 10 years (58.3%) and 5 years or less (33.3%). In general, the longer the Chinese women lived in New Zealand, the more knowledge they had especially on cancer screening. This may suggest a connection between age and residency and the level of cancer screening knowledge acquired.

Length of residency and cultural barriers

Out of the four chosen cultural barriers to service utilization, only one significant relationship was found on shame. Respondents who resided in New Zealand for more than 5 years were less likely to see shame as an important barrier to their service utilization (82.6% and 63.6%) as shown in Table 4. Even for those who had been here 5 years or less, 46.9% of the respondents did not see shame as a significant cultural barrier. This may suggest that apart from length of residency or acculturation in New Zealand, there are other variables existing outside the parameters tested in this study that prevent these women from utilizing sexual wellbeing services.

Table 4. Length of residency and levels of knowledge and cultural barriers to sexual wellbeing.

<table>
<thead>
<tr>
<th>Factors</th>
<th>5 years or less</th>
<th>&gt;5 to 10 years</th>
<th>More than 10 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cancer screening</td>
<td>More</td>
<td>Less</td>
<td>More</td>
</tr>
<tr>
<td>Ashamed of not knowing</td>
<td>Very</td>
<td>Not</td>
<td>Very</td>
</tr>
<tr>
<td>Ashamed of not knowing</td>
<td>53.1</td>
<td>46.9</td>
<td>17.4</td>
</tr>
</tbody>
</table>

Length of residency (Percentage)
DISCUSSION

In contrast to the common assumption that traditional beliefs and practices act as barriers to awareness and knowledge of sexual wellbeing, and access to allopathic care or to utilization of preventive services, data reported here clearly show that such beliefs and practices predicted neither lack of knowledge and access, nor underutilization. Instead, demographic attributes such as age and length of residency were the most influential determinants of health care access.

Our findings suggest that as women mature in age, they tended to develop more age-appropriate knowledge of sexual wellbeing. This implies that young Chinese women are more at risk regarding sexual wellbeing. Living in a foreign country at a young age involves disruption of life patterns and exposure to multiple stressors, new experiences and challenges. It becomes even more pertinent when these young women, lonely and in need of support, start intimate relationships. Significant relationships were found in this study between age and lack of knowledge about contraception and likelihood to seek information about sexually transmitted infections. With the poor knowledge about contraceptive choices such as condom use, young Chinese women may engage in risky and unprotected sexual behaviours and would be vulnerable to contracting AIDS/HIV or other infections. Such findings are consistent with the Health Needs Assessment 2001 released by Auckland District Health Board (2001) in which abortion was the second leading discharge condition for Asian people in the 15-24-year-old age group.

With respect to cancer screening, it is evident that cultural barriers were not the main determinants of screening knowledge and behaviours; instead age or longevity was found as a significant factor. In contrast to previous studies (Lovejoy, Jenkins, Wu, Shankland & Wilson, 1989; Tang et al., 1999) on Asian women's cultural barriers to screening, their lack of knowledge and utilization of cervical smears and mammograms, our data indicate a high level of likelihood in Chinese women from as early as in their mid-20s to seek cancer screening knowledge. This may be attributed to awareness of the importance of early detections for both cervical and breast cancer from the mass media. Such awareness indicates a similar pattern in the report by the Health Funding Authority (1998) on women’s health consultation in which Chinese respondents in their questionnaires ranked cervical and breast cancers as the top two of the most important areas to be addressed, with sexually transmitted diseases also considered a high priority. Although our study did not specifically ask respondents’ screening frequencies, our data shows a fairly high level of screening knowledge among women over 45 which is consistent with the study by Yu and Rymer (1998) in which 57% of 189 Chinese American women in Michigan, aged 50 or older, had had mammograms. Such findings may reflect normal development of women developing expected sexual and reproductive health knowledge as they mature.

While the frequency and recency of breast and cervical cancer screening are more relevant with regard to early detection and treatment, it is important to initiate screening behaviours such as breast self-examination and smear tests among young women. Our study shows that young Chinese women had the lowest level of screening knowledge and likelihood to seek such information. As these women are more sexually active at a younger age, they are more likely to take risks associated with the development of cervical cancer. By initiating self-screening behaviours in young women, such early interventions or detection sets the stage for future adherence to screening guidelines and encourages them to focus on prevention rather than crisis in health matters.

We also hypothesized that acculturation would be positively associated with sexual wellbeing and cultural barriers to services. Our findings partially supported this hypothesis. The data confirms the effect of length of residency on acculturation and
its relation to cancer screening knowledge and shame as cultural barriers to utilization. Acculturation may be supported here to show that Chinese women who had lived in New Zealand longer were more likely to be open-minded and engaged in preventive health utilization without the hindrance of their traditional beliefs. The length of residency may also reflect the level of opportunity a woman has for exposure or access to the Western health care system or Western health care professionals, and the women’s level of knowledge and comfort in seeking access to Western health care. It is worth noting, however, that these two factors cannot realistically be separated from the longevity question, as both length of residency and acculturation are both related to natural ageing through the lifecycle. In a sense, mammography, clinical breast examination, smear tests, contraceptive and sexually transmitted infection treatments are procedures that require contact with health care professionals, and acculturation may influence one’s entry into the system. However, once the women are introduced to the Western health care system, acculturation may no longer serve as an important determinant to preventive health care utilization.

Along with acculturation, previous studies (Tang et al., 1999; Yi, 1992) have indicated cultural barriers would be better predictors of low sexual wellbeing service utilization, such as screening among Asian or Chinese women in which they tend to utilize medical services only when experiencing acute illness or pain (Garcia & Lee, 1989). However results here disagree with specific cultural barriers as determinants of sexual wellbeing service utilization. The effects of acculturation, however, may be expressed here indirectly through other variables that have not been tested in this study.

Salant and Lauderdale (2003) argue that acculturation research in Asians has been unable to consistently articulate the cultural domains that change with acculturation or to explain how non-behavioural cultural features (e.g. cultural beliefs) fit into the larger picture of acculturation-related health outcomes. The question is not whether culture and health interact, but rather in what ways and what measurable domains. Acculturation studies for Asian immigrants continue to highlight unidirectional models through the use of length of residency, language proficiency and westernization. Nevertheless, it is important to identify the possibility that acculturation occurs in multiple domains such as age and gender; and that socio-economic status may modify acculturation’s effect on health. Apart from age as a strong determinant factor, our study did not indicate a clear pattern as to what extent acculturation has affected the respondents' attitudes toward sexual wellbeing. Future research should be focused on how to articulate a conceptual model of acculturation that states clearly the inter-relationship between acculturation and health while paying attention to the historical experience of different ethnic groups.

ACKNOWLEDGMENTS

The author acknowledges Dr. Mark Hendrickson for guidance and inspiration during his supervision of this research project. She wishes to thank Dr. Wilson Young and Vivien Hong Wei for giving up their time to check the Chinese translations. An extended gratitude is expressed to all the personal networks who have given up their time to distribute the surveys and for all who participated in filling out surveys and returned them on time.
REFERENCES


ADAPTATION PROCESS AND THE MENTAL HEALTH OF KOREAN IMMIGRANTS

Bon Giu Koo

ABSTRACT
This paper examines the adaptation process and its implications of the mental health of Korean immigrants in New Zealand. It consists of three parts. The first part is about the adaptation process of Korean immigrants in New Zealand based on my MA thesis. It is based on fieldwork conducted over a six-week period (June 8, 1996 through May 19, 1996), mainly in the city of Christchurch, New Zealand. In the second part of the paper, implications for the mental health of Koreans in New Zealand from the findings in my previous research are discussed in the light of the findings of the studies of Korean immigrants in other areas. Finally, my PhD project to further study about Korean immigrants in New Zealand is outlined.


Mr Bon Giu Koo
Doctoral candidate
Department of Anthropology
The University of Auckland
Email: bkoo008@ec.auckland.ac.nz
INTRODUCTION

The 2001 New Zealand Census reported that 19,023 ‘usually resident’ Koreans were in New Zealand. They account for 0.53% of the total New Zealand population. The Koreans have emerged as the third largest Asian ethnic group in New Zealand in the last decade. In the same period New Zealand was the third ranked country for Korean immigration. However, there are few studies with Koreans in New Zealand. As members of New Zealand society with their own culture and members of the Korean Diaspora with their own experience, Korean immigrants in New Zealand need to be given more academic attention.

This paper consists of three parts. The first part is about the adaptation process of Korean immigrants in New Zealand based on my MA thesis (Koo, 1997) which was the first ethnographic study of Korean immigrants in New Zealand in Korean. It is based on fieldwork, focusing on general Korean immigrants to New Zealand, who received approval through the point system after 1992. The fieldwork was conducted over a six-week period (June 8, 1996 through May 19, 1996), mainly in the city of Christchurch, New Zealand. A one-week field investigation covering Auckland also took place during this period. In all, I worked with 20 families.

In the second part of the paper, implications for the mental health of Koreans in New Zealand from the findings in my MA thesis are discussed in the light of the findings of the studies of Korean immigrants in other areas. Finally, I outline my Doctoral project to further study about Korean immigrants in New Zealand.

THE ADAPTATION PROCESS OF KOREAN IMMIGRANTS IN NEW ZEALAND

Pre-departure Condition

Socio-Cultural Conditions for Emigrations to New Zealand

The New Zealand immigration ‘boom’ of mid-1990s’ came at a time when Koreans had extensive immigration experience, accumulated over 30 years. Since immigration to the U.S. became stabilized in the late 1960s, networks linking Korea and the ‘central country’ of the world systems have been built and enlarged, and Koreans have been exposed to many immigrant success stories. Consequently, Koreans became able to obtain concrete information about life overseas and to consider immigration as an option to choose from.

Firsthand experiences such as those through various kinds of foreign services and studying abroad played important roles in the decision-making processes. Firsthand foreign experiences became more accessible after overseas travel was liberalized in 1989 by President Roh’s administration (Choe, 1989).

In Korean society, overseas life experience and foreign language skills, especially a good command of English, hold special value. In Korea, English is not just a means for communication but important Korean cultural capital. It is also a means for a head start and a standard for evaluating one's competencies. Such value given to the English language is heightened when joined with long-term foreign experiences. In this way, foreign experiences and English language skills as social capital come to
carry high value and thus, immigrations to the ‘central country’ come to be recognized as an opportunity to acquire such symbolic assets.

Furthermore, the ‘new immigrants’ of New Zealand, who are mainly highly educated professionals of the middle class, are equipped with the economic conditions that enable them to avoid starting ‘from scratch.’ This is possible because of the high costs of Korean real estate. Ownership of such real estate, apartments in particular, is enough to provide capital for immigration. Such economic foundations functioned as a background that could realize the option of immigration.

Immigration to New Zealand is similar to the early employment-based immigration to the US (Abelmann & Lie, 1995) in that both sets of immigrants are highly educated professionals of the middle class and in that the flow of immigration is controlled by the policy alterations of the receiving country. Nevertheless, these immigrations are different from those of the past in that they can be accomplished with knowledge, from direct or indirect experiences. Such advantages help immigrants reduce trial and error and plan out a more thorough immigration strategy.

Obstacles to the maintenance - escalation - reproduction of middle-class status

Immigrants to New Zealand must be well qualified. Accordingly, those who meet the requirements have been ‘filtered’ on account of their socio-economic status. Most of these people are estimated as either the ‘successful’ ones within Korean society or at least the ones ‘appropriately adjusted to society.’ So exactly what was it that pushed such people away from Korea?

The first factor that can be pointed out is the intensified competition in the Korean labor/job market due to globalization, and the resulting difficulty of maintaining middle-class status. Immigrants say that because of such difficulties there is no hope in finding any ‘possibility for elevation’ in their careers. Even people engaged in the most respected and accomplished professions, such as medical doctors and lawyers, admit that they are skeptical of their jobs because they show no ‘possibility for elevation.’

The immigrants point to the unreasonable education system and culture of Korea, which are characterized by excessive and abnormal competition, as another factor. Although the issue of status reproduction is becoming more salient in the present environment of Korean education (Cho, 1994), the immigrants understand this competitiveness as hindering the secure reproduction of status. In the process of seeking adjustment to excessive and abnormal competition, and to demands of a transformed labour market, what the people of the middle class needed was a means that would lead their children to attain definite superiority in competition.

The last indicated factor was the conflict of one’s values. Such conflicts were generated within the systematized social organizations and direct-line family structures in which the middle-class Koreans (Chung, 1995), who had acquired a modern value system and way of life through institutionalized education, were placed. These Koreans held value systems that were based on rationalism and the belief in competency. They experienced many difficulties while working in social or business organizations that were being operated by pre-modern family-oriented
principles. Especially inside the family, modern life styles and traditional life standards heavily collided. The life style that the Korean middle class pursued was either thwarted or distorted by the traditional life standards, and because of this arose complications in the establishment of identity. But the question of a way of life cannot be solved on a personal level. As matters stood, the topic of ‘immigration as a means to satisfy the desires of a modern life style’ was bound to rise again.

Preparations to prevent failure

When asked the reasons for immigration, many Korean immigrants answer that they “wanted to live once at least in a place with fresh air and clear water.” In such response, it can be inferred that these people can always move back when circumstances call for it. From the start, Korean immigrants make several preparations in case of immigration failure. Recently, the negative aspects of New Zealand immigration, especially the difficulties of job-hunting and English usage, have been disclosed. Thus, many people have started to visit New Zealand by themselves, so as to judge the possibilities of immigrant life and to learn English. Even after immigration, many are leaving their Korean houses and businesses as they are and are frequently inviting over family members and relatives. Through such measures, they are striving to maintain their economic and mental connections with Korea.

Living in New Zealand

Strategies for making a living

Accordingly, the immigrants’ ways of living cannot but be temporary and dependent upon the circumstances in hand. In the early stages of immigration, when the immigrants do not show much proficiency in English, a large percentage enrol themselves in school to learn English while also receiving student allowances. But the problem lies in that such courses last up to 2 years at the longest. Even those with jobs work at unofficial ones that only deal with Koreans, such as tour guides or lodging. This is not only because it is impossible to attain an official job of the same status as in Korea, mostly owing to language problems and job limitations, but also because some voluntarily do not work at official jobs in order to receive the student allowance and consequently acquire a dual income. Such strategies for making a living are prone to show a sensitive reaction to alterations in the law. So with the alterations, they are either done away with or adjusted.

Compared with Korean immigrants to other countries, the most distinctive aspect of the New-Zealand-immigrant styles of living is the separation of the family; the husband stays in Korea to work and the wife and children reside in New Zealand. A life style of this kind is only possible for those who hold high-income, professional jobs in Korea, such as doctors or businessmen. Through such measures, these people are able to maintain their socio-economic status even after immigration. But they must be resigned to the inconvenience of family separation. Such a strategy for making a living is based on the logic of the middle class, which states that “for the sake of the future” of every member of the family, one must “endure the inconveniences,” such as insecure family life, unstable social relationships, and isolation.
Such a short-term and insecure strategy for living is not helpful in building a stable life as an immigrant. It may also block the opportunities to adjust into New Zealand society. Moreover, because the connections with Korea are important in the economic, social and mental sense, many Korean immigrants are indifferent to the New Zealand society and fail to build their identity as immigrants. As a consequence, the behaviours and attitudes of life that these immigrants show do not turn out to be so much different of people in Korea.

**Strategies for living a life**

The specific area of Christchurch where many Koreans live has “large and well-known, therefore good” schools, few Maoris and Polynesians, and many newly built houses. The most preferred conditions for a residential environment are no different from those preferred in Korea. Immigrants also show a tendency to spend time with only a few close Koreans and so relationships with the New Zealanders are extremely confined. After having chosen their place of residence, immigrants then start to buy ‘new’ cars, whole ‘new’ sets of household electric appliances, and the like. Such purchases are made with much stronger symbolical intentions than the throwing-away of Korean articles from back home. Soon after, the children and most of the parents are enrolled in school. The primary settlement ends as such, and for the following 6 months (at the shortest) to 2 years (at the longest), immigrants lead lives as students. After listening to classes from 8 A.M. to 2 P.M., they usually “spend time doing nothing at all.”

But when life without a specific job is prolonged for some period, immigrants start to feel a sense of crisis. It is not only that they simply worry about how to make a living, their life habits from Korea reawaken and they become insecure and anxious. In such moments, due to differences in the level of adjustments, conflicts may break out between husband and wife, and between parents and children. The lives of immigrants are firmly tied around the family and there are few other social networks that they bind themselves into. As the family is nearly the only string that an individual can hold on to for support, the worst-case scenario would be for a family to disrupt.

For such reasons, returning migration started to occur in the early years of immigration. Nevertheless, returning migration of the New Zealand immigrants implied more than a failure of adjustment and settlement. In some aspects, returning migration was something that many of these immigrants had already forecasted even before they had left for New Zealand. Their moving-back to Korea can be seen as one of the last stages of the immigration strategy.

**The purpose of immigration**

Many immigrants are living fairly well through the temporary life style and their plans for the future are playing an important role in this adjustment. A 39-year-old immigrant is thinking about “starting off as a freshman in college,” as a Computer Engineering major. By the time he is ready to graduate, he will be a qualified candidate for a Permanent Returning Residence Visa. If his scenario succeeds, he will have secured a New Zealand bachelor’s degree and his children will have grown
to become independent of their parents. According to this immigrant, he will be able to obtain the “weapons,” that is English skills and a degree from an overseas college, needed for success in Korea. Moreover, his children will be given the proper opportunities to further their studies in New Zealand. So as to meet that day, immigrants make desperate efforts to sustain their ‘risky’ lives, while at the same time strive to maintain their connections with Korea.

At the time of my study, many New Zealand immigrants were looking into the possibility of moving back to Korea. The appropriate time for a returning migration is closely related to the opportune time for the children’s school entrance. There are people who even have plans to re-immigrate to ‘a larger’ country other than New Zealand. One of the main reasons for immigration to New Zealand is that it is easy to move to a third country. One immigrant thought of New Zealand as a “stepping stone” for immigrants.

Results of strategies

Immigration to New Zealand is a status strategy, which the Korean middle class uses as a means for social mobility. The outcome that the new immigrants seek from immigration can be summarized as immigration experience and educational records. While immigration experience mainly influences mobility within generations, an educational record functions as a cultural capital that can make possible status mobility between generations. Influenced by the discourse of “globalization,” Korean immigrants are making the judgment that life and educational experiences made in the central countries of the global structure will help their social mobility in Korea. Therefore, such strategies should not be understood as something unique to the New Zealand immigrants, but as a continuation of the status strategies of the Korean middle class. Such aspects are fundamentally not much different from the status-seeking cityward-driftings of the 1970s, which were influenced by the mainstream discourses of “economic development” and “modernization” (Jun & Kwon, 1991).

With the 1990s current of globalization, the labour market’s demands for symbolic capitals such as immigration, language, knowledge of the foreign society, social networks, and so on are expanding. Consequently, immigration experience has become an important capital for social mobility in the Korean society.

In conclusion, the outcomes that the New Zealand immigrants desire and the strategies for status escalation are mainly the results of the Korean middle class’ inclinations toward future successes (Kim & Kim, 1989). That is, they are the results of the middle class’ “common dream as a future elite” (Kim, 1983). Immigration to New Zealand is a strategy based on the middle-class logic, which seeks to overcome a collectively discriminative unit such as status by inhabiting an “elite, a social position grounded on individual free competition” (Jang, 1983).

IMPLICATIONS FOR MENTAL HEALTH

There is little empirical evidence for mental health of Korean immigrants. We only have a few case studies of Korean immigrants in the US and Canada (e.g. Hurh & Kim, 1990; Kim, 1988). I will discuss implications for mental health of Koreans in New Zealand from the findings of my MA thesis in the light of the findings of the studies of
Korean immigrants in the US and Canada. The findings of studies of Koreans in Canada are especially valuable to my preparations for my PhD research on Korean migration and mental health in New Zealand because of the similarities between Korean migration to Canada and New Zealand.

**Preparation for immigration**

In the study of mental health of Koreans in Canada, Kim (1988) pointed out that psychological conflict is less when immigrants are well prepared for immigration in terms of English skills and information about the receiving country.

In this respect, it could have a positive influence on psychological adaptation for many Koreans to visit New Zealand before immigration to judge the possibilities of immigrant life and to learn English. Their economic situations could allow them to avoid contact with host Canadians, to show high level of stress, and to feel insecure as well as during the initial period of immigration, downward social mobility acts as a serious stressor because it is not meaningful achievement (Kim, 1991).

Moreover, the fact that many Korean immigrants have experienced overseas life before immigrating to New Zealand means that they have already contacted other cultures and are at least partly aware of the adaptation problems they would face.

**Stress factors in the acculturation process**

*Language Barrier*

The language barrier is one of the major sources of stress for immigrants. Berry et al. (1987) reported that Koreans in Canada who had experienced a language barrier tended to avoid contact with host Canadians, to show high level of stress, and to feel being alienated from mainstream of the host society.

According to the 2001 New Zealand census, Koreans are the least likely to speak English among the Asian groups in New Zealand. Many Korean immigrants in my MA study attributed their limited interpersonal relationship with host New Zealanders to the lack of English ability. A serious problem stemmed from English inability for Korean immigrants regarding self-esteem. Many Koreans in my study said that they felt even their other abilities and educational and professional careers in Korea were “totally ignored” by host New Zealanders just because of their lack of English fluency. Shin (1995) reported in the study of Korean-American Women in the US that self-esteem was strongly related to depression.

*Joblessness/Status Loss*

Most Korean immigrants experienced unemployment or underemployment and consequent downward social mobility after relocation. Even after achieving economic security as well as during the initial period of immigration, downward social mobility acts as a serious stressor because it is not meaningful achievement (Kim, 1991).

For Korean immigrants in New Zealand who have worked as professionals and have belonged to the upper-middle class in Korea, this was an especially serious problem.
In particular, men, who have enjoyed special privilege in a Confucian cultural context, lose the authority they could have built as professional workers, and are deprived of the satisfaction of a valuable contribution to society.

In many Korean immigrants’ families, the husband stayed in Korea to work and the wife and children resided in New Zealand to maintain their socio-economic status even after immigration, while many Koreans in USA concentrated in small businesses to achieve economic stability in short term (Park, 1997). But those who stayed in Korea must be resigned to the inconvenience of family separation. Men, who would have to be outsiders in both societies, could not have a meaningful relation with their family members in this circumstance. The acculturation gap from different life experience between husband and wife and father and children causes spousal and intergenerational conflict. And sexual dissatisfaction could also arise from this situation. Yeom (1986, recited in Kim, 1991) showed in his study with Korean-Americans that such limited opportunity for contact between husband and wife would cause severe spousal conflict which led to mental health problems such as depression and alcoholism.

The Role Conflict Between Husband and Wife

In most cases of family immigration in my study, wives had the initiative to carry out immigration decision. For wives, immigration was a good way to be excused from the ethical obligations which were expected of women in the extended family in the Confusian family culture. In particular, if she pursues better education for their children through immigration, she could be praised as such a devoted mother as Mencius’ mother, because she must be resigned to all inconveniences of living abroad for her children. Even after immigration, it is through the women’s network that information about child education is spread and shared.

In this way, wives play a major role in the immigrant family through child education, while almost all husbands have to struggle with un/underemployment or operate small businesses, having nothing to do with their previous careers, with their wives’ help. Role reversal between wives and husbands in the Korean family structure occurs, which is a major cause of spousal conflict among Korean immigrants (Yu 1987). Moreover, there is no resource to support men’s status in the family as in Korea such as men-centered ideology or kinship network but men tended to adhere to the traditional status of men in Korea. Consequently men suffer more severe stress from this situation. The report that spousal conflict among Koreans in the US is more frequent in initial period of immigration and in the group of the higher educated (Yu, 1987) has implications that I plan to explain in my future research with Koreans in New Zealand.

Building immigrant identity

Among four possible acculturation strategies (Berry, 1997), integration is associated with greater life-satisfaction replicating results found in previous studies with Korean-Canadians (Kim, 1998). Integration is the ability to maintain one’s original culture, while in daily interactions with other groups (Berry, 1997).
In the same context, it is desirable for Korean immigrants to establish hyphenated identity (Kim, 1991). But immigrants unavoidably experience conflict between two different identities in identity formation. Especially, severe conflict emerges during adolescence when the individual’s identity is in the making.

Koreans in New Zealand in my MA study, however, showed the tendency to define themselves only in connection with Korea. Most of the immigrants still had certain uneasiness over labelling themselves as immigrants. Most of the immigrants were still continuing to hold on to the familiar ‘Korean’ life style and value.

Under these circumstances, the children must learn the values, life styles, and attitudes of the Korean middle class through their parent’s ways of life which are quite different from host society’s ones and may consequently end up building dual value systems, eventually becoming borderline identities.

Further Study

Many Koreans I met during my fieldwork in 1996 had a plan to return to Korea after successfully settling in New Zealand. They wanted to live in both countries at the same time “coming and going”. Such a plan was based on the advantages they would get from living experiences in and a connection with an “English-Speaking” and more westernized country than Korea. In fact, these transnational characteristics are major characteristics of almost all recent-mainly after 1990’s Korean immigrants as well as those in New Zealand and largely determine the adaptation process and feature of Korean immigrants in host countries. Transnational aspects of Korean immigrants in New Zealand and their influence on mental health require further research. To study it, special attention will be given to discourses about transnational experiences and adaptation strategies using transnational skills (Portes et al., 1999), ‘identity journeys’ of immigrants’ children (Anae, 2001), and consequent immigrants’ emerging identity.

Many studies point out that the immigration policy of receiving states has a strong influence on immigrants’ adaptation patterns and mental health (e.g. Berry, 1997; Kim, 1998). New Zealand has been pursuing closer relationships with various Asian countries in trade, tourism, and education as well as immigration. In response to this situation, a number of policy changes have been made by the government as it leads the nation towards a more multi-ethnic society by continuously inviting immigrants. How Korean immigrants, who have been acculturated in an ethnically homogeneous society, adapt to a multi-ethnic society is worthy of study.

In pursing this project, the life history approach provides a valuable tool in comprehending the immigrants’ adaptive efforts in the host country’s socio-cultural system. It allows the comprehension of the subjective meanings of immigration including their dreams and goals. It also shows how a society looks from the perspectives of the individual, and reveals how subjective experiences of the individuals are interwoven with objective structures of society.
REFERENCES

1. Korean Texts


2. English Texts


DIARRHEAL ILLNESS AND HEALTH-RELATED INFORMATION NEEDS OF INTERNATIONAL TOURISTS IN AN ATTRACTIVE DESTINATION, SOUTHERN THAILAND

Nopporn Howteerakul, Nawarat Suwannapong, Chaweewon Boonshuyar, and Manit Chaninporn

ABSTRACT
This cross-sectional study aimed to measure the prevalence, determine selected factors associated with diarrheal illness, and assess the health-related information needs of 350 international tourists aged ≥15 years travelling on Lanta Island, Southern Thailand. The cohort completed questionnaires and the results indicated that 36.3% had had diarrheal illness. Multiple logistic regression analysis showed that a longer stay on Lanta Island (>7 days) and a negative attitude towards food and beverage selection and consumption were significantly associated with diarrheal illness. About 60% of international tourists suggested providing adequate garbage bins, and life-safety equipment in attractive destinations.


Dr Nopporn Howteerakul
Faculty of Public Health
Mahidol University
Bangkok, Thailand
E-mail: npp92432@yahoo.com

Dr Nawarat Suwannapong
Faculty of Public Health
Mahidol University
Bangkok, Thailand

Chaweewon Boonshuyar
Faculty of Public Health
Mahidol University
Bangkok, Thailand

Manit Chaninporn
Office of the Permanent Secretary
Ministry of Public Health
Thailand
INTRODUCTION

Travellers’ diarrhoea (TD) is the main infectious disease among tourists who travel from developed to developing areas. The incidence rates vary from 20 to 50% (Caeiro & DuPont, 1998). Despite the advice “boil it, cook it, peel it or forget it”, dietary transgressions are usually unavoidable. Over 80% of TD is caused by bacterial contamination of food, especially enterotoxigenic Escherichia coli (DuPont & Ericsson, 1993).

Thailand is one country that attracts international tourists. Koh Lanta, in Krabi, a southern Thai province, is a famous island. In 2000, the number of tourists visiting this island was estimated at 4,000-5,000 persons (Tourism Authority of Thailand, 2001). Tourists going abroad often behave differently from when they stay at home, and are willing to experiment and take certain risks they would not normally take in their home environment (Hundt, 1996).

The rapid growth of international travel has made TD a significant problem. Although TD is a self-limited illness, it has the potential to incapacitate (Steffen et al., 1999). Several western studies have assessed TD prevalence and risk factors in terms of eating and drinking behaviours while travelling in developing countries (Cartwright, 1993), but such information, and the health information needs of international tourists in Thailand, are very limited. This information is important to improve prevention, treatment, and the quality of TD health care services in Thailand.

MATERIALS AND METHODS

A cross-sectional study was conducted at Koh Lanta, in April-May 2001. A total of 350 international tourists was recruited by the following criteria: age ≥15 years; able to read and write English; stayed at Koh Lanta for at least 4 days before filling in the questionnaire (to ensure that they got diarrhea in the study area). Expatriate residents of Thailand were excluded.

TD was defined as three or more episodes of loose stool within a 24-hour period, with or without other symptoms, or one watery stool, or one mucous bloody stool with one or more of the following—vomiting, nausea, abdominal cramps, fever, weakness.

The protocol was approved by Mahidol University Ethics Committee. The Head of Koh Lanta District Health Office gave permission to conduct the study. Verbal consent was obtained from individual international tourists.

MEASUREMENTS

The survey instrument was comprised of four parts: Part 1 contained closed-ended questions concerning general characteristics of international tourists. Part 2 was attitude towards food and beverage selection and consumption, which consisted of 10 items with a 3-point-rating scale, ranging from 3=agree to 1=disagree. A reverse score was given for negative items. Cronbach’s alpha was 0.71. Part 3 contained 10 items regarding food and beverage selection and consumption behaviour. Each positive item was rated on a 4-point-rating scale, 3=always, 2=often, 1=sometimes and 0=never. Cronbach’s alpha was 0.73. A score of ≥80% of the possible total
score was classified as positive attitude or good behaviour concerning food and beverage selection and consumption. Part 4 contained 12 items to assess health-related information needs while travelling in Koh Lanta District.

**STATISTICAL ANALYSIS**

Unconditional logistic regression analysis was used to obtain odd ratios (ORs), 95% confidence intervals and control potential confounders. The level of significance was set at \( P \leq 0.05 \). The sample size, 350 cases, was calculated using \( \alpha = 0.05 \), allowable error=0.04. The proportion of the target population estimated to get TD was 0.16 (Krabi Provincial Hospital, 2000). The sample size required for this study was at least 323 respondents.

**RESULTS**

**General characteristics**

Of the 350 recruits, 56.9% were female. Ages ranged from 17--76 years (mean=32.6); 65.1% came from Europe, 18.3% from Asia, 10.6% from America, and 6% from Australia. 94.3% travelled by self-arrangement. 81.4% had insurance. 77.7% stayed in bungalows. Duration of stay ranged from 4-330 days, with a median of 20 days; 40.3% stayed on Koh Lanta for 15--30 days. 56.0% had never before visited Thailand.

**Characteristics of diarrheal episodes**

Overall, the prevalence of diarrheal illness was 36.3% (127/350). Of 127 international tourists with a diarrheal episode during this trip, 60.6% had TD duration <48 hr, and 50.4% passed \( \geq 3 \) loose stools per day. Diarrhea-associated symptoms were nausea/vomiting (30.0%) and abdominal cramps (18.9%). 87% reported that food was the suspected cause, and 66.8% reported that a hotel/restaurant was the suspected source. Only 23.6% reported taking oral re-hydration salts (ORS), whereas 35.4% took medicines from their own countries (Table 1).

**Pre-travel advice**

82% reported receiving pre-travel health advice. The most popular source was friends (74.9%), then the Internet (39.7%), travel agency (14.9%), and embassy (5.7%).

**Attitude towards food and beverage selection and consumption**

Overall, 48.6% had a positive attitude. 53.1% agreed with choosing a clean restaurant for a meal. 41.7% agreed that food from hotels/restaurants was cleaner than food from street vendors. Only 26.3% said that tasting local food increased the risk of diarrhea and 39.4% agreed that some seafood could be eaten safely without cooking (Table 2).
Table 1. Characteristics of 127 diarrheal episodes of international tourists.

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duration</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 48 hr</td>
<td>77</td>
<td>60.6</td>
</tr>
<tr>
<td>2-7 days</td>
<td>50</td>
<td>39.4</td>
</tr>
<tr>
<td>Median = 2 days</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stool appearance (per day)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-2 loose stools</td>
<td>33</td>
<td>26.0</td>
</tr>
<tr>
<td>≥3 loose stools</td>
<td>64</td>
<td>50.4</td>
</tr>
<tr>
<td>≥1 watery stool</td>
<td>25</td>
<td>19.7</td>
</tr>
<tr>
<td>≥1 mucous/bloody stool</td>
<td>5</td>
<td>3.9</td>
</tr>
<tr>
<td>Associated symptoms&lt;sup&gt;a&lt;/sup&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stomach-ache</td>
<td>94</td>
<td>74.0</td>
</tr>
<tr>
<td>Weakness</td>
<td>55</td>
<td>43.3</td>
</tr>
<tr>
<td>Nausea/vomiting</td>
<td>47</td>
<td>30.0</td>
</tr>
<tr>
<td>Headache/dizziness</td>
<td>47</td>
<td>30.0</td>
</tr>
<tr>
<td>Cramp</td>
<td>24</td>
<td>18.9</td>
</tr>
<tr>
<td>Fever</td>
<td>20</td>
<td>15.7</td>
</tr>
<tr>
<td>Suspected cause of diarrhea&lt;sup&gt;a&lt;/sup&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food</td>
<td>110</td>
<td>86.6</td>
</tr>
<tr>
<td>Drinking water or ice cube</td>
<td>44</td>
<td>34.6</td>
</tr>
<tr>
<td>Vegetable or fruit</td>
<td>39</td>
<td>30.7</td>
</tr>
<tr>
<td>Other</td>
<td>18</td>
<td>14.2</td>
</tr>
<tr>
<td>Suspected place of getting diarrhea&lt;sup&gt;a&lt;/sup&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hotel/restaurant</td>
<td>81</td>
<td>66.8</td>
</tr>
<tr>
<td>Street vendor</td>
<td>57</td>
<td>44.9</td>
</tr>
<tr>
<td>Market</td>
<td>30</td>
<td>23.6</td>
</tr>
<tr>
<td>Treatment&lt;sup&gt;a&lt;/sup&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Take rest without treatment</td>
<td>47</td>
<td>39.6</td>
</tr>
<tr>
<td>Take medicine from own country</td>
<td>45</td>
<td>35.4</td>
</tr>
<tr>
<td>Take ORS</td>
<td>30</td>
<td>23.6</td>
</tr>
<tr>
<td>Go to hospital/health centre</td>
<td>21</td>
<td>16.5</td>
</tr>
<tr>
<td>Other</td>
<td>18</td>
<td>14.2</td>
</tr>
</tbody>
</table>

<sup>a</sup> multiple responses

Food and beverage selection and consumption behaviours
Overall, 11.4% of international tourists had good food/beverage selection and consumption behaviours. Only 30.6% always selected drinking water with the ‘FDA’ certified clean logo. 29.1% ate fresh vegetables/salads only from clean restaurants. 12.6% always chose restaurants/hotels with 'clean food, good taste' meal certificates (Table 3).
Table 2. Attitude towards food and beverage selection and consumption of 350 international tourists (%).

<table>
<thead>
<tr>
<th>Statement</th>
<th>Agree</th>
<th>Uncertain</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dining only in a clean restaurant can prevent diarrhea.</td>
<td>53.1</td>
<td>23.8</td>
<td>23.1</td>
</tr>
<tr>
<td>Hotel food is cleaner than street vendor food.</td>
<td>41.7</td>
<td>31.4</td>
<td>26.9</td>
</tr>
<tr>
<td>Well-cooked food may be contaminated when being served.</td>
<td>50.0</td>
<td>37.1</td>
<td>12.9</td>
</tr>
<tr>
<td>You should peel all fruits yourself before eating.</td>
<td>41.7</td>
<td>32.9</td>
<td>25.4</td>
</tr>
<tr>
<td>Eating well-cooked and steamed hot food decreases diarrhea risk.</td>
<td>64.0</td>
<td>28.0</td>
<td>8.0</td>
</tr>
<tr>
<td>Fresh vegetables/fruits are nutritious but if we don’t clean them properly we will risk getting diarrhea.</td>
<td>73.7</td>
<td>20.6</td>
<td>5.7</td>
</tr>
<tr>
<td>Safe drinking water should be kept in a container having a certified Thai 'FDA' logo.</td>
<td>58.3</td>
<td>33.7</td>
<td>8.0</td>
</tr>
<tr>
<td>Tasting local food increases diarrhea risk.</td>
<td>26.3</td>
<td>36.3</td>
<td>37.4</td>
</tr>
<tr>
<td>Consuming ice cubes may cause diarrhea.</td>
<td>47.4</td>
<td>33.2</td>
<td>19.4</td>
</tr>
<tr>
<td>Some seafood can be eaten safely without cooking.</td>
<td>39.4</td>
<td>35.2</td>
<td>25.4</td>
</tr>
</tbody>
</table>

* stands for Food and Drug Administration. ** negative item

Table 3. Food and beverage selection and consumption behaviour of 350 international tourists (%).

<table>
<thead>
<tr>
<th>Statement</th>
<th>Always</th>
<th>Often</th>
<th>Sometimes</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wash hands before meal</td>
<td>36.0</td>
<td>33.7</td>
<td>27.2</td>
<td>3.1</td>
</tr>
<tr>
<td>Wash hands after using toilet</td>
<td>71.4</td>
<td>19.7</td>
<td>8.6</td>
<td>0.3</td>
</tr>
<tr>
<td>Drink water from sealed container</td>
<td>75.7</td>
<td>9.4</td>
<td>6.3</td>
<td>8.6</td>
</tr>
<tr>
<td>Choose only 'FDA' certified drinking water.</td>
<td>30.6</td>
<td>20.3</td>
<td>31.1</td>
<td>18.0</td>
</tr>
<tr>
<td>Take drinking water in a sealed bottle with you whenever you travel</td>
<td>44.9</td>
<td>15.1</td>
<td>17.4</td>
<td>22.6</td>
</tr>
<tr>
<td>Peel fruit yourself before eating</td>
<td>20.9</td>
<td>22.0</td>
<td>43.4</td>
<td>13.7</td>
</tr>
<tr>
<td>Drink fresh juice only in a clean restaurant</td>
<td>30.9</td>
<td>22.9</td>
<td>34.3</td>
<td>12.0</td>
</tr>
<tr>
<td>Eat fresh vegetables/salads only from a clean restaurant</td>
<td>29.1</td>
<td>26.6</td>
<td>31.7</td>
<td>12.6</td>
</tr>
<tr>
<td>Try some local food you’ve never tasted before **</td>
<td>8.6</td>
<td>24.3</td>
<td>37.4</td>
<td>29.7</td>
</tr>
<tr>
<td>Dine at a restaurant/hotel with a ‘clean food, good taste’ certificate.</td>
<td>12.6</td>
<td>12.6</td>
<td>39.1</td>
<td>35.7</td>
</tr>
</tbody>
</table>

* stands for Food and Drug Administration ** negative item

Health-related information needs
62.9% suggested providing adequate garbage bins and good sewage disposal systems in tourist areas. 59.1% suggested having safety equipment such as a lifebuoy/life jacket. 54.9% needed English-speaking hospital staff (Table 4).
Table 4. Highly recommended health-related information needs of 350 international tourists.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provide garbage bins and garbage disposal at every tourist attraction</td>
<td>220</td>
<td>62.9</td>
</tr>
<tr>
<td>Have safety equipment i.e. life-jacket/lifebuoy</td>
<td>207</td>
<td>59.1</td>
</tr>
<tr>
<td>Provide hospital staff who can speak English or another language</td>
<td>192</td>
<td>54.9</td>
</tr>
<tr>
<td>Provide 24-hour emergency telephone service</td>
<td>182</td>
<td>52.0</td>
</tr>
<tr>
<td>Provide adequate number of toilets at tourist attractions</td>
<td>178</td>
<td>50.9</td>
</tr>
<tr>
<td>Have a check-point to stop drunk drivers, to prevent accidents.</td>
<td>172</td>
<td>49.2</td>
</tr>
<tr>
<td>Limit number of tourists traveling by boat, to prevent accidents.</td>
<td>167</td>
<td>47.7</td>
</tr>
<tr>
<td>Provide brochure about local endemic diseases and their prevention</td>
<td>164</td>
<td>46.9</td>
</tr>
<tr>
<td>Have warning signs in danger areas, e.g. ‘beware of jellyfish, deep water zone’</td>
<td>162</td>
<td>46.3</td>
</tr>
<tr>
<td>Strictly control speed limits for all transport vehicles</td>
<td>148</td>
<td>42.3</td>
</tr>
<tr>
<td>Provide health insurance via tour agencies while traveling in Thailand</td>
<td>139</td>
<td>39.7</td>
</tr>
<tr>
<td>Display ‘Standard Food’ certificate in every restaurant</td>
<td>123</td>
<td>35.1</td>
</tr>
</tbody>
</table>

Factors affecting development of diarrhea

Table 5 shows the prevalence and crude odds ratio of diarrheal illness. Univariate analysis indicated three variables were statistically associated with the occurrence of diarrhea among international tourists. American and European tourists were more likely to get diarrhea than Asians (OR=4.62, 95%CI 1.90–11.22 for America vs. Asia and OR= 2.38, 95%CI 1.22–4.62 for Europe vs. Asia). Tourists who travelled by self-arrangement were more likely to get diarrhea than those on a group tour (OR=5.46, 95%CI 1.24–23.88). Tourists who stayed longer on Koh Lanta were more likely to get diarrhea than those who stayed shorter (OR=4.91, 95% CI 2.32–10.37, p for trend <0.001).
Table 5. Prevalence and crude odds ratio (OR) of diarrheal illness by general characteristics, attitude and behaviour concerning food and beverage selection and consumption of 350 international tourists.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Total</th>
<th>n</th>
<th>%</th>
<th>OR</th>
<th>95%CI</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sex</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>199</td>
<td>75</td>
<td>21.43</td>
<td>1.15</td>
<td>0.74 - 1.79</td>
</tr>
<tr>
<td>Female</td>
<td>151</td>
<td>52</td>
<td>14.86</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td><strong>Age (years)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17 - 29</td>
<td>154</td>
<td>66</td>
<td>18.86</td>
<td>1.55</td>
<td>0.77 - 3.10</td>
</tr>
<tr>
<td>30 - 44</td>
<td>150</td>
<td>46</td>
<td>13.14</td>
<td>0.91</td>
<td>0.45 - 1.85</td>
</tr>
<tr>
<td>≥45</td>
<td>46</td>
<td>15</td>
<td>4.29</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td><strong>Residence</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>America</td>
<td>37</td>
<td>20</td>
<td>5.72</td>
<td>4.62</td>
<td>1.90 - 11.22</td>
</tr>
<tr>
<td>Australia</td>
<td>21</td>
<td>8</td>
<td>2.29</td>
<td>2.41</td>
<td>0.83 - 7.04</td>
</tr>
<tr>
<td>Europe</td>
<td>228</td>
<td>86</td>
<td>24.57</td>
<td>2.38</td>
<td>1.22 - 4.62</td>
</tr>
<tr>
<td>Asia</td>
<td>64</td>
<td>13</td>
<td>3.71</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td><strong>Journey type</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-arrangement</td>
<td>330</td>
<td>125</td>
<td>35.72</td>
<td>5.46</td>
<td>1.24 - 23.88</td>
</tr>
<tr>
<td>Group tour</td>
<td>20</td>
<td>2</td>
<td>0.57</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td><strong>Duration of stay (days)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 - 7</td>
<td>72</td>
<td>13</td>
<td>3.72</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>8 - 14</td>
<td>60</td>
<td>23</td>
<td>6.57</td>
<td>2.82</td>
<td>1.27 - 6.25</td>
</tr>
<tr>
<td>15 - 30</td>
<td>141</td>
<td>51</td>
<td>14.57</td>
<td>2.57</td>
<td>1.29 - 5.14</td>
</tr>
<tr>
<td>≥31</td>
<td>77</td>
<td>40</td>
<td>11.43</td>
<td>4.91</td>
<td>2.32 - 10.37</td>
</tr>
<tr>
<td><strong>Experience of travelling abroad</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>40</td>
<td>12</td>
<td>3.43</td>
<td>0.73</td>
<td>0.36 - 1.49</td>
</tr>
<tr>
<td>Yes</td>
<td>310</td>
<td>115</td>
<td>32.86</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td><strong>Received pre-travel health advice</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>62</td>
<td>18</td>
<td>5.14</td>
<td>0.67</td>
<td>0.37 - 1.22</td>
</tr>
<tr>
<td>Yes</td>
<td>288</td>
<td>109</td>
<td>31.15</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td><strong>Travelled directly to Koh Lanta</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>285</td>
<td>110</td>
<td>31.43</td>
<td>1.77</td>
<td>0.97 - 3.24</td>
</tr>
<tr>
<td>Yes</td>
<td>65</td>
<td>17</td>
<td>4.86</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td><strong>Attitude (food &amp; beverage)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negative</td>
<td>170</td>
<td>70</td>
<td>20.00</td>
<td>1.51</td>
<td>0.98 - 2.34</td>
</tr>
<tr>
<td>Positive</td>
<td>180</td>
<td>57</td>
<td>16.29</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td><strong>Behaviour (food &amp; beverage)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Need for improvement</td>
<td>322</td>
<td>120</td>
<td>34.29</td>
<td>1.78</td>
<td>0.74 - 4.32</td>
</tr>
<tr>
<td>Good</td>
<td>28</td>
<td>7</td>
<td>4.62</td>
<td>1.00</td>
<td></td>
</tr>
</tbody>
</table>

a refers to visiting other places before arriving at Koh Lanta
b p for trend <0.001

**Multivariate analysis**

Unconditional multiple logistic regression analysis revealed that, after adjusting for all other variables in the model, two variables were statistically associated with diarrheal illness among international tourists. Significant predictors were longer duration of stay (adjusted OR=2.43, 95%CI 1.01-5.85 for 8-14 days vs. 4-7 days, adjusted OR=2.15, 95%CI 1.01-4.85 for 15-30 days vs. 4-7 days and adjusted OR=4.61,
95%CI 1.87-11.35 for ≥31 days vs. 4-7 days; p for trend=0.007), and negative attitude towards food and beverage selection and consumption (adjusted OR=2.01, 95%CI 1.21–3.34). Comparison of crude and adjusted OR for attitude suggested that confounding variables attenuated the association between attitude and diarrheal illness (Table 6).

Table 6. Crude and adjusted odds ratio (OR) of diarrheal illness among 350 international tourists by multiple logistic regression.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Crude</th>
<th>Adjusted&lt;sup&gt;a&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>OR</td>
<td>95%CI</td>
</tr>
<tr>
<td>Duration of Koh Lanta stay (days)&lt;sup&gt;b&lt;/sup&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 - 7</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td>8 - 14</td>
<td>2.82</td>
<td>1.28 - 6.25</td>
</tr>
<tr>
<td>15 - 30</td>
<td>2.57</td>
<td>1.29 - 5.13</td>
</tr>
<tr>
<td>≥31</td>
<td>4.91</td>
<td>2.32 -10.37</td>
</tr>
<tr>
<td>Attitude (food &amp; beverage)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Negative</td>
<td>1.51</td>
<td>0.98 -2.34</td>
</tr>
</tbody>
</table>
<sup>a</sup> adjusted for all other variables in the model.  
<sup>b</sup> p for trend <0.007

DISCUSSION

The TD prevalence in this study was 36.3%, which was higher than the 21.1% finding of Mitsui et al. (2004). The possible explanation was that risk of TD varied by season. The Mitsui study was conducted in the cooler season with Japanese visiting Bangkok, while the present study was undertaken with international tourists visiting a seaside area during summer, the peak TD season. However, the result of the present study was similar to the 34% finding by Hill (2000) with a large cohort of Americans returning from developing countries. The TD prevalence in the present study might be overestimated, as: 1) this study was conducted in a seaside area, where international tourists tended to consume seafood that may cause TD; 2) data were collected from international tourists during the peak diarrhea season in Thailand; 3) all cases were self-reported. No stool samples were collected from diarrheic respondents for laboratory evaluation, which may cause misclassification in some cases.

35.4% (45/127) of international tourists took medicine from their own countries. Hoge et al. (1998) reported a high rate of antimicrobial resistance among diarrheal pathogens isolated in Thailand. Antimicrobials are not necessary for mild diarrhea. Therefore, it is essential for travellers to be clear about the instructions for the medicines they carry, and how to access safe and effective medical services.

Multiple logistic regression analysis revealed that longer stay and negative attitude towards food and beverage selection and consumption were statistically associated
with TD. The result of longer stay confirmed the findings of Cavalcanti et al. (2002) and Hill (2000). Perhaps a longer stay increased the chance of exposure to contaminated foods and beverages with enteropathogens that cause TD.

The international tourists with a negative attitude towards food and beverage selection and consumption had about double the risk of TD compared with those having a positive attitude. One possible explanation was that the high proportion of tourists with a negative attitude agreed that some sea foods could be eaten safely without cooking, or disagreed that tasting local food increased the risk of diarrhea, as they may see other tourists eating popular dishes of raw fish or oysters, or carefully try well-cooked local food, and not get diarrhea.

Univariate analysis showed no statistical association between tourists' food and beverage related-behaviour and TD. However, tourists requiring improvement in food and beverage behaviour were 1.78 times more likely to get TD than those with good behaviour, although the OR confidence interval included 1. The reason might partly be due to respondents' language barriers in filling in the questionnaire. In addition, all cases relied on self-reports of diarrhea. The result was similar to the finding of Mattila et al. (1995), who reported no statistical association between dietary errors and TD among 933 adult Finnish tourists visiting Morocco. 12.6% of the respondents always chose to dine at a restaurant/hotel that had a ‘clean food, good taste’ certificate. This indicated that tourists may not notice the sign, or that it is quite difficult to choose a safe place to eat, even a restaurant in a tourist attraction.

In conclusion, the TD prevalence was quite high among international tourists visiting Koh Lanta. Organizations responsible for health and tourism should collaborate to solve the problems systematically. Other suggestions include increasing the proper use of ORS for diarrhea, providing food safety programs, spot-checking the cleanliness of food and beverages of hotels, restaurants, and street vendors. Behaviour modification through mass media still needs to stimulate the health behaviours and attitudes of international tourists.
REFERENCES


ABSTRACT
Lifestyle, anthropometric measures and Dietary intakes in a group of Auckland migrant Chinese women were investigated. Results showed that they were in good health with few consuming alcohol (four percent), a low mean body mass index (21.8 kg/m^2), no subject was obese or had hypertension, or smoked. However, the high incidence of central obesity (26% had waist circumference excess, 50.9% had waist to hip ratio excess), the decreased activity level and weight gain after immigration indicated potential future risks to their health. Dietary assessment found that the proportion of total energy derived from fat was high (median 36.8%) and from carbohydrate was low (median 43.9%). Median Intakes of cholesterol (323 mg/day) and sodium (3584 mg/day) were high, whereas median intakes of fiber (17g/day), vitamin A (541ug/day), calcium (488 mg) and selenium (49 mg) were low. Acculturation had resulted in increased intake of fruit, dairy foods, poultry, and red meat but decreased intake of cereals.


Ms Kai Hong Tan
Assistant lecturer
Institute of Food, Nutrition and Human Health
Massey University
Email: kaihongtan@yahoo.com or k.k.h.tan@massey.ac

Mrs Patsy Watson
Senior lecturer
Institute of Food Nutrition and Human Health
Massey University
INTRODUCTION

When Chinese migrate to Western countries, numerous changes in eating habits and lifestyle occur. The process of acculturation results in increasing meat and animal fat consumption, and decreasing whole grain and vegetable consumption (Hsu-Hage, Ibiebele, & Wahlqvist, 1995; Lee, 1994; Wang et al., 1994). At the same time, migrant Chinese have experienced higher rates of overweight/obesity, hypertension, hyperlipidemia, diabetes and coronary heart disease than Chinese living in China (Hsu-Hage & Wahlqvist, 1993; Li, Tuomilehto, & Dowse, 1992; Unwin et al., 1997). It has been hypothesised that adoption of Western lifestyles and dietary practices results in modification of chronic disease risk in migrant Chinese populations.

Over the past decade, the Chinese population in New Zealand has grown to 104,000, contributing three per cent of the total New Zealand population (Statistics New Zealand, 2002). Comparatively, little is known about their health and health needs. In order to provide baseline data on their dietary intake and health status, and reveal any changes in food habits and lifestyle after immigration, a study in a group of young Mainland Chinese women resident in Auckland was conducted.

SUBJECTS AND METHODS

Only subjects originating from Mainland China, aged between 20 to 45 years, were recruited. Dietary intakes were assessed using a 24-hour recall and 2-day weighed diet records. Anthropometric measurements included height, weight, waist and hip circumference, and blood pressures. All measurements were made by a single, trained person in accordance with the procedures set out by International Society for the Advancement of Kinanthropometry (ISAK). A questionnaire was used to collect demographic and lifestyle data. This study was approved by the Massey University Human Ethics Committee. Informed consent to participate was obtained from every subject before initiating the survey.

Dietary data was analysed in the FoodWorks program (1999 Xyris Software Aus Pty Ltd). Other data analysis was performed using the statistical analysis programs Excel and MINITAB (1998 release 12).

RESULTS

Lifestyle of the Study Subjects

A total of 55 women completed the study. They came from different districts of Auckland and had been in New Zealand from six months to 13 years. The mean age of the study subjects was 33 years. None of the subjects smoked and only two (four percent) drank alcoholic beverages. Changes in weight and activity level since migration are shown in Table 1.
Table 1. Changes of weight and activity level of study subjects.

<table>
<thead>
<tr>
<th>Lifestyles</th>
<th>Number (percentage)</th>
</tr>
</thead>
</table>

**Weight Change After Immigration**
- No difference: 17 (31%)
- Increase: 36 (65%)
- Decrease: 2 (4%)

**Activity Level**
- In China > In New Zealand: 41 (75%)
- In China = In New Zealand: 14 (25%)
- In China < In New Zealand: -

**Anthropometric Measurements**

Anthropometric measurements and percentage of subjects having excess are shown in Table 2.

Table 2. Anthropometric characteristics of the study subjects.

<table>
<thead>
<tr>
<th>Body measurements</th>
<th>Mean ± SD</th>
<th>Percentage of subject having excess</th>
</tr>
</thead>
<tbody>
<tr>
<td>Body weight (kg)</td>
<td>55.3 ± 6.2</td>
<td></td>
</tr>
<tr>
<td>Height (cm)</td>
<td>159.2 ± 4.6</td>
<td></td>
</tr>
<tr>
<td>Body mass index (kg/m²)</td>
<td>21.8 ± 2.4</td>
<td>Overweight: 22%¹</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Obese: 0 ¹</td>
</tr>
<tr>
<td>Waist circumference (cm)</td>
<td>74.0 ± 7.9</td>
<td>26% ²</td>
</tr>
<tr>
<td>Hip circumference (cm)</td>
<td>90.8 ± 7.1</td>
<td></td>
</tr>
<tr>
<td>Waist / hip circumference</td>
<td>0.82 ± 0.1</td>
<td>50.9% ³</td>
</tr>
<tr>
<td>Blood pressure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Systolic (mmHg)</td>
<td>101 ± 11.5</td>
<td>Hypertension: 0</td>
</tr>
<tr>
<td>Diastolic (mmHg)</td>
<td>70 ± 8.9</td>
<td>Borderline hypertension: 1.8%</td>
</tr>
</tbody>
</table>

¹Overweight is defined as a BMI greater than 24 but less than or equal to 28, obese as a BMI greater than 28 in China (Food Nutrition Health, 2004).
²Cut-off point of waist circumference: Chinese standard: 80cm (Food Nutrition Health, 2004)
³Cut-off point of waist to hip ratio: 0.8 (National Cholesterol Education Program, 1994)
Dietary Intakes

Energy and macronutrients

The median intakes of energy and macronutrient and the energy contributions are shown in Table 3. Evaluation of intakes was made in comparison with the Australian Recommended Dietary Intake (RDI) and New Zealand Task Force Guideline.

Table 3. Intake of energy and macronutrient by the study subjects.

<table>
<thead>
<tr>
<th>Nutrients</th>
<th>Intake by study subjects (Median)</th>
<th>Recommended level</th>
<th>Percentage of subjects not meeting the recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy (kJ)</td>
<td>6965</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Protein (g/kg body weight)</td>
<td>1.3</td>
<td>0.8-1.6</td>
<td>9%&lt;0.8</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>24%&gt;1.6</td>
</tr>
<tr>
<td>Cholesterol (mg)</td>
<td>323</td>
<td>300</td>
<td>56% &gt;300</td>
</tr>
<tr>
<td>Fiber (g)</td>
<td>17</td>
<td>25-30</td>
<td>91%&lt;25</td>
</tr>
<tr>
<td>Percentage of Energy from Protein (%)</td>
<td>17.0</td>
<td>12-15</td>
<td>4% &lt; 12%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>76% &gt;15%</td>
</tr>
<tr>
<td>Percentage of Energy from Fat (%)</td>
<td>36.8</td>
<td>30-33</td>
<td>82% &gt;33</td>
</tr>
<tr>
<td>Percentage of Energy from SFA (%)</td>
<td>12.7</td>
<td>8-12</td>
<td>56%&gt;12</td>
</tr>
<tr>
<td>Percentage of Energy from MUFA (%)</td>
<td>14.3</td>
<td>Up to 20</td>
<td></td>
</tr>
<tr>
<td>Percentage of Energy from PUFA (%)</td>
<td>9.8</td>
<td>6-10</td>
<td>15%&lt;6</td>
</tr>
<tr>
<td>Percentage of Energy from Carbohydrate (%)</td>
<td>43.9</td>
<td>50-55</td>
<td>91% &lt;50</td>
</tr>
<tr>
<td>Percentage of Energy from sugar (%)</td>
<td>13.5</td>
<td>&lt;15</td>
<td>36% &gt;15%</td>
</tr>
</tbody>
</table>

1 Australian Recommended Dietary Intakes (National Health and Medical Research Council, 1991)
2 New Zealand Task Force Guideline (New Zealand Nutrition Taskforce, 1991)
Micronutrients

Table 4 shows the vitamin and mineral intakes by the study subjects as well as the percentage of subjects not meeting the recommendations.

Table 4. Vitamin and mineral intakes by the study subjects.

<table>
<thead>
<tr>
<th>Nutrients</th>
<th>Median intake by subjects</th>
<th>Percentage of intake below LRNI¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thiamin (mg)</td>
<td>1.1</td>
<td>0</td>
</tr>
<tr>
<td>Riboflavin (mg)</td>
<td>1.2</td>
<td>16%</td>
</tr>
<tr>
<td>Vitamin C (mg)</td>
<td>119</td>
<td>0</td>
</tr>
<tr>
<td>Vitamin B₆ (mg)</td>
<td>1.1</td>
<td>-</td>
</tr>
<tr>
<td>Vitamin B₁₂ (mg)</td>
<td>2.6</td>
<td>7%</td>
</tr>
<tr>
<td>Total Folate (ug)</td>
<td>198</td>
<td>7%</td>
</tr>
<tr>
<td>Total A Eq (ug)</td>
<td>541</td>
<td>13%</td>
</tr>
<tr>
<td>Sodium (mg)</td>
<td>3584</td>
<td>*</td>
</tr>
<tr>
<td>Magnesium (mg)</td>
<td>272</td>
<td>15%</td>
</tr>
<tr>
<td>Calcium (mg)</td>
<td>488</td>
<td>33%</td>
</tr>
<tr>
<td>Iron (mg)</td>
<td>12.5</td>
<td>11%</td>
</tr>
<tr>
<td>Zinc (mg)</td>
<td>9.4</td>
<td>0</td>
</tr>
<tr>
<td>Selenium (ug)</td>
<td>49</td>
<td>33%</td>
</tr>
</tbody>
</table>

¹LRNI: Lower Reference Nutrient Intake (Ralph, 2000).

*48 (87%) subjects had sodium intake greater than the Australian upper limit of 2300mg/day.

Food patterns

Consumption of different foods by the study subjects and Chinese living in China are compared in Table 5.
### Table 5. Food consumption patterns of Mainland Chinese and study subjects.

<table>
<thead>
<tr>
<th>Food Items</th>
<th>Chinese National Survey in 1992 (urban area, men and women Combined)</th>
<th>Present study (women only) (n=55)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean (g/day)</td>
<td>Mean (g/day)</td>
</tr>
<tr>
<td>Cereal (Rice/wheat/products)</td>
<td>388</td>
<td>212</td>
</tr>
<tr>
<td>Vegetables, tubers</td>
<td>365</td>
<td>300</td>
</tr>
<tr>
<td>Fruits</td>
<td>80</td>
<td>272</td>
</tr>
<tr>
<td>Pork/products</td>
<td>61</td>
<td>56</td>
</tr>
<tr>
<td>Other meats (lamb, beef, etc)</td>
<td>17</td>
<td>26</td>
</tr>
<tr>
<td>Organ meats</td>
<td>6</td>
<td>5.3</td>
</tr>
<tr>
<td>Poultry/products</td>
<td>16</td>
<td>51</td>
</tr>
<tr>
<td>Eggs/products</td>
<td>29</td>
<td>37</td>
</tr>
<tr>
<td>Fish/shellfish</td>
<td>44</td>
<td>58</td>
</tr>
<tr>
<td>Dairy food</td>
<td>36</td>
<td>49</td>
</tr>
</tbody>
</table>

### DISCUSSION

#### Lifestyle of the subjects

The prevalence of smoking and drinking in migrant Chinese women was much lower than that in New Zealand women, where 23.5% were smokers and 9.5% had a potential hazard drinking pattern (New Zealand Ministry of Health, 1999). The low prevalence of smoking and drinking in the study population could favour cardiovascular health. Migrant Chinese women should be encouraged to maintain this healthy habit.

On the other hand, the reported activity decrease and weight gain after immigration in most of the subjects were risk factors for the development of obesity, diabetes, and cardiovascular disease. In China because of the extensive use of bicycles and public transportation, physical activity, even in office workers, is performed regularly. While in New Zealand, the use of their car for transport attributed to their reduced activity partly. There is an urgent need to develop and deliver health education and promotion programmes to encourage migrant Chinese to increase their activity levels.
Anthropometric measurements

On average, Chinese women were shorter and lighter and had lower body mass index (BMI) levels than New Zealand women. The proportions of overweight and obese were much lower in the study subjects (see Table 2) compared to their New Zealand counterparts where 25% were overweight and 17% were obese (Russell, Parnell, Wilson, & The Principal Investigators of the 1997 National Nutrition Survey, 1999).

A number of studies have suggested that the central deposition of fat is more important as a predictor of coronary heart disease risk than generalized obesity. It has been reported that abdominal depots have higher lipolytic rates than other subcutaneous depots and tend to be associated with lipid abnormalities (Arner, 1995). Waist to hip ratio (W/H) and waist circumference are the two commonly used measurements of central obesity and have been used as indicators of risk for some diseases such as diabetes and cardiovascular disease.

Compared to New Zealand women, the study subjects had a relatively high W/H, on average 0.82 compared to 0.77 for New Zealand women, and they had a twofold prevalence of W/H excess compared to their New Zealand counterparts (50.9% vs. 24.8%) (Russell et al., 1999). The high average W/H was also found in two other Chinese immigrant studies. Firstly in a Melbourne study, 75% of Chinese women aged 25 years and over had a W/H greater than 0.83 (Hsu-Hage & Wahlqvist, 1993), and secondly, in Newcastle United Kingdom, the average W/H in Chinese women aged 25-64 was 0.84, higher than their European counterparts (0.78) (Unwin et al., 1997). The low prevalence of overweight, accompanied by high prevalence of abdominal fatness, is interesting and further investigation into its impact on cardiovascular risk in the Chinese people is warranted.

On the other hand, when the waist circumference was assessed, the incidence of abdominal fatness (26%) was only half the incidence when W/H was assessed (50.9%). This raises the issue as which measurement, waist circumference or W/H, is the better predictor of risk for Chinese, and whether the 0.8 cut-off point of W/H for specifying health risk, which was derived predominantly from epidemiological studies on Caucasian populations, is suitable for Chinese women.
Blood pressure

Compared to the 1996 New Zealand National Survey (Russell et al., 1999), the study subjects’ mean blood pressure (101/71 mmHg) was much lower than their New Zealand counterparts (117/75 mmHg). The prevalence of abnormal blood pressure in the New Zealand National Survey was more than eight-fold that of the study subjects. However, cardiovascular mortality has been found to rise among Australian Asian migrants after ten years of residence (Young, 1986). In Melbourne the prevalence of treated hypertension in Chinese migrant women was similar to that in other Australians (Hsu-Hage & Wahlqvist, 1993). Therefore, it is necessary to monitor the changing prevalence of hypertension with time in the migrant Chinese population in New Zealand.

Dietary intakes by study subjects and changes of diet habit

Macronutrient contribution to total energy intake

In the present study, in terms of energy contribution, fat intake was high and carbohydrate intake was low.

On average, dietary fat provided 37.5% of total energy, higher than that found in the 1996 New Zealand National Nutritional Survey (35% in women aged 25-44) and the 1992 Chinese National Nutritional Survey (28% in Urban residents). Fat provided more than 33% of total energy in 82% of subjects and 52% had a saturated fatty acid intake higher than the recommended level. This, along with the high intake of cholesterol, could result in an elevation of serum lipids, and thus increase the risks of chronic degenerative disease.

Compared to their New Zealand counterparts, although the fat intake was higher, the fatty acid profile was better: with higher polyunsaturated fatty acid and lower saturated fatty acid intakes. This was probably attributed to Chinese favouring vegetable fats for cooking. The most common type of oil using for cooking in this study was soybean oil, followed by peanut oil. No subject reported using animal fat and butter for cooking.

Carbohydrates provided less than 50% of total energy in 91% of subjects. The median carbohydrate/energy ratio was only 43% in this study, lower than that found in the 1996 New Zealand National Nutrition Survey (49% in women aged 25-44) (Russell et al., 1999) and the 1992 Chinese National Nutritional Survey (57% in urban residents) (Ge, 1996). Traditionally, the Chinese diet is high in complex carbohydrate and fibre (Ge et al., 1995). The low carbohydrate/energy ratio and inadequate intake of fibre in this population indicated that there is a need to encourage migrant Chinese to maintain their traditional eating habits by increasing their consumption of whole grains and vegetables.
**Intakes of micronutrient**

High sodium intakes and low intakes of vitamin A, calcium and selenium were the main problems identified in the study population.

Eighty-seven percent of the subjects had sodium intake greater than the recommended upper limit. Salt intake in China is very high by Western standards, and varies geographically, ranging from 13-17 g/day per person in the north to 11-15 g/day in the south (Chen, 1997). For hypertension prevention in susceptible people, sodium intake should further decrease.

The median calcium intake (488mg) in migrant Chinese was much lower than the Australian RDI and the median intake of New Zealand women (714mg) (Russell et al., 1999). Thirty-three percent did not meet the Lower Reference Nutrient Intake (LRNI) level. The low calcium intake resulted from a low consumption of dairy foods which are not traditionally eaten in China (Food and Agriculture Organization of the United Nations, 2001). One reason for the failure of the Chinese to consume dairy products is that many Chinese are lactose-intolerant. Another is that dairy products are too expensive to produce in China because of minimal grazing land. The low intake of calcium, high intake of protein and the decreased activity level were potential risks for the development of osteoporosis in this population, as these factors have been found to be inversely associated with bone density (Anderson, 1999; Barzel & Massey, 1998).

The median intake of retinol was only 72% of the Australian RDI. Thirteen percent of the subjects had intakes of vitamin A lower than the LRNI level. Considering the high intake of protein, fat and cholesterol and low intake of fibre in this study, the migrant Chinese should increase their vitamin A intake by increasing the consumption of carotenes from plant sources, rather than retinol from animal foods.

Low selenium intake was another nutritional problem identified in this study. Selenium is an essential component of the glutathione peroxidases, key enzymes for the cellular defence against oxidant stress. NZ soils are naturally low in Se and the serum selenium levels of many New Zealanders have been considerably lower than that in other countries (Reilly, 1996). Therefore, we do need to monitor Se levels in this population and educate migrant Chinese to choose foods which are high in selenium, such as seafood, whole grains and vegetables.

The median intake of iron was higher than the recommended level, however 11% had intakes below the LRNI. As blood tests had not been taken in this study, the iron status and the prevalence of iron deficiency anaemia in this population is not known but should be monitored.
Changes of food pattern

“Dietary acculturation” refers to the process that occurs when members of a minority group adopt the eating patterns/food choices of the host country. Several studies have documented changes in the food habits of Chinese migrants living in different parts of the world following immigration. The process of acculturation results in increasing meat and animal fat consumption, and decreasing whole grain and vegetable consumption, which had modified chronic disease risk in migrant Chinese populations (Hsu-Hage et al., 1995; Hsu-Hage & Wahlqvist, 1993; Lee, 1994; Li et al., 1992; Wang et al., 1994).

To reveal any changes of food patterns after immigration, a comparison between migrant Chinese women and Chinese living in China (Ge, 1996) was made. The Chinese data came from the 1992 Chinese National Survey. Compared with the Chinese data, the study subjects ate less cereal, vegetables, pork and organ meats. In contrast, fruits, other meats (lamb, beef, etc), poultry, egg, fish, shellfish and dairy food consumption increased. Increases in fruit, poultry, and dairy food intakes, and decrease in cereal intakes were especially marked.

Compared to the Chinese data, fruit consumption in this study was three times greater. Fruit is provided in tremendous variety in New Zealand, and the cost is low. On the other hand, vegetable consumption in this study was slightly less. There are more than 40 Chinese supermarkets and groceries, and nearly 40 Chinese restaurants in different Auckland districts. Some Chinese vegetables, such as Chinese cabbages, bakchoi, caixin, long beans, bitter melon, Chinese radish, kale (Gai Lan), watercress, mustard greens, are grown and sold locally. Hence, availability did not account for the decreased use of vegetables. The decline may be due to cost and perceived food quality.

Consumption of poultry was three times higher than that in the Chinese Study. This increased consumption of poultry, beef and lamb indicated a shift of consumption from pork to poultry in migrant Chinese. In China, the most popular meat is pork (Food and Agriculture Organization of the United Nations, 2000). Very little beef is available because of minimal grazing land. The decreased consumption of pork and its products by migrant Chinese was also reported in another study (Soh, Ferguson, & Wong, 2000). The poor flavour of pork and the lack of freshness were identified as problems in that study.

The amount of cereal, including rice and wheat consumed by the study subjects, was half that found in The Chinese National Nutrition Survey. This decline may partly explain the low contribution of carbohydrate to energy (43%) and the low intake of fibre in this study.

The process of acculturation has encouraged the consumption of dairy products among the Chinese women living in Auckland. As a result, the calcium intake increased in study subjects, compared to that in China. As the calcium intake in this study was still below the RDI, consumption of dairy products in this population needs to increase further. Milk was consumed only for breakfast by most of the study subjects. Cheese, yogurt and other dairy products were often not eaten at all.
Therefore, consumption of milk fortified with calcium should be promoted in migrant Chinese.

CONCLUSION

Lifestyles and anthropometric results showed that the incidence of degenerative disease risk factors was low in Auckland Chinese migrant women. However, the high incidence of central obesity as measured by waist and waist to hip ratio is one important potential risk to their future health. The low prevalence of overweight, accompanied by high prevalence of abdominal fatness implies further research into its impact on cardiovascular risk in the Chinese people.

Dietary problems identified in this study that could affect long term health were the high proportion of energy derived from fat, the low proportion of energy derived from carbohydrate, the high intake of cholesterol and sodium and the low intakes of fibre, vitamin A, calcium and selenium.

Acculturation had resulted in considerable change in lifestyles and eating patterns in these Auckland migrant Chinese women. Most subjects reported an activity decrease and weight gain after immigration. Intake of fruit, dairy foods, poultry, and red meat increased, whereas intake of cereal decreased. It is necessary to develop and deliver health education and promotion programmes to encourage Chinese migrants to retain their traditional healthful eating patterns and lifestyles and to increase activity level after moving to New Zealand.
REFERENCES


INTERNATIONAL STUDENTS’ HEALTH & WELLBEING
THE PSYCHOLOGICAL WELL-BEING OF ASIAN STUDENTS IN NEW ZEALAND

Colleen Ward, Anne-Marie Masgoret, Tracy Berno and Andy S-J. Ong

ABSTRACT
This paper summarizes key findings from our ongoing research on the psychological well-being of Asian students in New Zealand. In particular, it reviews the outcomes of both longitudinal, cross-sectional and comparative studies on the patterns, predictors and temporal variations in depression and life satisfaction in Asian students. In light of the research findings, recommendations are made for strategies that New Zealand educational institutions may use to promote positive intercultural interactions and to enhance the quality of life and the well-being of the large number of international students from Asia.


Professor Colleen Ward
School of Psychology
Victoria University of Wellington
Email: Colleen.Ward@vuw.ac.nz

Dr. Anne-Marie Masgoret
Lecturer, School of Psychology, Victoria University of Wellington and Fellow, Centre for Applied Cross-cultural Research, Victoria University of Wellington

Dr. Tracy Berno
Head, School of Food and Hospitality
Christchurch Polytechnic Institute of Technology

Mr. Andy S-J. Ong
Lecturer
Nanyang Polytechnic, Singapore
INTRODUCTION

In 2003, there were more than 110,000 international students in New Zealand, and the majority of these originated from Asian countries. Both national and international research has highlighted the difficulties faced by overseas students in adapting to a new educational system in a culturally unfamiliar environment. Problems pertaining to loneliness (Sam & Eide, 1991), homesickness (Sandhu & Asrabadi, 1994), communication, prejudice (Chataway & Berry, 1989), finances, (Matsubara & Ishikuma, 1993), academic performance and “culture shock” (Crano & Crano, 1993) are amongst the most commonly cited areas of difficulty. Coping with these challenges is an important component of the experience of international students and relates to their overall adaptation and psychological well-being.

Contemporary theory and research on acculturation situate the experience of crossing cultures in a broader stress and coping framework. Cross-cultural transition is conceptualized as a series of stress-provoking life changes that draw on adjustable resources and require coping responses. Linked to the popular concept of “culture shock,” this approach has been strongly influenced by Lazarus and Folkman’s (1984) work on stress, appraisal and coping, as well as earlier theory and research on life events (Holmes & Rahe, 1967). The analytical framework is broad and incorporates both characteristics of the individual and characteristics of the situation that may facilitate or impede adjustment to a new cultural milieu. Accordingly, researchers seeking to identify the factors that affect cross-cultural adjustment, particularly psychological well-being and satisfaction, have examined many of the same variables as those who investigate stress and coping in other domains. These include life changes, cognitive appraisal of stressors, coping strategies, personality and social support (Ward, 1996). More culture-specific variables such as cultural distance, acculturation strategies, contact with host nationals and language fluency have also been investigated. The stress and coping framework has been used to examine the experiences of a range of cross-cultural travellers, including tourists, sojourners, migrants and refugees, and has underpinned our own research, including our studies with international students (Ward, Bochner & Furnham, 2001).

This paper summarizes and synthesizes our research on the psychological well-being of Asian students in New Zealand. It addresses three basis questions:

1) How well do Asian students adapt psychologically?
2) Which factors predict their psychological adaptation?
3) How does psychological adaptation vary over time?

OVERVIEW OF STUDIES

Tables 1-2 provide an overview of the studies and samples involved in our programmatic research on cross-cultural transition and adaptation. Only those studies that specifically examine the psychological well-being of Asian students in New Zealand are included.

Table 3 provides information on samples collected expressly for comparison with international students from Asia. A number of our studies include multinational groups (e.g., Berno & Ward, 1998; Ward & Searle, 1991) which permits the comparison between international students from Asia and other regions; however, as
this was not the major objective of these investigations, they are included in the table of cross-sectional studies.

Table 1. Cross-sectional Studies: The Prediction of Psychological Adaptation.

<table>
<thead>
<tr>
<th>Participants</th>
<th>Method</th>
<th>Outcome</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>105 Malaysian and Singaporean university students</td>
<td>Survey</td>
<td>Depression</td>
<td>Searle &amp; Ward, 1990</td>
</tr>
<tr>
<td>155 multinational university students</td>
<td>Survey</td>
<td>Mood states</td>
<td>Ward &amp; Searle, 1991</td>
</tr>
<tr>
<td>145 Malaysian and Singaporean university students</td>
<td>Survey</td>
<td>Mood states</td>
<td>Ward &amp; Kennedy, 1993</td>
</tr>
<tr>
<td>95 multinational university students (73 from Asia)</td>
<td>Survey</td>
<td>Depression</td>
<td>Berno &amp; Ward, 1998; Ward, Berno &amp; Main, 2002</td>
</tr>
<tr>
<td>237 multinational university students (132 from Asia)</td>
<td>Survey</td>
<td>Depression</td>
<td>Ward, Ong &amp; Berno, 2002</td>
</tr>
<tr>
<td>2736 multinational secondary, tertiary and language students (2506 from Asia)</td>
<td>Survey</td>
<td>Life satisfaction</td>
<td>Ward &amp; Masgoret, 2004a</td>
</tr>
</tbody>
</table>

Table 2. Longitudinal Studies: Adaptation over Time.

<table>
<thead>
<tr>
<th>Participants</th>
<th>Method</th>
<th>Assessment Schedule</th>
<th>Outcome</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>35 Japanese students</td>
<td>Survey</td>
<td>On arrival&lt;br&gt;4 months post-arrival&lt;br&gt;6 months post-arrival&lt;br&gt;12 months post-arrival</td>
<td>Depression</td>
<td>Ward, Okura, Kennedy &amp; Kojima, 1998</td>
</tr>
<tr>
<td>14 Malaysian and Singaporean secondary and university students</td>
<td>Interview and survey</td>
<td>1 month post-arrival&lt;br&gt;6 months post-arrival&lt;br&gt;12 months post-arrival</td>
<td>Depression</td>
<td>Ward &amp; Kennedy, 1996a</td>
</tr>
<tr>
<td>23 Asian university students</td>
<td>Survey</td>
<td>2 months predeparture&lt;br&gt;3 months post-arrival&lt;br&gt;6 months post-arrival</td>
<td>Depression</td>
<td>Berno &amp; Ward, 2003</td>
</tr>
</tbody>
</table>
Table 3. Complementary Studies: Adaptation in Comparative Samples.

<table>
<thead>
<tr>
<th>Participants</th>
<th>Method</th>
<th>Outcome</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>156 Malaysian students in Singapore</td>
<td>Survey</td>
<td>Mood states</td>
<td>Ward &amp; Kennedy, 1993</td>
</tr>
<tr>
<td>267 New Zealand students at home</td>
<td>Survey</td>
<td>Depression</td>
<td>Berno &amp; Ward, 2003</td>
</tr>
<tr>
<td>218 Asian students at home</td>
<td>Survey</td>
<td>Depression</td>
<td>Berno &amp; Ward, 2003</td>
</tr>
<tr>
<td>447 New Zealand Maori and Pakeha secondary school students</td>
<td>Survey</td>
<td>Life Satisfaction</td>
<td>Ward &amp; Masgoret, 2004a</td>
</tr>
</tbody>
</table>

Ward (1996, 2001) has made the fundamental distinction between psychological and sociocultural adaptation, and both outcomes are routinely examined in our research with Asian students. Psychological well-being is most commonly assessed by the Zung Self-Rating Depression Scale (ZSDS, Zung, 1969, 1972) as it has been shown to demonstrate good cross-cultural reliability and validity. It has also been measured by the Profile of Mood States (POMS; McNair, Lorr & Droppleman, 1971) which taps symptoms of tension, depression, anger, vigour, confusion and fatigue. In two instances, a measure of life satisfaction based on work by Diener, Emmons, Larsen and Griffin (1985) has been employed. Sociocultural adaptation has been assessed by the Sociocultural Adaptation Scale (Ward & Kennedy, 1999) which has likewise been effectively used in cross-cultural research.

RESULTS

In this section we address three questions.

How well do international students adapt psychologically?

Overall, Asian students appear to adapt moderately well to life in New Zealand. The lack of culturally appropriate normative data for the Asian groups warrants caution in the interpretation of mean scores; however, the (adjusted) mean scores of Asian students in New Zealand do not appear to reach the cut-off points for screening of clinical depression. Furthermore, the scores are similar to those of other sojourning groups, including international business people, aid workers and diplomats in multinational destinations (e.g., Ward & Kennedy, 1994, 1996b; Ward & Rana-Deuba, 1999).

Comparative data yielded mixed results but do not suggest major psychological adaptation problems for the Asian students in New Zealand. More specifically, there were no significant differences in depressive symptomatology in Asian students in New Zealand compared to Asian students who remained at home (Berno & Ward, 2003). Nor were there differences between Asian students who made large cultural transitions to New Zealand compared to those who made smaller cultural transitions to another Asian country (Ward & Kennedy, 1993). We also failed to find differences in depressive symptomatology between Asian students in New Zealand and their domestic peers (Berno & Ward, 2003). However, international students from Asia
reported more symptoms of depression than their peers from North America and Europe (Berno & Ward, 2003).

With respect to life satisfaction, secondary students from Asia reported lower life satisfaction than their Maori and Pakeha peers, who in turn reported lower life satisfaction than international students from Europe and North America (Ward & Masgoret, 2004a).

**Which factors predict psychological adaptation?**

*Expectations*

There is strong evidence that students’ expectations are “undermet,” that is, their expectations are significantly more positive than their subsequent experiences. The research also indicates that the gap between these expectations and experiences is related to overall adaptation. Specifically, greater discrepancies are associated with poorer psychological adaptation after arrival in New Zealand (Berno & Ward, 2003). This is in line with broader international research on cross-cultural transition and adaptation (Black & Gregersen, 1990).

*Life changes, stress and coping*

Research findings are in accord with Holmes and Rahe’s (1967) theorizing on the stressful nature of life changes and their impact on physical and mental health. Depressive symptoms increase as a function of Life Change Units (the amount of readjustment required) associated with recent life events (Searle & Ward, 1990; Ward & Kennedy, 1993). Similarly, perceived stress associated with crossing cultures predicts more psychological adjustment problems in Asian students (Berno & Ward, 1998, 2003).

Certain coping strategies as responses to the stress of dealing with life in a new culture appear less efficacious and are more likely to impede students’ psychological adaptation. Those who rely on avoidant or escapist strategies, such as mental and behavioral disengagement, venting and denial, are more likely to suffer depression (Berno & Ward, 1998).

*Intergroup Perceptions, Contact and Relations*

International students from Asia engage in contact with a wide range people while in New Zealand, and our research has examined the quality and quantity of contact with three groups: people from their home country (co-nationals), other international students, and New Zealanders. Our studies have consistently found that more frequent and more satisfying contact with New Zealanders and other international students relates to better psychological adaptation (Berno & Ward, 2003; Searle & Ward, 1990; Ward & Kennedy, 1993; Ward & Masgoret, 2004a; Ward & Searle, 1991). The findings pertaining to co-national contact, however, are equivocal. Some studies have failed to find a significant relationship between co-national contact and psychological outcomes (Ward & Berno, 2003). In others, more frequent compatriot contact has been associated with lower life satisfaction and greater mood disturbance (Ward & Masgoret, 2004a; Ward & Searle, 1991) although greater
satisfaction with compatriot relations has been linked to decrements in depression (Searle & Ward, 1990; Ward & Kennedy, 1993). Overall, interpersonal relations are important, and loneliness has been found to precipitate depression in international students in New Zealand (Ward & Searle, 1991).

How Asian students view New Zealanders and how they believe that New Zealanders see them can also be an important aspect of the adaptation process. Although Asian students hold moderately positive stereotypes of New Zealanders, these perceptions are unrelated to psychological adaptation (Berno & Ward, 2003). However, those who believe New Zealanders have positive perceptions of international students (i.e., positive “reflected perceptions”) and those who perceive less discrimination report greater life satisfaction and fewer symptoms of depression (Berno & Ward, 1998, 2003; Ward & Masgoret, 2004a).

**Social Support**

Social support is known to assist people in coping with difficulties and challenges, and in this regard the situation for Asian students in New Zealand is no different from others who are dealing with significant life changes (Adelman, 1988). International students rely on people in their home countries as well as those in New Zealand for support although the sources vary as a function of needs. Informational needs are met by a variety of sources: staff in educational institutions, New Zealand friends, international friends and homestay families. Emotional needs, however, are more likely to be handled by people at home or international friends (Ward & Masgoret, 2004a).

Although students are moderately satisfied with the social support that is available, international students from Asia are less satisfied than those from Europe and North America. Consistent with the international research literature, greater availability of social support is associated with fewer symptoms of depression (Berno & Ward, 2003) and greater life satisfaction (Ward & Masgoret, 2004a).

**Personality**

Personality traits exert influence on how one adapts to life in a new culture, and there is evidence that successful adaptation can be predicted by traits measured before students depart for study abroad as well as those measured during residence in New Zealand. Our findings reveal that the following traits predict better psychological outcomes: Extraversion, Agreeableness, Conscientiousness (three of the “Big Five” personality dimensions), Emotional Resilience, Flexibility, and Internal Locus of Control (Berno & Ward, 1998, 2003; Ward, Berno & Main, 2002; Ward & Kennedy, 1993). Neuroticism is associated with more psychological adaptation problems (Berno & Ward, 2003).

**Other factors**

A number of other factors function as resources or deficits in coping with cross-cultural transition. Self-reported language proficiency predicts better psychological adjustment in Asian students, both fewer symptoms of depression and greater life satisfaction (Berno & Ward, 2003; Ward & Masgoret, 2004a). Cultural distance is
also important. In the main, greater differences between heritage and contact cultures is associated with poorer psychological adaptation (Ward & Searle, 1991).

Experiences across a range of life domains affect overall life satisfaction in international students. Greater life satisfaction has been reported by those who are more satisfied with their accommodation and homestays, those who more favourably evaluate services and facilities at their educational institutions, those who feel culturally included in the classroom, and those who have more positive perceptions of their town or city of residence also report greater life satisfaction (Ward & Masgoret, 2004a).

*Psychological, Sociocultural and Academic Adaptation*

Our research uniformly demonstrates a significant relationship between psychological well-being and social adaptation, that is, the acquisition of culture-specific skills or attainment of the cultural competence required to function effectively in a new cultural milieu (e.g., Searle & Ward, 1990; Ward & Kennedy, 1993). Where self-reported academic outcomes have also been assessed, these also relate to psychological adaptation (Berno & Ward, 2003).

*How does psychological adaptation vary over time?*

Our longitudinal studies have produced convincing evidence that international students from Asia experience a decline in psychological well-being on arrival to New Zealand (Berno & Ward, 2003). Furthermore, psychological distress peaks at entry, when life changes are greatest and coping resources, including social support, are at their lowest. Psychological well-being improves significantly over the first four to six months in New Zealand but is variable over time, depending on the nature of the New Zealand experience (Ward et al., 1998; Ward & Kennedy, 1996a).

**SUMMARY AND RECOMMENDATIONS**

Our programmatic research on cross-cultural transition and adaptation indicates that Asian students in New Zealand adapt reasonably well to life in this country. Their psychological well-being compares favourably both to their counterparts who remain at home and to their domestic peers. However, international students from European and North American countries enjoy better mental health, reporting fewer symptoms of depression and greater life satisfaction.

The findings also indicate that Asian students are most psychologically vulnerable on arrival to New Zealand. Depressive symptoms are greater at that time than either before departing from Asia or after four months in New Zealand.

A number of intrapersonal, interpersonal and intergroup factors relate to psychological adjustment. Some, like personality factors, are relatively stable dispositions and not easily amenable to change. Others, like intergroup contact, can be significantly affected by interventions designed to enhance the overall adaptation and psychological well-being of Asian students. It is these factors that we suggest for further consideration. Specifically, we recommend that educational institutions:
1. Ensure that students from Asia have realistic expectations about life in New Zealand, including the characteristics of the educational system. This may be achieved through the dissemination of pre-departure information through marketing initiatives, institutional communications or pre-departure training. Overly optimistic expectations result in greater psychological distress after arrival in New Zealand.

2. Provide orientation programmes and/or support services for Asian students soon after arrival in New Zealand. This is the most vulnerable period for their psychological well-being.

3. Address the issue of English language proficiency in a context-appropriate manner. Proficiency is a significant predictor of psychological, social and academic adaptation. Consideration may be given to raising entrance standards for students in secondary and tertiary institutions, although this is unlikely to be appropriate for language school students. In all contexts, high quality language programmes and learning support should be available for students.

4. Initiate programmes to increase contact between international students from Asia and domestic students. Optimally, the contact should be equal status, meaningful, intimate, cooperative and mutually beneficial. Greater contact with host nationals is associated not only with fewer symptoms of depression and greater life satisfaction, but also with improved social skills and academic performance in Asian students.

5. Ensure that institutional infrastructures provide avenues for social support and that students are aware of institutional resources. This may be partially accomplished by increasing contact between domestic and international students although this is not the only avenue for enhancing social support. Greater availability of social support is associated with better psychological outcomes, but research indicates that students are often unaware of the resources that are available in their educational institutions (Ward & Masgoret, 2004a).

6. Implement programmes for cultural awareness and appreciation of cultural diversity. International students from all countries report some discrimination in New Zealand, but those from Asian countries report more than those from Europe and North America (Berno & Ward, 2003; Ward & Masgoret, 2004a). Although these findings refer to perceived, rather than actual, discrimination, our New Zealand based research on attitudes toward immigrants indicates that these perceptions are likely to be accurate (Ward & Masgoret, 2004b). Students who perceive discrimination experience more depression and lower life satisfaction.

Although Asian students adapt moderately well to New Zealand, these strategies can further promote positive intercultural interactions, improve the quality of life and enhance the psychological well-being of the large number of international students from Asia who are now in New Zealand.
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**ENDNOTES**

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Correspondence regarding this manuscript should be sent to Colleen Ward, School of Psychology, Victoria University of Wellington, Wellington, New Zealand. E-mail: Colleen.Ward@vuw.ac.nz.
A “HOME AWAY FROM HOME”– A SUPPORT PROGRAMME
FOR INTERNATIONAL ASIAN STUDENTS

Angela Liew

ABSTRACT
The foremost concerns of most international Asian students were disappointments with their academic performance and their lack of fluency in English. There was a huge gap between their own expectations and reality, and was primarily caused by cultural misunderstanding and language inadequacy. However, such gap also created unnecessary performance pressures, prevented meaningful interaction and integration between international and local students, and generated feelings of rejections and isolations. Placing appropriate support mechanisms could address many of these issues. Even though all students needed support and care, it was much more effective and efficient to address a specific ethnic group and adopt strategies of their cultures. As a result, a support and care programme called *Ongoing Support for Asian Students (OSAS)* was initiated and implemented to raise awareness, communicate issues to students to encourage and equip them to do well academically as well as overall in the long term. OSAS organised many activities to develop relationship between students as well as self-confidence. Activities were carefully designed and structured to help students practise their interpersonal and intercommunication skills, educate students about the cultural differences, and teach essential survival techniques that were connected to belongingness, psychological wellbeing, self-confident, and self-worth that improved their communication and employability in New Zealand. This paper describes the various tactics and approaches taken by OSAS thus far. Language inadequacy might simply be a symptom of academic failure and thus would not ultimately resolve the language issues and poor academic results. However, if the existing main-stream language and academic support structures in place were coupled with abundant care, self-confidence promotion and cultural appropriate activities, then the main-stream support structures could be fully utilised and achieved their purposes. Overall, OSAS was well-received by many Asian students and staff for being more than an office, but was acknowledged as a “home away from home” where one could receive care and individual attention and closeness with people.


Angela Liew
Department of Information Systems and Operations Management
Business School
The University of Auckland
Email: a.liew@auckland.ac.nz
THE HISTORY AND MOTIVATION BEHIND THE INITIATION AND IMPLEMENTATION

Many international Asian students were observed not performing and coping as well as their Kiwi counterparts in class (Li, Baker et al., 2000; Berno & Ward, 2002). They often struggled to receive culturally appropriate advice from various offices in the institutions. Even though all students needed support and care, it was much more effective and efficient if the support programme for that specific ethnic group was created by that specific ethnic group for the purposes of that specific ethnic group (Bishop and Glynn 1998). It was also observed that international students tended to keep problems to themselves (Abe, Talbot et al., 1998; Yeh, Inose et al., 2001) as they placed much distrust in others (Kosowski, Grams et al., 2001). If they were to call upon those outside their circle of friends and family, they would choose to converse with professors or teachers and rely on them (Delaney, 2002) more than what domestic students would (Abe, Talbot et al., 1998; Yeh, Inose et al., 2001).

Many of these international students grew up in strong structures of extended families and friends and were used to seeking guidance from others. However, after they arrived in New Zealand they were required to adopt another culture despite the resistance from the general public. This often caused much distress in one’s self esteem and yearned for belongingness in a community.

As a result of these identified issues, a support and care programme called Ongoing Support for Asian Students (OSAS) was initiated and implemented to alleviate their academic and cultural transitions and create a sense of belongingness for those originated from the Asia continent. One key strategy of this programme was the utilisation of the notion of “teachers” (Abe, Talbot et al., 1998; Yeh, Inose et al., 2001; Delaney, 2002). Lecturers and teaching staff have a higher chance of interacting with students and would be in a better position noticing any immediate issues and needs. Furthermore, they would have established some levels of relationships and trust after several weeks. Another key strategy of this programme was the notions of networks and mentoring which were highly desired in most Asian cultures.

OSAS was launched since July 2003 in the department of Information Systems and Operations Management (ISOM) at the main campus to care for 750 Asian students (which comprised about 67% of the department’s total undergraduate population). Since July 2004 OSAS looked after 1100 undergraduate Asian business students studying with the ISOM department at the main campus as well as studying a tightly packaged business degree in two of its satellite campuses. The strategies and feedback described and evaluated in the following sections were based on the first twelve months of implementation in the main campus.

IMPLEMENTATION STRATEGIES

Organisational structure

OSAS has a collective structure where academic staff act as guides, while tutors and volunteers act as mentors. Networking occurs by creating a sense of belonging and connectivity through extending friends and teachers as an adopted family abroad;
while mentoring occurs through monitoring and study. Three main themes of activities were implemented to achieve networking and mentoring objectives. These three types of activities were supervised study sessions, seminars and gatherings, and an in-house community.

**Supervised study sessions**

Asian and Kiwi students were brought up differently and often held different expectations about academic qualification. Hence, it was important to discuss and acknowledge the behaviour and study techniques of Asian and Kiwi students, and the expectations of New Zealand academia in the study sessions. This was intended to reduce any misunderstanding or mismatch of academic expectations between the two cultures, and to encourage the adoption of strategies from both cultures whichever best suited. Even though there were a higher proportion of Chinese students with poor English, it was important that all the activities be conducted in English. Not only did the sessions motivate participants to review their content material regularly but enabled them to practise conversational English skills in a supportive environment and build their confidence to participate in their main-stream class discussion. Furthermore, language might be a hurdle but public speaking could be a bigger obstacle to overcome. Therefore, overcoming two big barriers would be extremely challenging.

One other key strategy of study sessions was to create connections and belongingness through fellowship and sharing. Mentors were encouraged to have tea or lunch break during or in between their study sessions. Beyond the study sessions, participants were recognised, monitored and cared for by mentors and guides. The mere recognition and sharing of progress were intended to make participants feel they were being noticed and cared for by a number of people. This feeling might allow them to feel at ease and safe that a caring and listening ear existed.

**Seminars and gatherings**

Much emphasis has been placed on relationship and trust building throughout the promotion, registration, attendance and follow-up processes in the gatherings and seminars. Personal email invitations were sent and intended to foster the thought that somebody cared. Email registration and story sharing gave students a chance to respond and accept an offer of care. The linkages of student names and email conversations upon meeting cultivated the fact that somebody remembered. Ultimately, following up on the students reassured them that the care and relationship was more than mere promotion and invitation and there was actually someone whom they could approach when in need.

Knowing that somebody cared might not be sufficient enough. In Asian cultures, care must come with actions and guidance. Unfortunately, parents might not have sufficient information or experience to help their children deal with the complexity and differences of living and studying in a foreign land. Hence, a gap of guidance arose. Unless that gap was filled, many would feel a lost of direction and purpose. Therefore, essential survival trainings were introduced to deal with the immediate
and future needs of students and to highlight how and where their futures lie so that they could better face their immediate academic challenges and increase their forthcoming employment opportunities.

**In-house community – “friends and family”**

Being away from familiar support structures did not mean one has to cope solely on one-self. A Chinese proverb said “you rely on your family when you’re at home, but you rely on your friends when you’re abroad”. The notion of family in many Asian cultures extends beyond immediate family and resembles a community. Therefore, a group of friends could act as a “home” abroad to symbolise a place with people whom you could rely on when in need. However, one would feel at ease and welcomed if that group of people exist inside their institution and was endorsed and supported by the institution.

Even though the initial purpose of recruiting volunteers were simply to help out with events, students would not consider volunteering and adopting a new family unless they have been touched, helped or enriched by that family. Furthermore, it provided an opportunity to provide leadership training and team work experiences to capable Asian students who would otherwise miss out when competing with mainstream domestic students. Frequent gatherings and social outings were held throughout the year to enable them to know each other and feel part of a new family. Such an adopted family could relieve homesickness and improve the wellbeing of students. Consequently, the goals of education could be fulfilled when students have better wellbeing which led to better concentration on studies.

**IMPLEMENTATION FEEDBACK**

The performance and success of OSAS was measured on the feedback received during the first 12-month of implementation in the main campus. These feedbacks could be in the form of solicited evaluation feedback, unsolicited appreciation emails and comments, and observations on attendance and reactions from various events. These feedbacks enabled us to match the levels of achievement against our goals and tasks, and use to discover any themes of patterns. Three main groups of students were approached for their view. They are volunteered mentors, study session participants, and students under the care of OSAS. Remarks and verification from staff members were also used to confirm the improvement of those participated in the study sessions.

**Initial reaction and attendance**

As mentioned earlier, the mere fact that somebody cared was not enough, especially since students might not have any prior interaction with any of the people involved. Therefore, personal email greetings were essential in attracting individual attention to attend any events, and building long-term association to eventually adopt a new family. For example, it took one whole semester before forty students attended a gathering despite generous free food was offered throughout.
Supervised study sessions

Only ten students actively participated in the study sessions during the first semester of implementation. This number grew to 60 participants in the second semester of implementation. High proportions of participants were past seminars and gatherings attendees or volunteered mentors. Hence, connections were essential in creating the trust of care followed by actions of academic support.

Twenty participants responded in the voluntary electronic evaluation feedback during the holiday period in June 2004. The findings presented two major themes of impacts on the participants: academic improvement and a larger social circle. According to the structured feedback questionnaire most participants felt more confident and believed that they have understood the course material better and gained better results as a result of participating in the supervised study sessions. Furthermore, the study sessions have played an important part in the social lives of students enabling them to know more people and make good friends with those in their sessions. Table 1 gives a summary on the agreement of academic and social improvement through study sessions. Not only had the participants felt the connections with the mentors but also with the study group. Thus, the attendance was perfect even during weekend. As one respondent said, “OSAS give me a warm family feeling, it make my university study becomes more happy!”

Significant academic improvement in comprehension and quality was verified by teaching staff when comparing the exam scripts of participants between two consecutive papers and semesters after the intervention of study sessions. Despite the fact that many participants have limited English skills, with much guidance, encouragement and practice in the study sessions they were able to overcome the language hurdle. This was reflected in the willingness and active participation of study session participants in the main-stream class discussion. Hence, two major barriers of language and public speaking were tackled successfully through a safe and caring environment.

Table 1. Participants’ Feedback on Supervised Study Sessions (n = 20).

<table>
<thead>
<tr>
<th>Question</th>
<th>Agreed</th>
</tr>
</thead>
<tbody>
<tr>
<td>You believed the study sessions have helped you better understand the course material and gained better results.</td>
<td>100%</td>
</tr>
<tr>
<td>You felt more confident about your study as a result of the study sessions.</td>
<td>90%</td>
</tr>
<tr>
<td>You made some good friends from your study sessions.</td>
<td>85%</td>
</tr>
<tr>
<td>You know more people taking the same course as a result of the study sessions.</td>
<td>80%</td>
</tr>
</tbody>
</table>

Seminars and gatherings

Frequent seminars and gatherings provided plenty of opportunities for students to socialise with other students taking the same or similar papers, talk with staff members in a casual setting, and learn how to deal with issues which were
commonly experienced by Asian students. Plenty of food was served at each event and it made the students feel the host was sincere in the invitation and that students were valued. Each of the events attracted about 50 to 90 attendees. Even though plenty of food was served, food was used as an attractor. The whole gathering event was structured with one important objective in mind that “no one should be left alone and unattended” and was actively pursued during each event. This was evident when 76% of the thirty-seven respondents commented on the friendly atmosphere which allowed them to meet more people and develop their networking skills (see Table 2 on the most important benefit about seminars and gatherings). This was also supported by a very low 4% acknowledgement of free food and drinks (see Table 2) and the unsolicited email appreciation for providing them more than mere free food. Unfortunately, many students did not have enough opportunity to meet staff members. This could be due to their lecturers not attending the events, or their expectation that lecturers should approach them instead.

More students were attracted to receive support and volunteered as mentors after experiencing the promotion, registration, attendance and follow-up processes. Unsolicited email apologies were often received expressing their appreciation for the events despite their unavailability to attend. Sometimes such emails went into much length and depth about their unfortunate incident or personal struggle. Such sharing has been made possible when care and trust surfaced through prior communication and interaction. Therefore, the notion of a home surfaced as it created warmth and confidence, and kept them on safe grounds (see Table 2).

A variety of issues and topics relating to short-term academic choices and long-term employment opportunities were shared at some event. It was intended to communicate the need to study for one’s own future, rather than study for the sake of obtaining a qualification. As a result of such events, 55% of the student respondents felt that they have found a sense of direction and purpose in what lies ahead and were able to start planning for their future; while 15% of the respondents felt that they have learnt some immediate practical tips in choosing papers. Table 3 gives a summary of what they thought was the most important benefit from the events with guest speakers. Therefore, the gap of guidance was filled for those who came to the seminars. As one feedback respondent said, “It is a wonderful programme for international students as it foresees their needs and provides various supportive activities for the Asian students’ requirements”.

Table 2. Students’ Open-Ended Feedback on “What is the most important benefit for you from the advertised gatherings?” (n = 37).

<table>
<thead>
<tr>
<th>Common Response</th>
<th>Replied</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meet new friends</td>
<td>76%</td>
</tr>
<tr>
<td>Free food and drinks</td>
<td>4%</td>
</tr>
<tr>
<td>Assist me to understand the subject content</td>
<td>4%</td>
</tr>
<tr>
<td>Learn more skills</td>
<td>4%</td>
</tr>
<tr>
<td>Cooperation and coordination</td>
<td>4%</td>
</tr>
<tr>
<td>Warmth and confidence</td>
<td>4%</td>
</tr>
<tr>
<td>Keeping myself from danger</td>
<td>4%</td>
</tr>
</tbody>
</table>
Table 3. Students’ Open-Ended Feedback on “What is the most important benefit for you from the advertised gatherings with guest speakers?” (n = 19).

<table>
<thead>
<tr>
<th>Common Response</th>
<th>Replied</th>
</tr>
</thead>
<tbody>
<tr>
<td>Know what I should do now for my future</td>
<td>55%</td>
</tr>
<tr>
<td>Gives me some ideas in choosing papers</td>
<td>15%</td>
</tr>
<tr>
<td>Advice and experiences from the speakers</td>
<td>10%</td>
</tr>
<tr>
<td>Understand the current situation for international students who want to get a job in NZ</td>
<td>5%</td>
</tr>
<tr>
<td>More understanding and ambitions of my study</td>
<td>5%</td>
</tr>
<tr>
<td>Realise the importance of English</td>
<td>5%</td>
</tr>
<tr>
<td>Nice topic, great ideas</td>
<td>5%</td>
</tr>
</tbody>
</table>

**In-house community – “friends and family”**

The observation made during the trial period of a 12-week semester suggested four main themes of changes occurring among the volunteered mentors. Firstly, the mentors learnt to work and operate in teams even under pressure. Secondly, they developed better interpersonal and intercommunication skills with each other as well as with strangers. Thirdly, their self-confidence grew. Fourthly, they became closer and often conversed with each other outside scheduled events. So, the frequent meetings and trainings have allowed them to know each other and enabled them to work together. All these four themes evolved through care, monitoring and guidance, and clearly revealed the improvement of mentors’ wellbeing. The fact that they were comfortable with each other and called upon each other for academic or personal support suggested that the notion of a family has been planted since there was a place to turn to for assistance and reassurance. Furthermore, some graduating wished they could stay behind and experience once more. As one respondent said, “It’s home for me on campus, where I can always find helps whenever necessary”.

When the mentors were asked to comment on their expectation and experience gained through OSAS, 94% of the seventeen respondents said that they have met more people and learnt to socialise or network. 77% of the respondents felt that they have helped students in some way and 71% of them have gained valuable team work experience, as indicated in Table 4.

Table 4. Mentors’ Feedback on Their Expectation and Actual Experience Gained (n = 17).

<table>
<thead>
<tr>
<th>Question</th>
<th>Agreed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meet more people and learn to socialise or network</td>
<td>94%</td>
</tr>
<tr>
<td>Helped students</td>
<td>77%</td>
</tr>
<tr>
<td>Team work</td>
<td>71%</td>
</tr>
</tbody>
</table>

When they were asked in an open-ended “any other comments”, their responses clearly indicated their satisfaction and trust in the support programme and especially
in those who were involved. These comments include: “OSAS is a great programme”; “Nobody should be doubtful of OSAS’s existence”; “OSAS is a great family for Asian students I enjoyed working with friends in OSAS, helping other students and feel thankful for help I got from OSAS”; and “Keep on doing what OSAS has been doing. Not only makes new students feel better but also other Asian students that have been here for a long time feel better too”.

**OSAS overall**

Much positive feedback on OSAS and its activities have been received. According to the feedback received, 30% of the respondents said that OSAS was a great organisation; 30% of them wished to thank those involved; 27% of them said it was wonderful source for first year students; 24% of them said OSAS has created opportunities for them to meet new friends taking the same papers as them; 14% of them said OSAS has provided practical study assistance; 11% of them thought OSAS was like a family that had someone who cared for them; and 8% of them proposed that OSAS be expanded to other departments and faculties. Table 5 gives a summary of students’ feedback on OSAS.

Table 5. Students’ Open-Ended Feedback on “What do you think of OSAS?” (n = 37).

<table>
<thead>
<tr>
<th>Common Response</th>
<th>Replied</th>
</tr>
</thead>
<tbody>
<tr>
<td>OSAS is a great/good organisation/society/program</td>
<td>30%</td>
</tr>
<tr>
<td>Applaud and thank you to OSAS Coordinator, tutors and helpers</td>
<td>30%</td>
</tr>
<tr>
<td>OSAS is helpful and gives a good start for first year students</td>
<td>27%</td>
</tr>
<tr>
<td>OSAS enables them to meet new friends and socialise</td>
<td>24%</td>
</tr>
<tr>
<td>OSAS provides study assistance</td>
<td>14%</td>
</tr>
<tr>
<td>OSAS is a family and who cares</td>
<td>11%</td>
</tr>
<tr>
<td>OSAS should be expanded to other departments and faculties</td>
<td>8%</td>
</tr>
</tbody>
</table>

**CONCLUSION**

The notion of care and trust took significant time and effort to reach students. However, networking and mentoring could only begin when students were ready to respond or partake in activities. Each of the action and activity has a continuum effect connecting the care to an actual seminar and gathering, which in turn translated into study session participation and mentorship.

English language deficiency might simply be a symptom of academic failure. It was evident that such language deficiency and academic disappointment could be overcome by abundant care and self-confidence building exercises. It was important that a seminar and gathering was not arranged for the sake of it, but must place much thought and effort into managing the flow of attendees, providing personal attention and building relationship. The need for guidance must be put into practice to highlight the importance of personal development, educate students on cultural differences, and teach essential survival techniques. Most importantly, the connectivity and belongingness provided a safety cushion and relieved them to concentrate on their studies and future. Hence, the feeling of a “home away from home” was constructed.
Everything about the support programme was probably best summarised in an unsolicited email, “all i want to say here is thank you, to OSAS, and to you, angela, thank you very much. Thank u for being there, thank you for the nice food and thank u for sending me the emails all the time, they do make me feel that i am really important to someone other than my girlfriend, :-) And such feeling is not that easy to find, i promise, OSAS made feel that whatever i do, i'm not alone. Thank you”.
REFERENCES


ACKNOWLEDGMENTS

Special thanks to my Head of Department *Professor Ananth Srinivasan* for believing in me and giving me a budget to start up *Ongoing Support for Asian Students (OSAS)*; to the Head of Division *Associate-Professor Kambiz Maani* for obtaining additional funding for me to expand OSAS to the satellite campuses; to the Dean of Business School *Professor Barry Spicer* for promoting OSAS to the rest of the faculty and the university and committing to additional funding for OSAS; and to the Deputy Dean of Business School *Professor Michael Powell* for taking his time attending many of our OSAS events and encouraging me.
“IS THERE ANYBODY OUT THERE TO HELP ME?”
LEARNING EXPERIENCES OF VIETNAMESE INTERNATIONAL
STUDENTS AT NEW ZEALAND UNIVERSITIES

Dieu-Hien Thi Mack

ABSTRACT
While there are similarities in the structure and style of learning and teaching at universities in New Zealand and Viet Nam, there are sufficient differences to provide real challenges to Vietnamese overseas students. New Zealand universities have in place a range of learning support for international students, but are they in fact readily accessible and do they meet the learning needs of specific cultural groups, such as Vietnamese? This paper aims to test the hypothesis that Vietnamese international students received appropriate and useful support to assist them to adjust and adapt while studying at New Zealand universities. Results indicated that Vietnamese international students had a wide range of experiences while studying in New Zealand and in utilising the learning support available. Over all, the evidence suggested that learning support was in the main inadequate or inappropriate. Recommendations for possible improvements to services are discussed.


Mrs Dieu-Hien Thi Mack
Email: hien.m@clear.net.nz
INTRODUCTION

The number of international students enrolled at New Zealand tertiary institutions has grown markedly in recent years, but little research has been carried out on their experiences while studying in New Zealand, especially in regard to academically related issues. New Zealand universities have in place a range of support services to assist international students to adapt to their new learning environment, however, little is known about the degree to which these services meet international students’ needs, particularly on a nation by nation basis.

PLANNING FOR OVERSEAS STUDY

Australian host institutions invest considerable resources in support services for overseas students (Samuelowicz, 1987), of particular note are pre-departure programmes integrated with on-site programmes to assist students in adjusting and adapting to new learning processes (Ginsburg, 1992; Nguyen, Nguyen & Craven 2000; Robertson & Andrew, 1990). Barker, Chia and Lopresti (1990) in discussing orientation for success, describe a loop of stages of inter-cultural adjustment and orientation presented in the form of a W-curve (Barker, 1990) (Appendix 1).

NEW ZEALAND – VIET NAM COMPARISONS

Tran (1999) suggests that “Viet Nam has some of the characteristics of universities in the United States, the United Kingdom, Australia, and some parts of Southeast Asia, impinged on by traditional Vietnamese values of teacher-student relationships and the more recent political (Marxist Leninist) aspects of Vietnamese education”. The New Zealand system historically draws on the traditional British university model.

Similarities

New Zealand and Vietnamese universities seem to have much in common. Both systems are hierarchical in structure (Appendix 2a, 2b) and are funded through a mix of state funding, tuition fees and private donations and grants and entrance to university directly from school for both is dependent on a nationally recognised qualification. Staff-student ratios in Viet Nam and New Zealand seem to be comparable. Eight universities taken at random in New Zealand showed an average ratio of 20.5 students to each of the teaching staff while the average of the same number of universities in Viet Nam was 23.5.
Differences

Structure and system

<table>
<thead>
<tr>
<th>Factors</th>
<th>New Zealand</th>
<th>Viet Nam</th>
</tr>
</thead>
<tbody>
<tr>
<td>Influences</td>
<td>• Historical stability</td>
<td>• Historical instability</td>
</tr>
<tr>
<td></td>
<td>• British origin</td>
<td>• Wide ranging colonial</td>
</tr>
<tr>
<td></td>
<td>• Evolutionary change over time</td>
<td>influences</td>
</tr>
<tr>
<td></td>
<td>• Apolitical</td>
<td>• Swift</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Political</td>
</tr>
<tr>
<td>Course design</td>
<td>• Two semesters &amp; Summer school</td>
<td>• Two main semesters</td>
</tr>
<tr>
<td></td>
<td>• Independent learning</td>
<td>• Teacher dependent</td>
</tr>
<tr>
<td>Assessment</td>
<td>• Multi-format assessment</td>
<td>• Single subject examination</td>
</tr>
<tr>
<td>The role of English</td>
<td>• Everyday communication</td>
<td>• Tool to access information</td>
</tr>
<tr>
<td>Attitudes</td>
<td>• Individualist society</td>
<td>• Collectivist society</td>
</tr>
<tr>
<td>University</td>
<td>• Wide range of services</td>
<td>• Few formal services</td>
</tr>
<tr>
<td>learning</td>
<td></td>
<td></td>
</tr>
<tr>
<td>support</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staff – student</td>
<td>• Partners in Learning</td>
<td>• Source of Knowledge</td>
</tr>
<tr>
<td>relationships</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

“The provision of library, computing, experimental equipment, consumables and other learning resources is extremely limited” (UNESCO, 1992, p. 23), (Ngô Lão Đông, 2003). Figures taken from Table 1 (Appendix 3) show that the average number of library resources per student in a random sample of Vietnamese universities is 18, compared with 68.25 for their New Zealand counterparts.

Learning & teaching styles

In first comparing Vietnamese and New Zealand learning styles in the light of the figure designed by Ballard and Clanchy (1984) (Appendix 4) it seems that they are at the opposite ends of the continuum of attitudes to knowledge, with the Vietnamese emphasis on conservation and the New Zealand focus on extension. The reproductive approach to learning is typical of much of the established Asian education system, where the key question is ‘what?’, whereas in the Western education system analytical and speculative approaches revolve around questions such as ‘why?’ ‘how?’ ‘how valid?’ ‘how important?’ and ‘what if?’.
Students in the Asian system can be almost totally dependent on lectures for course content, as staff may assume that other sources of information are not available. As a result, considerable amounts of information are presented in a paced, clear manner, contrasting with the summaries typically presented in New Zealand lectures. In the systems in use in Australian and New Zealand universities, tutorials, practicum, computers, libraries, interviews and field trips are used in addition to formal lectures, with students expected to seek out their own readings and information with minimal supervision (Phillips, 1992). Debate, an everyday tool of Western university life, has been actively discouraged in Vietnamese universities, where it can be seen as disrespectful, “What the teacher or textbook says is unquestionably the standard” (Le, 2001, p. 35).

Vietnamese students may develop doubts as to the teaching competence of their New Zealand lecturers and tutors who do not, as a matter of course, provide “right” answers to questions, and, in discussion with students (which is in itself not a usual teaching practice in Viet Nam), may accept a variety of conflicting ideas as valid. The adoption of new ground rules for interacting with their peers and teachers and acceptance of personal responsibility for learning may require the student to go against both culture and habit, providing additional stress in the learning process, “the student-lecture relationship is a fragile one” because “students from collectivist societies like those characteristic of Asia are very aware of status differences” (Barker et al., 1991, p. 83).

The use of critical thinking, “the process of systematic analysis and questioning” (Ballard & Clanchy, 1984, p. 44) to make careful or exact judgements, can be a major challenge for Vietnamese students in New Zealand universities. A reproductive approach to learning being poor preparation for the speculative, creative approach essential to the critical thinking process.

In referring to the New Zealand situation FINDSEN (1991, p. 14) calls for local research, stating that “Such research should benefit not only incoming overseas students but our own institutions and lives.” The case for local based research is also strongly put by James and Watts (1992, p. 5) and Beaver and Tuck (1998, p. 167) who point out that although the growth of the numbers of overseas students in New Zealand has been dramatic “there has been a dearth of published studies” on the issues of adjustments and problems which overseas students encounter in this country.

This research sets out to investigate the following questions:
1. What have been the learning experiences of current Vietnamese international students at New Zealand universities?
2. What has been their experience of official and unofficial support at their universities?
RESEARCH METHODOLOGY

Ethics Approval was granted before the data collection was undertaken and confidentiality of information sources was assured.

The subjects were nine Vietnamese overseas students studying at four New Zealand universities undertaking either undergraduate or postgraduate studies. They were identified through personal contacts and official university sources.

As there are relatively few Vietnamese overseas students in New Zealand universities the anonymity of the participants was protected by neither assigning codes to specific participants nor identifying the institutions at which students were enrolled.

Interviews were conducted and recorded with the participants’ permission. For clarity of understanding the interviews were conducted in the Vietnamese language.

RESULTS

Learning experiences

Understanding the New Zealand University system

Responses indicated a poor understanding of how the New Zealand University system was structured and functioned. Some thought that it was similar to the Vietnamese system, and Orientation Day seen as “It was only a tour of the university, I didn’t like it”

Most of the respondents were critical of the university administration, with no positive comments being recorded. The separation of the various departments within the wider university was described as confusing and frustrating for everyday student administration needs, as, “In the university the people in offices don’t work together.”

Integration into the mainstream student body was hoped for, and, based on the positive attitude to foreign students in Viet Nam, expected. “We had one Mongolian student in our class, the whole class looked after him. We took turns to care for him.” while in New Zealand “How could I improve my English when I speak and learn with Chinese students all the time?”

Figure 4 shows that the respondents reported a wide range of experiences while studying in New Zealand, some positive, some negative. All claimed that they recognised the differences between the two systems.
Figure 4. Students’ responses to learning experiences.

*( ) : number of students’ responses

<table>
<thead>
<tr>
<th>Experiences</th>
<th>Positive</th>
<th>Negative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning/teaching style</td>
<td>Learner centred (9) Encourages independent learning (9) Stimulates &amp; extends (9) Combines theory with practice (9) Active learning (9) Encourages analytical and speculative approaches (4) Encourages critical thinking (9) Enjoyable (9)</td>
<td>Expectations of teacher-centred approach (9) Lack of peer support (8) Lack of training of critical thinking (6) Lack of appropriate study skills (5) Poor local socio-cultural knowledge (8) Reluctance to actively participate in classes (9) Limited ability to present ideas/arguments (5) Cultural dissonance (9)</td>
</tr>
<tr>
<td>Course design and assessment procedures</td>
<td>On-going feedback (9) Promotes on-going study through assessment demands (9)</td>
<td>Heavy workload (9) Implicit course requirement not clear (7) Not socio-culturally appropriate (7) Places heavy demand on academic English (6)</td>
</tr>
<tr>
<td>Academic staff-student relationship</td>
<td>Relationships were professional (9) Some academic staff were friendly &amp; supportive (8) Some very accessible (8) Ground-rules set early (3) Email was replied to promptly (4)</td>
<td>Some relationships lacked warmth (8) Cultural insensitivity (9) Some inaccessible (8) Student access time inadequate (6) Too many students per lecturer (9)</td>
</tr>
<tr>
<td>Perception of quality of teaching</td>
<td>Teachers are knowledgeable (8) Academic staff are trusted (9)</td>
<td>Some lecturers lack sound teaching skills (4) Some lecturers lack real life experience (4) Teaching quality not even (1) Poor control of students (5)</td>
</tr>
<tr>
<td>English competence</td>
<td>Improved with use (7)</td>
<td>Speaking was the most difficult (6) Academic reading &amp; writing was difficult (technical terms, grammar, style) (4) Limited English competence (4)</td>
</tr>
<tr>
<td>Integration into the main stream student body</td>
<td>NZ students generally friendly (7)</td>
<td>NZ students don’t mix with international students (9)</td>
</tr>
</tbody>
</table>
University learning support

Respondents indicated that they accessed a wide range of support for learning while studying. When questioned as to where they accessed their most useful support four respondents nominated the library, four, individual academic staff and one did not respond. Four of the students when asked which support was least useful said that they didn’t know, because they (the services) were all the same. One respondent named the International Student Office and another the English Language Centre as being least useful while the remaining three respondents did not name a least useful service.

Of the nine respondents, three changed institutions in course of their studies, each for different reasons. One changed because of the agency in Viet Nam placed him in a polytechnic institution, not a university, the second changed because “I fell in love with the university at first sight because of its academic atmosphere after arrival”, while the third changed because she blamed lack of help from her initial New Zealand university for her failing several papers.

Satisfaction with academic results

Six of the nine respondents said that they were satisfied with their academic results, however, three of these said that this applied only to the later part of their studies. The three who were dissatisfied with their results attributed this to worries over accommodation, adjustments to learning styles and social life distracting them from their studies. Upon reflection, they felt that they should have studied harder. However, one respondent expressed dissatisfaction with the quality of teaching, feeling that it did not equate to the time, effort and money he had invested.

While most of the respondents said that they had tried to be independent learners they recognised that they had need of specific support and offered recommendations as to the form this should take.

DISCUSSION AND RECOMMENDATIONS

Although the small size of the sample and the interviewing of undergraduate and graduate students as a single group limited the scope of this research, the findings were similar to other studies of the learning experiences of overseas students, both in New Zealand and elsewhere. Vietnamese students, in common with other international students had both positive and negative experiences while studying in New Zealand, having to adjust to the new learning and teaching environment by making appropriate interrelated shifts (intellectual, linguistic and social). The rate and degree of adaptation and integration into the new learning culture varied from person to person. Those reporting clear positive experiences had previous university experience in Viet Nam and/or previous cross-cultural experience such as overseas travel. This is supported by findings from Sodjakusumah (1996) and Klineberg and Hull (1979).
Students who changed their course of study from the one that they had been pursuing either prior to coming to New Zealand or shortly after, had to devote more time and energy to study than those who did not change courses. This additional academic effort was at the cost of their overall adjustment process. This is supported by the findings of a study of Chinese students in Auckland University undertaken by Liang (1990).

Participants had a poor understanding of the New Zealand university system and structure. This was due to inadequate pre-departure preparation, and lack of information about differences between the New Zealand - Vietnamese university systems and learning and teaching styles. Students tended to use their knowledge of the home university system to try to understand the new system with limited success.

Teacher-student relationships differed greatly from their previous experience. In Vietnam teachers at all levels are revered and their knowledge is never questioned. Suddenly finding themselves in a learning partnership with a teacher who expects and encourages debate can be very unsettling and extremely difficult to adapt to (Ballard & Clancy 1984; Phillips, 1992). To students used to teachers delivering all of the course information clearly and methodically through formal lectures the much less structured, catalytic, often questioning presentation style of the New Zealand lecturer can seem to them unprofessional and erratic.

Most found the New Zealand learning and teaching style stimulating and the majority of the academic staff were seen as professional, friendly and above all, supportive. They commented favourably on the assessment system, which enabled them to measure their own learning progress through on-going feedback and found the learning experience to be one which fostered personal growth.

However, there were some difficulties in adjusting and adapting to the new learning style, particularly in regard to expectations of lecturers and use of critical thinking (Ballard & Clancy, 1984; Beaver & Tuck, 1998; Burns, 1991; Phillips, 1992; Samuelowicz, 1987). They also complained of a lack of appropriate training courses and an inadequate understanding of the host country’s social norms and culture. Berry (1985), PISAAC and PISC (1996), Scott and Edmond (1996) and Kirkland (2001) found that students who were in the greatest need of help were those who least utilised available learning support. Of the nine students interviewed only two attended the Orientation Day held by the university, most seeing no value in it.

The students could be divided into two broad groups, Those who were proactive in seeking out information for themselves and had well-developed time management and research skills. They also had good English language skills, a factor crucial to accessing and understanding learning resources including lecturers and other students (Findsen, 1991; Furnham, 1997; Holmes, 2000). Those who were reactive in their approach (due to either shyness or immaturity) experienced considerable difficulty in adjusting to the new learning-teaching culture as well as lacking in social skills and confidence. They also had poorer English language skills than the other
group and tended to get bogged down in decision making and problem solving; failing to access the necessary input to enable them to move on from self imposed limitations.

Predictably the proactive group were happy with their academic results, while the reactive group were less so.

Critical thinking and how to develop it was poorly understood. Vietnamese society is built on sharing the same values and norms in harmony, avoiding criticising each other in order to maintain good relationships (Tran, 2001; Trinh, 1968). To criticise or be critical has, for those from such a culture, negative connotations (Ballard & Clanchy, 1984).

The students' view of the accessibility to teaching staff in this study is consistent with that of Burns (1991) and Mullins et al. (1995). Students reported that getting help from academic staff was difficult. Students from a system in which the teacher is the prime source of knowledge are likely to see the staff as the first point of information and may see redirection to their own resources as an abdication of responsibility.

Concern was expressed about the perceived inconsistent quality of teaching experienced in the course of their studies. This perception is to be expected where staff are not working slavishly from set texts and draw on a wide range of experiences and methods to present their work.

Asian students often write in an indirect style, working around the point, unlike the direct nature western academic writing (Ballard & Clanchy 1984; Phillips, 1992). “The culture of kinship influences the way Vietnamese students approach knowledge, not critically and directly but circularly and indirectly to show respect and tactfulness... The English approach does not constitute respect in Vietnamese writing” (Phan, 2001).

Only one of nine students interviewed agreed with the statement that “learning difficulties are only intellectual shifts, not linguistic or social difficulties”. The remainder believed that those three elements were interrelated and depended on an individual's experiences such as length of study, the stage of adjustment, academic background, English language competence, intellect, perception, motivation and interpersonal skills, among others.

This difficulty with integration into the mainstream student body has been commented on by others, (Beaver & Tuck, 1998; Dalley 1972 & Leo 1983 in James & Watts 1992; Holmes, 2000; Kinnell, 1990) with both host and guest students blaming each other for failure to initiate social interaction. That there are advantages to both host and visitor in integration is well supported and avenues to facilitate this need could well be explored further.
IMPLICATIONS

The implications cover the first two of the three stages listed by Barker (1990) (Appendix 1), especially home country (pre-departure) and host country (on-arrival orientation). “The experience of studying in a foreign country leaves a powerful impression on young people that may last all their lives” (Furnham, 1997, p. 14). It is in the interest of both the learning institutions and the host country to make the experiences of international students, the parents and business and political leaders of tomorrow, a positive one. It is proposed that the following recommendations may assist in doing this. These will address first the preparation for study in New Zealand, then general university services and finally departmental services.

Pre-departure information could be an integral part of the university study package, including clear, simple descriptions of the differences between the New Zealand and home education systems, structure and learning and teaching styles, with examples. History and social and cultural background of the host country should also covered, with examples and comparisons with their own culture all in the first language of the prospective student. Pre-departure courses could be provided in the homeland covering the study skills needed for New Zealand university work, assessment procedures and an introduction to critical thinking. The involvement of returning students in such programmes would be beneficial in bridging the cultural divide.

Enrolling students from non-western systems could be actively encouraged to take an initial, non-credit course of study to familiarise themselves with New Zealand study and assessment styles, or, failing that, to enter into a course the subject matter of which is familiar to them.

Institutions could establish an international student council, with representation from all nationalities attending the university. This would have value as a two-way conduit for information and student/institution concerns.

Cultural specific web pages could be set up to provide a means of communicating information relative to that group.

Asian liaison officers from within the student body could be appointed, recognising the diverse nationalities covered by the term Asian there should be a liaison/contact person for each.

New Zealand – international student friendship groups, nation/culture specific, should be encouraged, to share social and cultural events and create opportunities, through developing friendships and cultural exchanges.

The organising of a buddy system for orientation would improve the rate of participation in orientation activities by international students.
The International Student Office could adopt a more flexible approach in dealing with student inquiries, and the role and limitations of this office should be clearly spelt out at every opportunity. International students tend to think it is there to deal with all matters relating to international students and this can lead to frustration. Staff should be sufficiently informed to be able to direct inquirers to appropriate sources of help, in effect become a broker of mainstream services and contacts as well as providing services specific to international students.

Library tours and courses could be made available, specific to each culture, either prior to or early in the academic year and ideally the facilitator should be someone from that group. By checking and discussing with compatriots information and confidence will be more firmly attained and the collective nature of the group will encourage attendance and participation. To provide ongoing support library guides summarising library services and procedures should be made available in the students’ languages. These should be developed in consultation with current international students, not merely translated from existing material.

A tutor or assistant tutor could be designated within each faculty to assist students with the mechanics of writing assignments, where it has been done it is recognised as a valuable resource. Skill in English as it used in specific disciplines is of more practical value to the international student than that in general English available from the Student Learning Centre or English Language Centre. Samples of essays and assignments with a range of grades, not just examples of the best, giving reasons for the assessed grade, both positive and negative would help students understand the course requirements.

CONCLUSION

This study identified a range of services available to the Vietnamese students enrolled at New Zealand universities, some of which were rated highly by them. However, it was clear from the findings that overall they fell short of providing all practicable support to them in achieving their academic objectives. There were shortfalls both in the range of services available as well as the appropriate nature of their form and presentation. Students’ knowledge of what was available was incomplete, as was their awareness of the benefits to be gained from utilising support opportunities, such as those provided by orientation programmes. These facts, singly and collectively, lead to the conclusion that the evidence does not support the hypothesis.
APPENDIX 1

Figure 1. Stages of inter-cultural adjustment and orientation W-curve (Barker 1990: 16)
APPENDIX 2a
Figure 2a. The University of Auckland (The University of Auckland 2002)
APPENDIX 2b

Hanoi University of Science, Hanoi National University (Hanoi University 2003)
APPENDIX 3

Table 1. Ratio of teacher per students and of students per library

* U age: university age in years
T/S: Teacher–student ratio (rounded to full figures)
LR/S: number of library resources per student (rounded to full figures)

<table>
<thead>
<tr>
<th>New Zealand university</th>
<th>U age</th>
<th>T/S</th>
<th>LR/S</th>
<th>Vietnam university</th>
<th>T/S</th>
<th>U age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auckland University of Technology</td>
<td>3</td>
<td>1 to 40</td>
<td>4</td>
<td>Cantho University</td>
<td>37</td>
<td></td>
</tr>
<tr>
<td>Lincoln University</td>
<td>42</td>
<td>1 to 17</td>
<td>52</td>
<td>College of Technical Teacher Training</td>
<td>41</td>
<td></td>
</tr>
<tr>
<td>Massey University</td>
<td>40</td>
<td>1 to 13</td>
<td>18</td>
<td>Hanoi Agricultural University</td>
<td>47</td>
<td></td>
</tr>
<tr>
<td>University of Auckland</td>
<td>121</td>
<td>1 to 19</td>
<td>63</td>
<td>Hanoi University of Civil Engineering</td>
<td>37</td>
<td></td>
</tr>
<tr>
<td>University of Canterbury</td>
<td>130</td>
<td>1 to 25</td>
<td>117</td>
<td>Hanoi University of Technology</td>
<td>47</td>
<td></td>
</tr>
<tr>
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<td>134</td>
<td>1 to 12</td>
<td>142</td>
<td>Ho Chi Minh City University of Technology</td>
<td>46</td>
<td></td>
</tr>
<tr>
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<td>1 to 19</td>
<td>74</td>
<td>University of Agriculture &amp; Forestry</td>
<td>48</td>
<td></td>
</tr>
<tr>
<td>Victoria University of Wellington</td>
<td>104</td>
<td>1 to 19</td>
<td>76</td>
<td>University of Fisheries</td>
<td>44</td>
<td></td>
</tr>
</tbody>
</table>

(Based on Salzman 2003)
Figure 3: Influence of cultural attitudes to knowledge on teaching and learning strategies (Ballard and Clanchy 1997:12)
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KEY DETERMINANTS OF HEALTH: EMPLOYMENT & RELATIONSHIPS
ADDRESSING THE RELATIONSHIP
BETWEEN IMMIGRANT HEALTH AND EMPLOYMENT

Kitty Chiu and Nigel Lacey

ABSTRACT
The Kiwi Ora programme (www.kiwi-ora.com) allows open entry for immigrants with permanent residence or citizenship status. The programme aims to give the learner knowledge, information and skills to help them succeed to their full potential in their new country.

The aims of this workshop are to:
1. Overview of the contextual setting of the programme demonstrating its inherent mental health value to the Asian immigrant through their absorption of knowledge and adeptness to the New Zealand cultural environment.
2. Demonstrate specific skills throughout the programme that help the Asian immigrant gain meaningful employment.

It is known that unemployment can have a detrimental effect on our health and general well being. Unemployment is associated with stress, low self-esteem and increased feelings of depression. In fact, one study by Warner (1994) showed that recovery rates from schizophrenia were lower during the Depression years of the 1920s and 1930s. Also, that recovery rates are better in industrialised countries with higher rates of employment, and in non-industrial, developing nations where the term ‘unemployment’ is meaningless.


Kitty Chiu
Strategic Planner
Ora Management Team

Nigel Lacey
Quality Auditor
Ora Management Team
INTRODUCTION

The aim of this workshop is twofold; firstly, we want to give an overview of the challenges facing Asian immigrants in New Zealand. Secondly, we wish to present the Kiwi Ora programme demonstrating its contribution to the mental health of the Asian immigrant through their absorption of knowledge and adeptness to become an acculturated member of the workforce.

Are immigrants displaced persons who must accept the ways of their adopted country or at least find the middle ground between their perspective of the world and that of New Zealand? Or are they emotionally involved with the social spirit of their native culture to the extent that they are conditioned by the responsibility and preconditioning of their family and their society? Agnew (1990, p. 65) comments that, “Conventional wisdom regards immigrants as uprooted individuals who must adopt the ways of a new land or at least compromise between old and new world values. This view is being challenged by scholars who argue that immigrants remain attached to the emotional and social nexus of their homelands, and that life in the New World is primarily conditioned by the obligations and requirements of their family and the old society.”

Many of the immigrants have travelled great distances and triumphed over immense obstacles in order to achieve their desire to live in Aotearoa, New Zealand. Unfortunately, the pioneering struggle to arrive at these shores is far from over when the new immigrant receives their permanent residency visa, it is in fact the beginning of the sometimes bitter mêlée with the cultural and language divergence; the fight to establish oneself in a community while leaving all that is intelligible and dear to one, thousands of kilometres behind. For some it has been a hard fought battle to gain the correct points to actually achieve permanent residence. They are then thrust into the New Zealand culture unable to perform at their accustomed intellectual and employment stratum.

Agnew (1990) believes women immigrants cope with more complexity and contradictions than men. Hypothetically, immigration to New Zealand establishes the opportunity to assert their individual rights, and becoming independent women. This may not be the case as immigrant women who are socialised within family and cultural systems are influenced by the mental and moral necessities established in those groups. Their new appreciation of preference is exercised in a society where race, class, and gender influence them in ways that require a new appraisal of their Asian femininity in a contextual reference to New Zealand society.

Lee and Mokuau (2002) feel that Asian men as new immigrants feel an anxiety to provide for their family as native cultural stressors add to the feeling of inadequacy that builds on them. In the Asian culture the male is the provider, protector and the source of authority within the family unit. Faced with daily rejection from prospective employers the dream of building a new future that enticed them as it did the first pioneers to settle here deteriorates with each day that passes. The need for paid employment forces them to abandon their profession and seek lowly paid manual labour.
Fryer and Payne (1986) establish that unemployment is associated with stress, low self-esteem and increased feelings of depression. A study by Warner (1994) showed that recovery rates from schizophrenia were lower during the Depression years of the 1920s and 1930s. Also, that recovery rates are better in industrialised countries with higher rates of employment, and in non-industrial, developing nations where the term ‘unemployment’ is meaningless. The main problems faced by the unemployed have been identified as follows: lack of time structure, financial worries, boredom, and feelings of isolation, low self esteem and life expectations.

It is a recognised fact that unemployment can have a negative effect on both physical and mental health. Unemployment has been shown to correlate with raised levels of stress, and increased incidence of depression, homicide, suicide and attempted suicide. Lewis and Sloggett (1998, p. 1283) investigating the association between suicide and socioeconomic status, unemployment, and chronic illness, found that, “The association between suicide and unemployment is more important than the association with other socioeconomic measures. Although some potentially important confounders were not adjusted for, the findings support the idea that unemployment or lack of job security increases the risk of suicide and that social and economic policies that reduce unemployment will also reduce the rate of suicide.”

Lee and Mokuau (2002, p. 11) state, “Asians are generally raised with a deep sense of obligation and expectation to achieve, and many are taught to repress their emotions and focus on the needs of others or of the family. Internalising anger, guilt, and shame without strong coping mechanisms for resolving them can lead to self-destructive feelings.”

INTRODUCTION TO KIWI ORA

It was against this background that Kiwi Ora (“Kiwi,” from the Aotearoa iconic bird and Ora meaning “Alive, Life, Health, Safety and Wellness,”) came into being. Based on a humanistic andragogic paradigm the Kiwi Ora programme furnishes the new Kiwi cultural deficient immigrant with the skills to eliminate the isolation and become an active participant in New Zealand society.

We believe that to achieve settlement immigrants require information. Unfortunately the type and content of the information required is dispersed throughout our society and many times the information is informally distributed, out of date or incorrect and in English. The Kiwi Ora EDE model for this programme has at its core, three needs: Emotional needs, Domestic Needs and Employment Needs.

If we first look at Maslow’s Hierarchy of Needs we see that to become self actualising, a human must satisfy the following:

1. Physiological needs are the very basic needs such as air, water, food, sleep, sex, etc. When these are not satisfied we may feel sickness, irritation, pain, discomfort, etc. Once these basic needs are alleviated homeostasis is establish.
2. Safety needs have to do with establishing stability and consistency. These may be difficult to establish for an immigrant family without positive input from the adopted culture.

3. Love needs, humans have a desire to belong and to feel loved (non-sexual) by others, to be accepted by others.

4. There are two types of esteem needs. First is self-esteem which results from competence or mastery of a task. Second, there is the attention and recognition that comes from others.

5. Self-Actualisation, people who have achieved can maximize their potential. They can seek knowledge, peace, esthetic experiences, and self-fulfillment.

The Kiwi Ora programme aims to help by assisting their students through the skills in the programme that are focused at employment.

In the case of our students, our aim is to help them fully integrating as effective and contributing member of New Zealand society.

We aim to help students move on to address their belonging needs, to find groups and friends within this new society.

Physiological needs are the very basic needs such as air, water, food, sleep, sex, etc. When these are not satisfied we may feel sickness, irritation, pain, discomfort, etc. once these basic needs are alleviated homeostasis is established.

The Kiwi Ora programme endeavours to provide a positive input to the mental health of Asians by providing information; resources and a network of support, personal along
with situational students to help immigrants. The andragogic method of delivery places the responsibility for achievement firmly with the student. There is support through a Programme Advisor, course resources, Call Centre and support sessions, all of these are provided to help the student’s achievement leading to potentially higher levels of self-esteem and positive life expectations, to help them overcome the mentally stressful circumstances of settlement.

There is a huge void between arriving in New Zealand and actually settling down, integrating into the community, having a productive life and making a meaningful contribution to society. It is our belief that all immigrants cannot begin to feel settled until they have fulfilled their EDE requirements which are:

1. **Employment** needs, to generate income that in turn supports:
2. **Domestic** or infrastructural component needs, in the form of accommodation, transportation and schooling that supports:
3. **Emotional** needs a settled contented and productive family unit.

![Figure 2. The Kiwi Ora EDE model.](image)

The entire programme contains four packs each received at different time intervals over a twelve month period. The Packs were designed and cover topics relevant to settlement and assimilation for new immigrants, an aspect of employment is represented in all four packs. To facilitate Asian students the programme now offers reference material in Chinese & Korean.
New Zealand immigration settlement, we believe will occur once the EDE needs are met by the entire family unit.

**DISCUSSION**

Most immigrants find themselves having to make the same decisions that they made when they were twenty years old, the big difference is that they are not twenty years old. This means that the style of education and delivery of information needs to be different. There are added stressors for Asian immigrants such as language and cultural issues.
Kiwi Ora has enrolled in excess of eighteen thousand students over a two year period with the value and quality of the programme recognised by the Immigration Service and the Tertiary Education Commission who both carry website links to the Kiwi Ora site. To further build on our quality systems each pack includes a programme evaluation sheet allowing students to provide feedback on the support the programme has given them. The final pack contains a detailed evaluation & feedback questionnaire that provides us with a demographic summary of our student population.

CONCLUSION

Upon setting foot in New Zealand the challenges presented to non-native English speaking immigrants are phenomenal. If we add to this, the lack of settlement and integration support up until the inception of the Kiwi Ora programme we have reduced the chances for a quick settlement and integration into this populace. The professional Asian migrant who has achieved the required level of English language skills and arrives in New Zealand with the expectation of employment in their chosen profession, only to discover that our society has erected a glass barrier in the form of cultural stereotyping and an infrastructure incongruence with their cultural backdrop that prevents any possibility of a speedy settlement.

The distress and disappointment of employer rejection and disgrace in the Asian culture at not providing or meeting their humanistic safety needs for their family is a precursor to mental illness. The Asian professional in New Zealand that is unable due to the lack of information achieve their “Safety Needs,” but who arrived and still holds the feeling that everything is good and that success will surly follow may lead to personal disappointment when things go wrong and they have to face that there is no substance to their beliefs. Stress may result and the individual may be unaware of the effects of stress because of their positive attitude. Eventually mental illness in its many forms encircles not only the individual but their family alienating them further and placing a burden on the very society that requires their skills and expertise.

The Kiwi Ora programme aims to address a migrant’s need for infrastructural and cultural information that helps them to achieve initially their “Safety Needs”. Immigrants are equipped to ask the questions needed for psychological enhancement without which they are hampered from moving forward and fully integrating into New Zealand society. Integration is of course essential if they are to contribute to New Zealand’s growth which is the very reason they were originally given permanent residence. Likewise the Kiwi Ora programme is provided free to aid this integration.
REFERENCES


THE ROLE OF INTER-GENERATIONAL COMMUNICATION IN THE SUBJECTIVE WELL-BEING OF NEW ZEALAND CHINESE AND EUROPEAN FAMILIES

James H. Liu and Sik-hung Ng

ABSTRACT
Survey research on large samples of young and middle-aged New Zealand Chinese and New Zealand Europeans revealed that intergenerational communication was experienced differently and affected subjective well-being in different ways for the two ethnic groups. New Zealand Europeans reported less difficulty in conversing with elderly family, and participated in conversation with them more because they wanted to, out of a sense of obligation. However, while New Zealand Chinese reported more conversational difficulties and conversing out of a sense of obligation, this was not associated with lower conversational frequency and length, whereas difficulty in communication was associated with less contact for New Zealand Europeans. Filial piety obligations and expectations were far higher among New Zealand Chinese than New Zealand Europeans. This may have had a “buffering effect” for New Zealand Chinese, giving them the ability to endure conversational difficulties with elderly family without experiencing unhappiness and a desire to reduce contact.


Dr. James H. Liu
Centre for Applied Cross-Cultural Research
School of Psychology
Victoria University of Wellington
Email: James.Liu@vuw.ac.nz

Professor Sik-hung Ng
City University of Hong Kong
INTRODUCTION

Subjective well-being (SWB), defined as people’s evaluative reactions to their lives, in terms of life satisfaction (cognitive evaluations) and/or affect (on-going emotional reactions), is increasingly the focus of research (Diener, Suh, Lucas & Smith, 1999). As more nations and people grow in wealth and move around the world, the question of “what makes life satisfying” and “what makes people happy” is being examined across diverse populations and cultural perspectives. In New Zealand, the most rapidly growing ethnic group is Asians, particularly Chinese. Chinese currently constitute about 2.5% of New Zealand’s population of 4 million, but this is projected to increase significantly in the future (see Ip, 2003). This sustained trend in New Zealand demographics is a driver for basic research on cultural correlates of subjective well-being, and applied policy development to better suit the needs of today’s New Zealanders.

Cross-national research in a sample of 55 nations showed higher levels of SWB among industrially developed nations with characteristics of high income, individualism, human rights, and societal equality (Diener, Diener & Diener, 1995). This research capitalizes on the variability in SWB among the broad spectrum of nations in the world at various stages of economic development, and does not explain why industrially developed Asian nations with high income like Japan (Heine, Lehman, Markus & Kitayama, 1999) or Taiwan (Lu, Gilmour & Kao, 2001) should be lower in SWB than comparable Western nations. To capture these more subtle differences at the individual level, Markus and Kitayama (1991) and their colleagues have advanced a theory of selfways, or “core cultural ideas and values” that include cultural consensus in understanding what a person is and how to be a “good”, “appropriate”, or “moral” person.

According to this theory (Kitayama & Markus, 2000), selfways in North American and other Western societies incorporate assumptions that validate an independent construal of self where high self-esteem and feeling good about oneself are central to cultural ideals about appropriate behaviour. In East Asian societies (including China and Japan) an interdependent sense of self is assumed, where a sense of group belonging and emotional adjustment to important others takes precedence over personal attributes. Behaviour of the interdependent self is seen as most appropriate when it is functioning smoothly within a collective, maintaining interpersonal harmony (Kwan, Bond & Singelis, 1997), and confirming shared experiences and norms, rather than pursuing personal satisfaction or happiness. According to this point of view, there is no universal model of SWB, but only culture specific constructions of self that emphasize different ways that a person can function appropriately in different societies.

The description of cultural selfways, while extremely influential, has not been without criticism (Oyserman, Coon & Kemmelmeier, 2002). In today’s rapidly globalizing world, how appropriate is it to take such a categorical view between East and West? A literature has emerged showing that bicultural people, primarily but not exclusively Asians who have emigrated to Western nations, show characteristics of both the independent and interdependent self (Harrington & Liu, 2002; Liu, Ng, Weatherall & Loong, 1999; Yamada & Singelis, 1999). Even Heine et al. (1999), who are
advocates of the theory of selfways, presented data showing how the acculturation of Japanese in Western society can take place over several generations, such that the self esteem of 3rd generation Asian Canadians is on par with that of Euro-Canadians, whereas the self-esteem of sojourners and 1st or 2nd generation Asian Canadians is intermediate between that of Euro-Canadians and Japanese who have never been abroad.

Self-esteem is NOT equal to SWB, but the issue of how the acculturation of migrants is taking place in various populations of the world both informs and reflects changes taking place globally in the world in terms of the movement of people, capital, and systems of social interaction. A central issue is whether assimilation (the absorption of new migrants into the host country without substantial change to the host country’s ideals and practices) or integration (migrants retaining their cultural distinctiveness and adopting local norms) is taking place (Ward, Furnham & Bochner, 2001). A wholesale pattern of integration in a country with high levels of immigration would suggest some form of cultural hybridity taking place at both the individual and group levels. Such an approach would suggest not just culture specific models of SWB, but intermediate or hybridized models of SWB within immigrant populations having different cultural ideals than the mainstream.

The issue of whether there is one universal model of SWB, different models of SWB in different cultures, or hybridized/acculturated models of SWB is important in light of not only globalization, but the other great feature of present day population dynamics, the rapid aging of developed countries (Ng, Weatherall, Liu & Loong, 1998). If there are, as Heine et al. (1999) suggest, culture specific selfways, then populations may age well in different ways. Not all selfways may require the fulfilment of personal wants and the pursuit of positive affect for a person to be satisfied in later life. As the provision of the SWB for older people is becoming an important issue with critical policy implications (Gee, Liu, & Ng, 2002), the examination of models of SWB among immigrants into Western cultures provides insight into whether non-Western selfways are viable, and can provide alternative patterns for positive aging in Western societies in need of insight into creative ways to manage the relationship between generations.

The domain of social relations, in particular the degree of social integration into society and relational harmony among family and key friends may be the most culturally variable among the major predictors of SWB. Previous research has shown that integration, or maintaining positive links to the heritage group while establishing new connections to the host nationality is the preferred and most beneficial acculturation strategy for immigrants (Ward, Bochner, & Furnham, 2002). Separation, or maintaining an ethnic identity separate from the mainstream of the host nation is associated with less positive outcomes. This would suggest that in most countries, it is difficult to establish a set of selfways that are consistent with immigrant norms but inconsistent with the majority. This would be particularly true for older populations of Asians, who value social relations and may be prone to experience generational dissonance with their children (Gee et al., 2002). Intergenerational communication between younger (and more acculturated) and older family members (more traditional) in the New Zealand Chinese community may be particularly difficult given their differences in acculturation. Such communication difficulties, sometimes referred to as non-accommodation (see Coupland, Coupland,
& Giles, 1991 for example), may be exacerbated by tendencies for traditional East Asian communication to be less oriented towards positive affirmation and praise (e.g., increasing self-esteem).

Hypothesis 1. The experience of intergenerational communication difficulties within families is higher among New Zealand Chinese than New Zealand Europeans.

However, it may be possible for immigrant groups to maintain positive characteristics of their ethnic group (e.g., the tight family structure of Chinese) while incorporating positive characteristics of the host nation. In particular, Liu et al. (1999) found that attitudinal support for filial piety, or veneration and respect for elders, was highest among New Zealand Chinese identifying with both New Zealand and Chinese culture. New Zealand identity was most strongly associated with those aspects of filial piety related to maintaining positive contact with parents, whereas Chinese identity was more closely associated with financial obligations. In other words, Chinese identity is associated with maintaining inter-generational relationships with elderly parents regardless of the cost (e.g., despite difficulties in communication). It is a duty, a requirement of filial piety.

Hypothesis 2. Intergenerational communication with and filial piety for elderly family is perceived more as a obligation rather than as a desire among New Zealand Chinese compared to New Zealand Europeans.

Finally, because Chinese cultural selfways view the maintenance of relationships with elderly family as an obligation, this may insulate them from some of the negative consequences of communication difficulties. We hypothesize that New Zealand Chinese may follow a script wherein they expect dialogue with elderly parents to contain some difficulties, and adjust for them so it does not adversely affect their subjective well-being or relationships with their parents as much as it might for New Zealand Europeans.

Hypothesis 3. Communication difficulties are negatively related SWB and desire for contact among New Zealand Europeans, but not New Zealand Chinese.

METHOD

Participants

As part of a larger programme of research, 310 New Zealand Chinese and 309 New Zealand Europeans completed questionnaires. The sampling frame required families with one or both middle-aged (35-55) parents living in the same household with one or more children (10-25 years old). Both a young person and a middle-aged person in each family completed questionnaires. The sample accurately reflected the diversity of both the Wellington Chinese and European communities (see Liu et al., 1999 or Liu, Ng, Loong, Gee, & Weatherall, 2003 for details about the sample). The average age of the younger generation was 17, and of the middle aged generation was 46. There were 172 women and 137 men in the New Zealand European sample, and 153 men and 157 women in the New Zealand Chinese sample. Half the New Zealand Chinese sample had resided in New Zealand longer than 14 years, 79% were completely fluent in English, and 32% fluent in Chinese.
Materials

All items were translated from English to Chinese and backtranslated, and Chinese participants could choose to fill out the questionnaire in either language. A 6-item measure of filial piety obligations and expectations was developed. Participants were asked “How much would you agree or disagree that with respect to ELDERLY GRANDPARENTS, New Zealand Chinese/Europeans have the obligation to...” “look after them”, “assist them financially”, “respect them”, “obey them”, “please and make them happy”, and “retain contact with them”. Each item was rated on a 5-point Likert scale (with 1 = Disagree and 5 = Agree). The six items were added together to form a highly reliable scale measuring filial piety obligations (Cronbach’s $\alpha$ for reliability = .86).

Next, a complementary set of questions measured participants’ perceived expectations from others: “In your impression do elderly New Zealand Chinese/Europeans expect their GRANDCHILDREN to...” followed by the same six sentence completion items (e.g., “look after them”, “assist them financially”, etc.). These produced measures of elderly Chinese parents’ and grandparents’ expectations for their grandchildren ($\alpha = .79$).

Conversational experiences with elderly family members were assessed using the following items: “How frequently did you have conversations with them?”, “Approximately how long was the LAST conversation you had with them?”, “How often did you take part in conversations because you wanted to?”, “How often did you take part in conversations because you felt obliged to?”.

Subjective experiences of communication was assessed using the following item stem: “During conversations, they generally...”. Three items assessed communication accommodation: “were attentive to what you were saying”, “were keen to talk about things that interested you”, “tried to see things in your way”; $\alpha = .73$. Two items assessed non-accommodation: “were negative about people your age”, “were out of touch with your way of thinking”; $\alpha = .56$; honouring: “made you feel respected”, “showed pride in you”; $\alpha = .75$; autonomy: “gave you the option to refuse their request without making you feel embarrassed”, “were careful not to impose themselves on you”; $\alpha = .77$; disapproval: “used silence and other non-verbal means to show disapproval”, “held you responsible for what happened even though it was not your fault”; $\alpha = .52$. Single items measured empathy “understood what you were feeling without you saying much”, giving lessons “gave helpful lessons on how to conduct your life”, and comparing “compared you with other people your age”.

Finally, subjective well-being was measured using two indicators of happiness: “How happy were you after the conversation?” and “How happy did you think they were after the conversation?” All items were measured using Likert type scales ranging from 1-5. Not all participants completed all questions, so their numbers vary from analysis to analysis.

RESULTS

As can be seen in Figure 1, confirming hypothesis 1, a multivariate analysis of variance (MANOVA) showed that young and middle-aged New Zealand Chinese experienced more difficulty communicating with elderly family than a comparable sample of New Zealand Europeans across 8 conversational indicators, F(8,
They reported significantly more comparing, non-accommodation, disapproval, and helpful lessons than New Zealand Europeans $F(1, 592)'s$ ranging from 11.6 to 87.5, $p's \leq .001$. New Zealand Europeans reported significantly more accommodation and honouring ($F$'s of 12.7 and 7.4 respectively, $p's < .012$). There was no difference between the two groups in autonomy or empathy ($F$'s less than 1.16, $p's > .28$).

Figure 1. Conversational experiences with elderly family reported by young and middle-aged New Zealand Chinese and New Zealand Europeans.

Figure 2. Taking part in conversation with elderly family because of wanting to or feeling obliged to according to ethnicity.
Figure 2 shows that, confirming hypothesis 2, New Zealand Chinese reported taking part in conversation with elderly family more because they felt obliged to than because they wanted to compared to New Zealand Europeans, F(2, 602)=8.46, p<.0001.

As a further elaboration of hypothesis 2 (see Figure 3), a MANOVA shows that New Zealand Chinese felt far greater obligations and expectations regarding filial piety than New Zealand Europeans, F(2, 600)=71.66, p<.0001.

Figure 3 shows that, confirming hypothesis 2, New Zealand Chinese reported taking part in conversation with elderly family more because they felt obliged to than because they wanted to compared to New Zealand Europeans, F(2, 602)=8.46, p<.0001.

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Filial Piety Obligations and Expectations...

Figure 3. Filial piety expectations and obligations for New Zealand Chinese and New Zealand Europeans.

In summary, New Zealand Chinese perceive their relationships with close kin to be more of an obligation compared to New Zealand Europeans, who perceive the relationship to be more voluntary.
Finally, and in accord with hypothesis 3, putting these two factors together, we see from the correlations shown in Table 1 that difficulty in conversational experiences with elderly family was associated with a reduction in conversation length and frequency (see columns 1 and 2) only for New Zealand Europeans and not New Zealand Chinese. Similarly, difficulty in communication, as indexed by comparing, non-accommodation, and disapproval was associated with a reduction in wanting to converse with family elders only for New Zealand Europeans, and not New Zealand Chinese (column 3). These difficulties in communication were also associated with a greater feeling of obligation (being forced) to converse with family elders more for New Zealand Europeans than New Zealand Chinese (Column 4).

Table 1. Correlations between communication practices, conversational indices and subjective well-being among New Zealand Chinese and New Zealand Europeans.

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<tr>
<th></th>
<th>Conv Freq</th>
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<th>YOU feel Happy</th>
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<td>Disapproval</td>
<td>-.04</td>
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<tr>
<td>Accommodation</td>
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<td>Honouring</td>
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<td>Autonomy</td>
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<td>Empathy</td>
<td>.26**</td>
<td>.16*</td>
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N of cases: 276  1-tailed Signif: * - .01  ** - .001
New Zealand Chinese

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N of cases: 261 1-tailed Signif: * -.01 ** -.001

Finally, and perhaps most importantly, conversational difficulties were associated with feeling less happy only for New Zealand Europeans and not for New Zealand Chinese (columns 5 & 6). On the other hand, harmonious conversational experiences, such as accommodation, honouring, empathy, giving autonomy, and helpful lessons were associated with feelings of happiness for both groups. Furthermore, despite greater difficulty conversing with elderly family, New Zealand Chinese and Europeans did not differ in their feelings of happiness after conversation, F(1, 608)=1.22, p<.27.

DISCUSSION

While young and middle-aged New Zealand Europeans experienced less difficulty and more enjoyment conversing with elderly family members than New Zealand Chinese, this did not translate into greater conversational frequency among New Zealand Europeans. This appears to be because New Zealand Chinese feel that it is their duty and obligation to converse with older family members. They were not as sensitive to communication difficulties with older family; rather they seemed to endure or ignore these. New Zealand Europeans, by contrast reacted to conversational difficulties with older family by feeling less happy, and reducing contact with them. However, both ethnic groups enjoyed positive feedback from their elders.

These results suggest that while there are some cross-cultural universals in inter-generational communication, Chinese and Europeans react to difficulties in communication in culture specific ways, even under the umbrella of an overall Western society. Traditional Chinese notions of filial piety appear to have survived transplanting to New Zealand society, providing a “cultural shield” for New Zealand Chinese in dealing with communication difficulties with elderly family. While New Zealand Chinese may celebrate this cultural affordance, they might also wish to take
notes from their European neighbours on how not just to endure, but to enjoy their elderly family more.

The interdependent self prevalent in Asian societies appears to have maintained some of its characteristics among Chinese who have settled in New Zealand. The interdependent sense of self is rooted in a system of reciprocal obligations among primary group members, of which family is primary. While these obligations appear to buffer New Zealand Chinese from some of the adverse effects of their communications difficulty with elderly family, they are far from the ideal of interpersonal harmony and empathy posited by Kitayaman and Markus (2000) and Kwan et al. (1997); as New Zealand Chinese did not report feeling greater empathy in their conversations with family elders than New Zealand Europeans. Rather a script of “mutual sympathy” between family members, there appears to be “mutual endurance”. In part, this may be a product of generational differences and language differences caused by acculturation, exacerbated by tendencies for traditional East Asian communication to be less oriented towards positive affirmation and praise. Whether these communication styles are dichotomous cultural practices or if communications training could improve the well-being of New Zealand Chinese by adding a dimension of enjoyment to their already strong bonds of family relations is a question for future research.
REFERENCES


CULTURALLY RESPONSIVE INTERVENTIONS AND WORKFORCE DEVELOPMENT
ABSTRACT

New migrants to New Zealand are often worried that the doctors and nurses here may be sceptical of their use of their own cultural healing modalities. A multiple-case study (n=7) on the use of Complementary/Alternative Medicine (CAM) in New Zealand Primary Care highlighted that previous experiences, beliefs and culture had a significant impact on the individual’s desire for seeking medical services. This in-depth case study is one of the seven (7) cases illustrating how culture has influenced the decision-making when treatment was sought during illnesses. To be culturally competent, nurses need to develop understanding on clients’ cultural view.


Mrs Helen Chan
Practice Nurse/Manager
Windsor Medical Centre
Mairangi Bay
Auckland
Email: holchan@xtra.co.nz
INTRODUCTION

New Zealand population is becoming more diverse. The Asian Public Health project report (2003) shows the total number of foreigners living in New Zealand is over 600,000. Of these Asian constitutes 6.1%, Pacific people 5.4% and other ethnicities 4.6% others. Asian population is make up of multiple ethnic sub-groups of which Chinese is the largest group, followed by Indians and Koreans (Asian Public Health Project Team, 2003). Every group has its unique cultural beliefs, ideas, customs, values and practices, which will influence how they respond to illness and determine their decision-making in seeking healthcare services (Anderson & McFarlane, 2000; Dossey, Keegan, Guzzetta & Kolkmeier, 1995; Giddens, 1989; Jones, 1994; Keegan, 1994).

As a result of the migration, nurses have more opportunities interacting with Asian clients who have a different set of health beliefs, languages, life experiences and expectations from the New Zealand norms. In view of providing a client-centered care and achieving health for all, nurses need to develop awareness, understanding and skills to work with these migrant clients. A qualitative, descriptive, and interpretive multiple-case study (n=7) was conducted to explore the use of Complementary/Alternative Medicine (CAM) in New Zealand Primary Care. It includes accounts of the participants’ life experiences, perceptions and knowledge on CAM and conventional medicine, their choice of healthcare services, the values they put on doctors and CAM practitioners, as well as their future needs. This in-depth information would help to increase nurses’ awareness of the client’s perceptive and facilitate a more client-centred approach to healthcare. It is envisaged that improved understanding and communication between practitioners and clients will result in better health care and health outcomes.

CULTURE, COMPLEMENTARY / ALTERNATIVE MEDICINE (CAM) / HEALTH

The history of medicine can be traced back to the dawn of mankind. Both Western and Eastern healing systems originated in antiquity. They are a combination of the science and art of healing, which is the process of treating and preventing disease (Britannica, 1987; Lewinsohn, 1998). The art of healing takes on a cultural meaning because individualised treatments or diagnostic techniques are used differently by particular cultures and at particular times in history to deal with a range of diseases and health problems throughout their evolution. (Capra, 1983; Spencer & Jacobs, 1999). As a result, common sets of beliefs, standards, norms and practices have been established according to the needs of each individual ethnicity. These individualised culture sub-consciously influence individual’s perceptions of illness, decision in seeking treatment and the choice of healthcare practices (Anderson & McFarlane, 2000).

For example: CAM refers to a number of practices that people use to treat diseases, to prevent illness and to maintain good health and wellbeing. CAM is the unique healing systems that have developed out of ancient culture and been handed down to us through oral and written knowledge (Anonymous, 1999, 2000; Casey, 2003; Engebretson, 2002; Ernst, 2000; Jonas, 1998; NCCAM, 2000; Strader et al., 2002; Toop, 1998; Tovey & Adams, 2002; White, 2000; WHO Policy Perspectives on Medicines, 2002; WHO Press Releases, 2004; Wong & Lien-The, 1936; Zollman &
Vickers, 1999). Therefore, what is called CAM in the Western world is actually the traditional medicine of another culture.

**AN IN-DEPTH CASE STUDY—APOLLONIA**

In view of protecting the studied participant’s anonymity, a pseudonym of the mythological Greek and Roman god or goddess was assigned to each participant. The names were organised according to the sequence of the interviews and in relation to gender. The intention to use the mythological Greek and Roman gods and goddesses names was to remind the readers that the art of healing or medicine was primarily associated with the mystical power of nature in ancient time. Extraneous personal data had been omitted and extra precautions were taken to ensure anonymity. The following case study is the lived experience of Apollonia who was the first to be interviewed.

**Background**

Apollonia was born in Hong Kong and migrated to New Zealand about eight years ago. She came from a working class family and only completed intermediate schooling. After that she self taught herself by reading. She is now in her late forties. She lives with her two young adult children. Her husband works overseas, coming home three times each year, a typical ‘astronaut’ migrant family—a new term used to describe the intermittent long-distance separation between husband and wife in the new migrant generation. Her daughter is a full time university student who is always busy with her study. She has a son who is autistic and has great difficulties with communication, requiring much support. Apollonia takes her son to school, sports and group meetings and organises his days for him. She is very committed to her son, and comments “There is time to die but no time to be sick”.

During the interview, Apollonia told me that she had always embraced an integrative approach in the management and maintenance of her own health. Apollonia began by telling me her experience with CAM, which is part of her culture and the way she was brought up. As a Chinese descendent, she likes to seek help from Chinese doctors or health professionals that could understand her cultural context. She started off by saying:

**APOLLONIA’S LIVED EXPERIENCES**

**First memory**

When I was about ten, my 38 years old Mum suddenly developed paralysis and became bed-ridden. My family did not know that we should have taken her to the hospital. Instead we requested a doctor’s (GP) visit. The doctor did not make any specific diagnosis and only said “I cannot find anything wrong, she needs to rest for a few days”. Being the oldest child, I had to pick up the responsibility of looking after my mother and running the family. I found this difficult. I cried and wanted mum to get better soon. As there was no treatment or support offered, my father sought help from a traditional Chinese doctor who used pulse diagnostic technique, acupuncture, herbal medicines, and passive exercise to help with Mum’s recovery. Treatments
were impressive and effective. Mum made steady progress and returned to normal activities and started to work within a few months. She is now in her seventies and is still healthy and well.

She had a similar condition a few years ago. She was hospitalised and only received hospital treatment. However, her recovery process was slow. She never returned to normal activities and became totally dependent on other’s care. “Mum’s experience with CAM is very positive and this was not so with my sister.” (She sighed and continued her next story).

Second memory

My family was poor, and I had to share a bedroom with my sister. One day, I noticed my fourteen years old sister’s legs were different in sizes and lengths. She told me her legs hurt when she walked. My parents took her to an acupuncturist and she had two courses of acupuncture. The Chinese acupuncturist explained that she had a trapped nerve and poor circulation in the legs. After two courses of acupuncture, she was able to cope with the pain but was still limping. She withdrew from socialisation completely because other children teased her and gave her a nick name reflecting her limping. She developed a low self-esteem. When she grew up, she joined a government-subsidised hospital nurse training programme. She found out her leg problem was the result of a benign tumour and was told that early surgical intervention could have enabled her to fully recover. Upon hearing this, she became very angry and refused to communicate with the family anymore because she began to blame the family for her disability and low self-esteem. I felt very hurt by her words. She did not even visit me when she came to New Zealand last year. (Apollonia looked sad.)

A Caring Mum

I use CAM on my autistic son too. My friends recommended Qi-gong therapy to help my son’s autistic conditions through restoring the balance of the flow of Qi in the body. When I first hearing about this, I had doubts about the therapy. However, my motherly instinct urged me to try anything as long as the treatment was safe and I should have no regret.

I made an appointment with the healer through my father-in-law who did not want anyone to know about his grandson’s condition. He actually dismissed that there was nothing wrong with my son. I begged him to help and finally he agreed. We travelled back to China for treatments. I watched the practitioner holding both hands on top of my son’s body while he lay supine and slept soundly on the bed. The outcome of the treatments was not noticeable. There was no immediate effect apart from the fact that my son seemed happier and more relaxed, which I identified as the result of my presence rather than the therapy. Nevertheless, more noticeable improvements were observed by his teacher a week later. She reported that he had made progress in reading and writing and his behaviour was easier to manage than before. I was not convinced by the teacher’s comment but I was pleased with the improvement. (Apollonia grinned heartedly.)
Previous Personal Contact

For myself, a few years ago, I accidentally found herbal medicine to be useful for treating my chronic tiredness. One day, when I accompanied my friend to see a traditional Chinese doctor (Herbalist), I decided to have a consultation as well. As soon as the Chinese doctor put his three fingers on my left radial pulse, he exclaimed, "I cannot treat you because you need to see a Western doctor and have an X-ray or ECG done because there are some significant, irregular beats from your heart. You need to have immediate investigation".

I was impressed with his knowledge as I already knew that I had valvular stenosis and epilepsy. I was actually put on long-term preventative medications several weeks before because I had an unexpected epileptic turn. Ever since I took the pills, I began to feel lethargic and have impaired memory. The intention of the visit was to seek an alternative way to help improving my wellbeing. At hearing my story, the Chinese doctor immediately wrote a herbal formula for balancing and enhancing my wellbeing. He emphasised that I should use it fortnightly alongside my usual medications.

Taking the herbal medicine in addition to the anti-epileptic pills, I felt energised and began to cope better with the household chores and the children’s demands. I went to see the medical specialist for my yearly echocardiogram, and EEG check in 1997. Surprisingly, both results were normal and the specialist had doubts about the results. He sent me for a further scan and these showed that the valvular stenosis still existed but no further damage. The specialist was amazed and wondered how I maintained my condition. As I had no palpitations, seizures or fits, the specialist agreed to stop all medications, which had given me indigestion, stomach aches and dizziness, and suggested that I should keep on doing what I felt was beneficial. (Apollonia looked proud and self-confident).

Recent Contact

Recently, I have tried other forms of CAM for my chronic neck pain. Both acupuncture and massage have helped to reduce the pain and stiffness, and gave me back a full range of movement. The Osteopath has helped to put my neck back. Reiki has no effect on me. This was a process of trials and errors. I have come across practitioners that had made my pain worse and made me feel faint. My family had to take me to the hospital. Now, I am the expert for telling my friends who to go for help. (She giggled and nodded.)

Apart from neck pain, I use other therapy for my mental wellbeing. I had phobia about flying, but had to travel every three months. Whenever I sat on the plane, I felt sick and experienced severe abdominal cramps and diarrhoea. I consulted several doctors but they all said this was due to my anxiety and no treatment was offered. I felt hopeless and not sure what to do till I was introduced to the Bach Flower remedies. I was sceptical at first. My desperation to get rid of my phobia drove me to try anything. The effectiveness of Bach Flower took me by surprise. After taking the remedy, I felt I was another person. I was so relaxed and calm and had no symptoms at all. Now I carry a bottle of Bach Flower remedy whenever I fly.
I used Bach Flower remedies for my family. My daughter found the remedy to enhance her confidence and her mental acuity. It also helped her to achieve good grades after taking Bach Flower remedies. My son became more social, more communicative, and had confidence to do things on his own. The Bach Flower Remedies have opened up his personality. He is more proactive and taking interest in life. He is more independent and mature. Other parents have noticed the difference and commented my son’s improvements. They said, “The look in his eyes is different and he has more facial expressions than other autistic children”. (Apollonia looked pleased and relieved.)

Apollonia’s Beliefs and Perceptions

Apollonia acknowledged the prestigious and the dominant political-legal power of conventional medicine. She believes that conventional medicine has better technologies, provides better diagnosis, and gives immediate relief to the signs and symptoms of minor illnesses such as flu and headache. She likes to seek conventional medical treatments before turning to other therapies because she cannot forget what happened to her sister.

She maintains CAM is natural and effective, slow but permanent. Although there might not be a scientific basis, her personal experiences have proved CAM has clinical, functional and psychological benefits. “I feel better; my son is better and all these are evidences,” she says sternly. Her concerns about CAM are the lack of regulation, licensing, quality control, and the insufficiency of research. She also believes it is necessary to find an honest and reliable practitioner, otherwise, “it is a waste of money, energy and time”. She believes the skills of CAM practitioners are inconsistent. Their training, qualifications and background worry her at times. At times she has doubts about their commercial approach and lack of ethics. That is the reason why she prefers to seek the GP’s advice. Apollonia points out, “Every CAM practitioner claims to be a healer but where are their standards?” Apollonia often thinks that if doctors have the understanding and are willing to refer appropriately, it would help in minimising unnecessary costs and providing other treatments option for the patients.

Apollonia’s Future Needs

Apollonia’s expectations include open discussion with doctors / nurses on the safe and effective treatment options. This would help to save time, money, confusion and suffering. Apollonia would like to receive integrated therapies in general practice. She feels safer if CAM is performed or referred by registered medical practitioners. She believes that doctors are the gatekeepers and have the accountability to protect the public.

She suggests that the government needs to integrate CAM into the existing healthcare system, and establish standards, regulations, qualifications and National registers to protect the public as she has had bad experience with CAM practitioner before. She comments, “I have had bad experiences with an osteopath and the masseur. They made my neck pain worse and I had to seek urgent medical care”.

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FINAL THOUGHTS

This case study is a typical lived experience describing Asian migrants’ health encounter in their own country. Very often new migrants to New Zealand have often already experienced a set of healthcare belief different to the current local health care provision. They have to adopt an integrative health approach for their own health management and maintenance. As new comers, they are worry about local health professionals would not be able to understand their cultural health needs. They feel vulnerable and embarrassed to discuss and raise concerns. This may due to language difficulty and/or try to be polite. Sometimes they may even answer ‘yes’ to all questions even though they do not agree. This will lead to unnecessary risks such as drug interactions, delayed diagnosis and treatment, and lowered self esteem, jeopardising their health and their accessibility to health care service.

As the New Zealand population is becoming more diverse, primary care nurses would note increased opportunities interacting with clients who have a different set of health beliefs, languages, life experiences and expectations from the New Zealand norms. To be client-centered and to achieve health for all, nurses need to be non-judgmental and more open-minded to the holistic integrative health practices of the Asian migrants. They may need to include the use of different traditional medical approach into their clinical psycho-social assessment and/or during their communication with clients. This unprejudiced approach will empower and enable clients to feel more comfortable and relax to discuss about their health concerns and/or issues. After all, the case findings together with the cited literature support the concept of culture affecting individual’s health care decision-making. A more open, holistic and centred model may result in better therapeutic compliance and utilisation of the healthcare service.

CONCLUSION

This study has clearly demonstrated that culture, beliefs and experiences influence healthcare choices. The understanding of healing is innate and different in every culture. Nurses are likely to have increased opportunities to care for Asian clients. Cultural competency is essential for gaining better health outcomes and increasing efficacy of health promotion. Developing an awareness and acceptance of Asians’ health care preferences integrating other healing modalities into their practice would be beneficial to the communities they serve.
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RAISING AWARENESS OF YOUTH ONSET TYPE 2 DIABETES: 
RESOURCES IN ASIAN LANGUAGES

Judy Rowden and Kate Smallman

ABSTRACT

Background
Type 2 diabetes is an emerging global problem in children and adolescents. The NZ Asian community has been noted to have a high incidence of type 2 diabetes compared to NZ Europeans (Diabetes, 2004) which reflects international trends.

For more than 10 years, the Diabetes Projects Trust has promoted diabetes awareness and prevention education.

Aim
To create awareness and improve knowledge of type 2 diabetes to Asian youth, families and the wider Asian community.

Contents
This paper discusses developing awareness and prevention brochures with translation into Mandarin, Korean, Vietnamese, Hindi and Arabic.

Conclusion
Well-designed written information is just one part of an overall strategy to reduce type 2 diabetes. Key issues are to keep information simple, understandable and relevant.


Mrs Judy Rowden
Adolescent Project Co-ordinator
Diabetes Projects Trust
Email: dptproject@xtra.co.nz

Mrs Kate Smallman
Lifestyle Nurse Co-ordinator
Diabetes Projects Trust.
INTRODUCTION

The Diabetes Projects Trust has been involved in the design and production of resources and projects targeted at raising awareness about type 2 diabetes and its prevention for over 10 years.

Recent publications have identified an emerging global problem of type 2 diabetes in children and adolescents (FOE, 2004). The Asian community in New Zealand has been noted to have a high incidence of type 2 diabetes in comparison to New Zealand Europeans (Diabetes, 2004). While it could be argued that it is due to a change in cultural and eating habits taking on more of the “western” lifestyle, it appears that type 2 diabetes is a growing problem in all Asian countries not only when associated with migration.

A global epidemic of overweight and obesity due to high-fat, high-sugar dietary intake and lack of physical activity are closely associated with increasing incidence and prevalence of type 2 diabetes in young people (Pinhas-Hamiel, 1999).

International research identifies that the epidemic of overweight and obesity due to high-fat, high-sugar dietary intake and lack of physical activity is closely associated with increasing incidence and prevalence of type 2 diabetes in young people (Pinhas-Hamiel, 1999). This is of major concern as diabetes is a costly disease for young people, their families, communities and the wider healthcare (American Diabetes Association, 2000) with significant physical, social, sexual, cultural, spiritual and financial costs.

The American Diabetes Association (2000) estimates that for those diagnosed, a further 35-50% of young people remain undiagnosed. Given that type 2 diabetes is now being diagnosed in earlier age groups the onset of complications are likely to be associated with age of onset and duration of disease, with complications becoming established much earlier (Fagot-Campagna, 1999).

Of particular concern to the Asian community is the finding that the Asian population is at risk of developing type 2 diabetes at a lower Body Mass Index (BMI) than other ethnic groups. A World Health expert consultation reviewed scientific evidence that suggests that Asian populations have different associations between BMI, percentage of body fat, and health risks than do European populations. The consultation concluded that the proportions of Asian people with a high risk of type 2 diabetes and cardiovascular disease is substantial at BMIs lower than the existing WHO cut-off point for overweight (WHO Expert Consultation, 2004).

The challenge is to create awareness and improve knowledge of type 2 diabetes for Asian youth, their families and the wider Asian community, with a view to delaying or preventing the onset of this condition.

With all of the above information to hand, the Diabetes Projects Trust examined the possibility of translating already popular resources into some Asian languages.
In 2003 prevention and awareness brochures were published by the Diabetes Projects Trust specifically for NZ adolescents with funding from New Zealand Ministry of Health. The brochures are titled “If I have type 2 diabetes, what can I do?” and “type 2 diabetes, what can I do to stop this happening to me?” These have been hugely popular in English, Maori, Samoan and Tongan. Evaluation and feedback on the brochures has been extremely encouraging with perhaps the most positive of all coming in the form of demand for the amount of re-prints we have ordered during the past year.

While leaflets are a valuable resource, other resources are needed when dealing with health promotion in young people. Supporting resources were designed including a comic book called “Tama’s Big Day” which describes the activities of a young boy with type 2 diabetes. Research showed that comic books are successfully used by a number of organizations, e.g. Mental Health Foundation, Hepatitis C Resource Centre, Streetwise Communications (Australia). They are easy to read, entertaining and reach a wide audience for comic book is available in English and if at demand is identified, the Diabetes Projects Trust may consider translation.

An interactive prevention video aimed at adolescents was also produced in 2003. The video “Stay in Touch” takes on the style of cell phone text–ing with the approach to health promotion. It is about 13 year old Sam whose body has had enough of his lifestyle and takes up the challenge to communicate with him using modern technology. Feedback from evaluation forms indicates that the video is extremely appropriate for the targeted audience with comments such as: “Great health promotion tool”; “Easy to understand / in young people’s language / not too much medical jargon”; “This video is at an excellent level for youth to understand and relate to. The texting is cool”; “Aimed at a good age group in a language and style they will understand. Nice and short and succinct”.

The target audience for these resources is principally adolescents aged 11-14 years. However, as proven with the brochures already produced in English, Maori, Samoan and Tongan, their impact is much wider. The brochures are highly visual therefore people of all ages and cultures have found them acceptable.
OBJECTIVES

- To create awareness about the emergence of type 2 diabetes in younger populations.
- To improve the knowledge of type 2 diabetes among adolescents.
- To educate concerning the risks and consequences of type 2 diabetes.
- To promote healthy lifestyle behaviours, which would include information on nutrition and healthy activity and to minimise harmful health impact among adolescents for prevention of youth-onset type 2 diabetes.
- To assist young people to recognize areas for realistic positive change towards a healthy and active lifestyle.
- To provide positive health education messages on prevention of type 2 diabetes through using highly visual printed resources.

PROCESS

A recognised process was followed with the design of all resources and includes:

- Set goals and objectives.
- Contact preliminary stakeholders.
- Commissioned comic artist and brochure designer.
- First draft and pre-test.
- Evaluation and action taken.
- Check revised version with regards to content, technical accuracy, regional and cultural appropriateness.
- Further proofs, re-testing and amendments with additional proofs to obtain accuracy and appropriateness of content.
- Translation consultation of both brochures was undertaken for 5 further languages. Hindi, Mandarin, Korean, Vietnamese and Arabic were chosen by popular request.
- Translation actioned.
- Translation consultation for accuracy, relevance and appropriateness.
- Drafts reviewed by the Translation service.
- Further proofs checked with the appropriate cultural groups.
- Marketing and distribution through contacts already established, General Practice Surgeries with a high ratio of Asian clients, word of mouth, health related conferences, public health offices, hospitals, diabetes services, schools, community groups.
- Evaluation forms enclosed with each distribution.
- 10 copies of each brochure were forwarded to the Ministry of Health.
EVALUATION

Evaluation has been part of the development process throughout. At each stage, the resources have been consulted on, comments have been elicited and changes made where needed. This process is ongoing and includes the following:

- Written feedback forms from users – (including teachers, health promoters/professionals and students) are currently in circulation. While the majority of feedback thus far has been related to the English, Pacific and Maori versions, all feedback has been tremendously positive, with comments made about the quality of the contents, relevance of examples to each ethnic group, leaflet layout, and eye catching design suitable to age group. A new version of the feedback form is being developed with a score system to be used in conjunction with the written response to questions.

- Ongoing demand of ordering and re-printing - no advertising of the current resources has been required at this point, with demand exceeding material on hand. Additional funding has been and continues to be sourced to enable us to provide these resources free of charge. This indicates high consumer acceptability.

- Verbal feedback - this has been positive throughout the design and distribution process, including those involved in translation and cross checking, health professionals in the field and laypeople. Appreciation has been expressed that the absence of suitable language appropriate resources is being addressed constructively. Anecdotal comments have been forthcoming without encouragement, such as “please produce in more languages”, “excellent resource, please send me some”.

- Comparison evaluation tool - at this point there is difficulty sourcing suitable comparative information to carry out this routine method of evaluation of written resources. Use of Fry, Frog, Freyberg and Fletch-Kinkaid readability evaluations, while not validated for use in Asian languages specifically, have delivered suitable reading age scores when based on the original English version. Equivalent assessment tools are yet to be sourced for the 5 new translations but the use of multiple reviewers in the translation process has been undertaken to get a wide perspective.

- Effectiveness of message delivery – new methods are being designed to assess this as resources become more widely distributed. Evaluation is planned within 3 high school settings in 2005 which will include among other methods the use of focus groups and in class evaluation of knowledge and behaviour change.

CONCLUSION

This paper discusses the printed and video resources produced to promote awareness and prevention of type 2 diabetes. Two brochures are presently being translated into five more languages; Mandarin, Korean, Vietnamese Hindi and Arabic, and other resources targeted at young people are being considered for translation, or in the case of a video, subtitled or voice-overed.

Throughout the process of developing the brochures the Diabetes Projects Trust strived to keep the different psychological and cultural requirements of adolescents
foremost. Teenagers were interviewed and their suggestions actively integrated into the finished product where possible while maintaining the basic message of diabetes education. To raise awareness and educate Asian youth about the seriousness of this condition an uncomplicated, understandable and relevant message with a robust consultation development process was needed. It is hoped that these resources will not only raise awareness of type 2 diabetes, but also become a tool used to equip Asian young people with the necessary skills to make healthy lifestyle choices for their future health.

Resources designed for community use require intensive consultation and feedback to ensure the greatest likelihood of success. Ministry of Health guidelines were adhered to at all stages throughout the process of developing the initial resources.

Evaluation has established that through the distribution of these brochures, the Diabetes Projects Trust has:

- Produced a popular resource.
- Used a wide variety of cultures and age groups.
- Met with international awareness and demand.
- The resources are well received and understood by target group.

Further evaluation includes plans for future development of resources for example, more reprints, improved evaluation tools, modification of resources as necessary.
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ABSTRACT

Background
Human migration has been happening since 8,000 to 4,000 BCE (Before Common Era) in Eurasia. Its main causes are interregional differences in opportunities. Therefore, Asians have been part of this. Since 1986, changes in New Zealand immigration policy have been aimed at attracting immigrants with professional skills and capital for investment, irrespective of race and country of origin, so Asians make up the fastest-growing ethnic community in New Zealand today and the second largest population group in Auckland. The Asian population is expected to increase mainly through further immigration.

Aim
To investigate the quality of life of new Asian immigrants and refugees in the Auckland region in terms of their stresses and coping skills, and to explore the potential use of a community development model to help them increase control over their own mental well-being.

Contents
This research is a small qualitative study which attempts to look at stresses across a number of Asian groups including refugee and migrant groups. It involves interviewing nineteen interpreters with expert knowledge on this issue, from the Interpreting and Translation Service, South Auckland Health to ascertain what they see to be the priorities for Asian mental health needs in the Auckland region, the barriers to these priorities being met, and what sort of action they consider appropriate. A health promotion approach called the PEOPLE System, used successfully in a number of local (but not specifically Asian) community health promotion activities, and favoured by the researcher, is introduced as an idea to the interviewees, and its usefulness discussed.

Semi-structured interviews were used as a data gathering procedure and the framework approach was used to analyse the qualitative data.

Conclusion
The research found that a meaningful employment dictates mental well-being of Asian immigrants and refugees in New Zealand. Their negative stress is proportionately more than the positive stress in terms of health outcomes. Therefore, they suffer from health and social consequences. Retention of cultural values in Asians is important to develop their positive coping. Mental health promotion - the PEOPLE System appears to be an ideal solution for Asian immigrants and refugees. The study concludes with a mental health promotion kit for Asian immigrants and refugees. This contains the “SmoothStream – the PEOPLE System model” with eight formulae. The kit is intended to be flexible and laid as a foundation for further research and development from a health promotion perspective.


Dr. Ronald Win-Sein Ma
Clinical Analyst
Decision Support
Auckland District Health Board
Email: ronaldwsm@adhb.govt.nz
INTRODUCTION

This research is a small qualitative study looking at the stresses and mental health of new Asian immigrants and refugees living in the Auckland region. Asians generally do not want to talk about mental health issues because of previous stigmatisation in many Asian cultures (Ho, Au, Bedford, & Cooper, 2003). However, this research attempted to use “stress” as a lingua franca to explore their mental health issues. It investigated the differences between immigrants and refugees in terms of stress, and looked at their main coping strategies including positive and negative. Then based on those coping strategies, the main actions we can take to improve their situations were investigated. A health promotion approach called “the PEOPLE System”, used successfully in a number of local (but not specifically Asian) community health promotion activities, and favoured by the author, was introduced as an idea to the participants, and its usefulness discussed.

Aim

“To investigate the quality of life of new Asian immigrants and refugees in the Auckland region in terms of their stresses and coping skills, and to explore the potential use of a community development model to help them increase control over their own mental well-being”

Objectives

1. What are the biggest demands for Asian immigrants and refugees living in the Auckland region?
2. To probe any differences between immigrants and refugees
3. What coping strategies are typically used to meet everyday stresses
4. To discuss the main actions that could be taken to improve the situation, and what main goals would arise from this
5. To inquire whether the community development approach called the PEOPLE System is one that could work to help improve quality of life

Background

Implications of the Asian influx for healthcare services

Now and in the future, a huge Asian influx will put a great pressure on the unprepared, yet already strained, New Zealand infrastructures and services including healthcare system, which is believed to be under-funded and under-resourced. Health issues are the ones we consider as critical. Mental health issue is one of the specific areas of concern (Asian Public Health Project Team, 2003).

Attitudes towards Asian immigration

In a survey carried out for the National Business Review in October 2002, forty-five percent of all respondents felt there were too many immigrants from Asia, with anti-
Asian sentiment strongest in Auckland and among people under 30 (One News, 2002). Their reduced receptivity plays a very important part for the newcomers and affects health of all citizens. It is clear to the extent that Asians live in a negative political climate in New Zealand (One News, 2002).

What are the risk factors associated with mental disorders in Asians?

Ho et al (2002) report that Asians have significant risk factors for developing mental disorders such as drop in personal socio-economic status following migration and poor language skill (Ho et al., 2003). However, there are some protective factors to counteract with those risk factors before developing into health consequences.

What are the protective factors?

The protective factors are as follows:

- Social support from the host country
- Psychological support from families and friends
- The receptivity of the host society

(Ho et al., 2003)

If we can reduce the risk factors and promote the protective factors, Asians will have more control over their mental well-being than the present situation. So what kind of approach can help them?

Mental health promotion may help

Mental health promotion has been defined in “Building on strengths - a new approach to promoting mental health in New Zealand / Aotearoa” as:

“The process of enhancing the capacity of individuals and communities to take control over their lives and improve their mental health. Mental health promotion uses strategies that foster supportive environments and individual resilience, while showing respect for culture, equity, social justice and personal dignity”.

(Joubert & Raeburn, 1998; Ministry of Health, 2002)

“Building on Strengths” provides an excellent framework for Asians to improve their situations. The view of the research is that mental health promotion is the best option to improve their mental health. So, how to research this issue?

Using “stress” is a good way to get Asian people to talk about mental health

The knowledge from a quick literature review of current health and medical studies, and personal experience as an Asian gave me the feeling that “stress” rather than direct language like “mental illness” would be appropriate to explore this topic, otherwise I would have met resistance from Asian communities. Therefore, I have used “stress” as the pivotal concept in this research, and have taken a “stress approach” for the mental health promotion analysis.
Mental health promotion and the PEOPLE System: a possible solution?

If our solution for Asian mental health issues aims to be culturally appropriate our view of health should be holistic, because the Asian tradition of viewing the body and mind is unitary rather than dualistic (Lin & Cheung, 1999). Mental health promotion is appropriate here, because it offers a conceptual approach to deal with this complex issue in Asians. Although two Maori and one Samoan mental health promotion models were included, no specific Asian model was found in “Building on Strengths”. Therefore, we need to come up with a specific solution for New Zealand context.

Aye (2002) and Campbell (2003) recommend that Raeburn’s “PEOPLE-centred” approach to community development would be ideal for refugees and new migrant groups (Aye, 2002; Campbell, 2003; Raeburn & Rootman, 1998; Raeburn, 1992). The PEOPLE System also has a good reputation in many other community development projects in New Zealand, including its recent application to a public health approach to gambling, which involves an Asian component (Raeburn & Herd, 2003).

METHODOLOGY

Data gathering involved semi-structured interviews with 19 professional interpreters from the Interpreting and Translation Service of South Auckland Health. “Ethics application” was approved by the University of Auckland Human Subjects Ethics Committee on 14 May 2003. The following is the outline for recruiting participants:

- The researcher went to where the interpreters worked
- Asked them if they would like to take part and check with the criteria
- Go over Participant Information Sheet and get signed Consent Form
- Do interviews
- The researcher started applying selection criteria regarding gender balance and especially the country of origin to include Burma, Laos, Cambodia and Vietnam

The sample in this research is drawn from East Asian interpreters at Interpreting and Translation Service, South Auckland Health (ITS), because those interpreters are working with Asian immigrants and refugees who are stressed and holding the ideal position to give information on behalf of them. In this case, the selection was of 19 East Asian interpreters. East Asia is an Eastern part of Asia divided by a line vertically between Bangladesh and Burma, and its customs, beliefs and religions are common in many aspects, and usually very different from West Asia (Major, Barnatt, & Bertles, 2001). The East Asian countries are Burma, Laos, Cambodia, Vietnam, Indonesia, Malaysia, Singapore, Hong Kong, Philippines, Taiwan, China, Korea and Japan. The purposive sampling was used to pay special attention to minor ethnic groups from Burma, Lao, Cambodia and Vietnam (at least two interpreters from each of above countries were included) (Thomas, 2002). Their backgrounds are lecturers, medical doctors, Justice of Peace, masters, counsellors, community leaders, journalists and teachers.

After transcribing the interviews, qualitative data was analysed with the framework approach (Pope & Mays, 1999). The author developed these stages in a graphical format as below:
RESULTS, DISCUSSIONS AND RECOMMENDATIONS

Top three stresses

The top three stresses are those from poor language skill, unemployment and culture shock (defined by the participants as “they are shocked because of huge differences between their home countries and New Zealand in every aspect”).

The common factor is the language barrier that gives rise to both unemployment and culture shock. Competence in the fluent use of idiomatic New Zealand English is rarely (some participants say “never”) achieved among Asian immigrants and refugees, even though they have received intensive language training according to the “Critical Period Hypothesis” (Ellis, 1994). Therefore, current levels of language training alone clearly cannot provide much difference in reducing their stress. The only thing that can provide a major difference in reducing their stress is meaningful employment. To amplify this point, it can be depicted as a formula as below:

*Formula One*

Meaningful employment = Mental well-being

Although moderate stress is good for most people (Hebb, 1955; Sarafino, 1997), negative stress - which can give rise to negative health and social consequences, especially mental health consequences - is proportionately more than positive stress for many Asians. This phenomenon can be described below with two formulae:

*Formula Two*

Negative stress > positive stress in Asian immigrants and refugees
Formula Three

(Negative stress) – (positive stress) = Health and social consequences

Their health and social consequences can affect everyone from individuals to societies with physical, mental and social problems such as depression, divorce, domestic violence, gambling problems, alcohol problems, substance abuse, teenage pregnancies, high abortion rates and crimes. These consequences are absolutely of public health concern.

Differences between immigrants and refugees in terms of stress

The differences happen in three areas: sources of stress, access to social support and coping ability.

For refugees, the sources of their stress derive from residency status approval process which usually takes quite a long time, and lack of choice to migrate. But for immigrants, the sources are from making a better life and from their children’s academic achievement.

Access to social support network is better in the refugees compared to the immigrants, because the refugees have an established social network, which happened in the refugee camps even before they came here and have affiliations to various organisations such as Mangere Refugee Resettlement Centre, Auckland Refugees As Survivor (RAS) Centre, Refugee and Migrant Services (RMS).

Moreover, coping ability is better in the refugees compared to the immigrant group, because of their higher hardiness, having better social support and better employment prospect – they usually move into trade services where racial and professional discrimination is the least.

In summary, the conclusion can be drawn that an Asian refugee whose residency status has been approved - “Refugee-status Approved Refugee” or RAR, feels less stressed than his immigrant counterpart. This can be described as below:

Formula Four

The intensity of the stress in a RAR < the intensity of the stress in an immigrant

Coping strategies used in solving their daily stresses

Asian immigrants and refugees cope with their stresses in both positive and negative ways in terms of health outcomes. In this case, negative ways are of a particular concern.

Negative ways of coping are emotion-focused coping strategies such as substance use (alcohol, drugs, and smoking), drink-driving, child abuse, domestic violence, petty crimes and gambling (Sarafino, 1997).

Gambling is almost inevitably harmful to both individuals and society, at least in the New Zealand context. The participants said that gambling affects Asians very badly.
because information about the gambling issue does not reach the Asian communities at present and they say that counseling in this area is urgently needed. One participant says that some Asians even fish illegally and commit immigration frauds such as marriage for convenience, simply to make money for gambling.

The choice of coping strategies in Asians depends on their particular cultural values. One of the participants suggested that negative coping among Asians can be prevented by maintaining their cultural values. “When they are stressed, they get together, sit and talk in monasteries and do meditation, which is their way of life. They endure to pass through that difficult period. Generally, I do not see any negative way of coping in my community. They are religious, so negative way is rare.” Therefore, retention of cultural values can confer socially and culturally acceptable positive coping choices and options for Asians, which becomes another formula.

Formula Five

Retention of cultural values = socially and culturally acceptable coping = Mental well-being.

As a result of various coping strategies, there are three groups of people based on the result of coping: successful, failed completely and borderline. Those latter two groups are of concern, because they are left with negative consequences. However, those groups who are either failed or on the borderline do not usually seek help because of various barriers, such as cultural barriers, language barriers, lack of information, lack of understanding of healthcare systems and lack of social networks. They remain feeling stressed, and as a result, their health status will surely deteriorate, eventually their quality of life. Therefore, their situation calls for prompt action.

Main actions to reduce Asian immigrants and refugees’ stresses

The main action to reduce Asian immigrants and refugees’ stresses is creating meaningful employment for them, which is unanimously agreed by all participants. Asians feel very frustrated and depressed in trying to find a meaningful job, despite the fact that they often have many years of work experience and are highly qualified (Basnayake, 1999; EEO Trust, 2003; Ho et al., 2003; McIntyre, Ramasamy, & Sturrock, 2003). Here we need to clarify a distinction between what is “needless discrimination” and “necessary discrimination”. Needless discrimination in this research context means discrimination against Asians on grounds of their age, sex, race, religion and countries of origin, whereas “necessary discrimination” means the kind of discrimination that happens to Asians simply as a result of their lack of New Zealand experience, New Zealand qualification and English language skill. Obviously, these things are required in some high level jobs, regardless of the origin of the applicants including locals. Meaningful employment is relied upon by all age groups in a family. One participant reported that all the negative consequences happening in Asian communities are due to one thing: the employment issue. Important actions to this are language training, new skill training, solving public transport problems and improving the cultural awareness in the host society.
The Formula One can now be modified as formula six, and a new “formula seven” is introduced as below:

**Formula Six**

Meaningful employment = removal of needless discrimination = Mental well-being

**Formula Seven**

- Removal of needless discrimination
- Learning English in the workplace = Mental well-being
- Efficient public transport system
- Cultural awareness in the host society

**The PEOPLE System**

This category relates to one of the objectives in this research to inquire into the perception of the concept of a general community project and to be more specific, the perception of the PEOPLE System as an approach supported by Asian communities. That is, this research does not just stop at an inquiry about stresses but also moves a step further, and explores possible actions, particularly in favour of the “PEOPLE System” explicitly. As was seen, there was a positive perception of both the community project and the PEOPLE System.

The PEOPLE System, a New Zealand based creation and approach, has its own excellent reputation spanning more than 26 years around the world and in New Zealand. In Canada it was known as “People Projects” (Raeburn, 1987). Some of the examples of its applications are the Community Push Programme (1972-1973) in Auckland Hospital, the Birkdale-Beachhaven Community Project (1973-1980) on the North Shore of Auckland, the Superhealth Lifestyle Programmes (1974-1989) in Community Houses; e.g. Waistline - an effective weight-control programme, Unstress (1978) and Superhealth Eatwell: A Beginner’s Guide to Healthy Eating, and the North Shore Community Health Network (1983-present) and the Other Way Project (1993-present) in Thames and Northcote to deal with health, mental health and social consequences of unemployment in New Zealand. The philosophy behind the PEOPLE System, namely empowerment and community control, was also welcomed in the researcher’s proposal to the Manukau City Council “Health Promotion for Alcohol-related Harm (2002)” by the Programme Advisory Group. The most recent practice is in the public health approach to gambling (Raeburn & Herd, 2003).

The consensus on the positive perception of the system is its ability to provide empowerment, social support, true democracy, equity, and trust and fun, and to provide “hope” for Asians. One participant says that we do not need any medication,
but we need some “hope”, and we need to look forward. This can be depicted as the final and ‘ultimate’ formula as follows:

*Formula Eight – the ultimate formula*

Mental well-being = the PEOPLE System

Let us, therefore, start actions that Asian immigrants and refugees are hungering for with the PEOPLE System immediately.
“The SmoothStream – the PEOPLE System model” is a model developed by the researcher on the basis of this research to describe graphically the main stresses for new immigrants and refugees, going from the sources of stress to possible solutions, are from a mental health promotion perspective. It has two components: SmoothStream and the PEOPLE System. The “SmoothStream” component means the model enables immigrants and refugees to cope successfully with their stresses in a new country and to be able to integrate ‘smoothly’ into host society as a ‘stream’
by utilising the PEOPLE System. The PEOPLE System component is essentially a possible solution, which can empower immigrants and refugees to increase control over, and to promote their own mental well-being. It can be used as a theoretical or conceptual model for mental health promotion programmes for any Asian or other migrant groups.

SUMMARY

The eight formulae and the model can be combined to form a “mental health promotion kit for immigrants and refugees”, which will guide any mental health promotion programme for Asians.

RECOMMENDATIONS

1. Apply the PEOPLE System to promote mental well-being in Asian communities
2. The New Zealand government should lead the actions at the national level with the organised efforts of all governmental and non-governmental sectors
3. Asian minority ethnic groups should be paid more attention by the government than the larger Asian groups, because those minority groups are more vulnerable and their health status is at stake.
4. Asian immigrants and refugees will benefit more if the government policy is directed towards an enabling approach rather than an approach of imposing policies and actions on Asian communities from the centre

CONCLUSION

Until now, mental health issues of Asian immigrants and refugees have not received sufficient attention. Previous research done on this subject overlooked smaller ethnic groups and has not introduced any specific solution to improve the present situation faced by new Asian immigrants and refugees. On the other hand, Asians have a strong aversion to talking about mental health, because of stigmatization of mental illness as supernatural punishment for wrong-doing in many Asian cultures (Ho et al., 2003). That makes research on this subject extremely difficult. However, the author of this research used a “stress” language as an alternative way to explore mental health issues in a wide range of Asian ethnic groups, including smaller ones, and successfully found top three stresses, which are those related to employment, poor language skill and culture shock.

On a cautionary note, the usefulness of the “stress” language has not been tested directly on Asian immigrants and refugees, but from the author’s sense of doing this research, if the “stress” language had not been used, he would have met definite resistance even from his participants, namely interpreters from Asian communities who provide information on behalf of their clients.

The real concern is with the proportion of negative stress in immigrants and refugees, which is significantly higher than their positive stress, and gives rise to physical, mental and social consequences. Those consequences are “communicable” in nature, and consequently affect the whole New Zealand population and the entire healthcare system. So this situation is absolutely of public health concern. The
PEOPLE System, which is based on a philosophy of empowerment, and personal and community development, is found in this research to be an ideal solution from a public health – health promotion perspective. This would be aimed at preventing their mental health status from deteriorating and promoting their mental well-being, and is welcomed by the Asian communities in this study. The main actions to reduce their stresses can be done within the PEOPLE System framework, coordinating the organised efforts of all sectors. Therefore, equity in health and the quality of life for those Asian communities is not a dream, but can be a reality.

Urgent research is needed on other possible solutions to reduce the stresses of these groups, and how those solutions can be implemented at the national level. In particular, FFPS (Foreign Fee Paying Students) and primary school children, especially depression, are calling for prompt investigation. The specific issues of disabled Asian immigrants and refugees require particular attention, because they have more difficulties in social inclusion and participation than their counterparts, especially in the current implementation of the new New Zealand Disability Strategy.

To do that, we need participation not only from new Asian migrants, but also from all sectors of society to achieve our ultimate goal, which is the mental well-being of all New Zealanders. Therefore, in light of New Zealand increasingly multicultural society, if the goals of health promotion are to reduce human suffering, to promote holistic healthcare that is culturally appropriate and responsive, and to improve the health of all New Zealanders, it is not the time to procrastinate our actions any more, because the solution is right here. We need to start our actions immediately with the PEOPLE System. But, this is, I suggest, a national responsibility. We cannot have a health promotion specialist in each and every home of Asian immigrants and refugees. But this research can be a voice in the ear of all New Zealanders, and the conscience sitting on their shoulders. Every New Zealander, with the knowledge from this research, can take responsibility for reducing the stress of newcomers. And start, for once, to think about their mental well-being.
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A MODIFIED COGNITIVE BEHAVIOURAL THERAPY MODEL FOR WORKING WITH CHINESE PEOPLE

Mei Wah Williams, Eve Yee Han Graham and Koong Hean Foo

ABSTRACT

The plight of Chinese people’s mental health is particularly relevant given the current large number of ethnic Chinese immigrating to Aotearoa/New Zealand over the past decade. It is frequently remarked that very few Chinese people utilise mental health services. If they do, they present only when their mental health problems are severe or they terminate prematurely.

The aim of this paper is to introduce a model for psychotherapy, a modified cognitive behavioural therapy (CBT) model, which could be used in treating Chinese people with mental health concerns. The cognitive behavioural therapy model has been used widely with Western and non-Western people and extensive research supports its efficacy in treatment outcomes.


Ms Mei Wah Williams
Lecturer and Clinical Psychologist
School of Psychology, Massey University
Email: m.w.williams@massey.ac.nz

Ms Eve Yee Han Graham
Clinical Psychologist
Private Practice

Mr Foo, Koong Hean
Doctoral candidate and PG Dip Cognitive-Behaviour Therapy student
School of Psychology, Massey University
IMMIGRATION OF CHINESE PEOPLE TO AOTEAROA/NEW ZEALAND

Since the late 1860s, New Zealand has accepted migrants from Asia with the majority of the non-European arrivals being Chinese who came in large numbers to work in the gold mines in South Island (Statistics New Zealand, 1999). The majority of them were Cantonese-speaking Chinese from the southern province of Guangzhou, the People’s Republic of China, or Hong Kong (Statistics New Zealand, 1995). New Zealand people, in the newly adopted country, did not readily accept these non-European settlers and as a consequence, the Chinese people suffered much hardship through discriminatory laws restricting their residence, citizenship, and marriage. The 1881 Chinese Immigrants Act required every Chinese immigrant to pay a ten-pound poll tax and placed a quota on ships carrying any Chinese migrants of one Chinese per ten tons of cargo. The Chinese Immigration Amendment Act of 1896 increased the poll tax to one hundred pounds and the quota was further restricted to one Chinese person for every two hundred tons of cargo. Up until 1952, Chinese people were not able to become New Zealand citizens.

Removal of barriers to immigration in 1986 saw significant growth of Chinese migrants settling in New Zealand, especially during the past 10 to 15 years (Ho, Au, Bedford & Cooper, 2003). These recent migrants are more heterogeneous, unlike the earlier arrivals, being more culturally and ethnically diverse. Although Chinese and Indians continue to make up the largest pool of migrants, significant numbers are now from Laos, Vietnam, Cambodia, Thailand, Japan, Indonesia, Malaysia, Sri Lanka, Iran, and Korea (Statistics New Zealand, 1995). Many of these new arrivals are urbanised, well educated, with professional skills and training, and/or entrepreneurial (Chu, 2002). Some of the Chinese migrants come from multicultural societies where English is their first or second language, such as those from Malaysia and Singapore, and they will generally adapt more easily into the New Zealand way of life. Others come from societies that differ considerably from New Zealand’s social and political structures, and adjustment to life in New Zealand will be more challenging and arduous.

It can be expected that with immigration will come a plethora of challenges, both universal and distinct, for the individual and/or the family as they adjust and integrate into the new host country. Some of these challenges will be caused by having poor English language skills, in finding employment, changes in familial roles and social support systems, or trauma experienced prior to immigration (Ho et al., 2003; Williams & Aye, 2003). Although Chinese people have been generally well-accepted into New Zealand society since the removal of discriminatory laws in the 1950s, their numbers have been small and they were largely invisible in mainstream society. The recent phenomenal growth in the number of Chinese immigrants arriving into New Zealand, however, have made them much more prominent as an ethnic group and with this has been accompanied by unease about the large-scale immigration of non-European people (Gregory, 2004b). It has been reported that one in five migrants has experienced some form of discrimination in New Zealand (Gregory, 2004a).
EXPERIENCE OF CHINESE MIGRANTS: DISCRIMINATION AND ADJUSTMENT TO LIVING IN AOTEAROA/NEW ZEALAND

One of the authors (EYHG) completed a qualitative study using interpretive phenomenology to uncover the meaning of eight Chinese migrants' experiences of discrimination in New Zealand, which included two first generation Chinese New Zealanders (Graham, 2001). The emphasis is on how they interpreted their encounters, the way they felt, reacted and dealt with the phenomenon of being discriminated against. Allport (1954) proposed that racism includes prejudice, stereotypical beliefs and overt discriminatory behaviours toward minorities. According to Lonner and Malpass (1994), racism includes “the attitudes, practices and policies that result from a belief that skin tone determines attributes on behaviour”. Prejudice and stereotypes come from categorisation, the grouping of people according to their cultural group, emphasising the differences between groups and similarities within groups (Sampson, 1999).

Racism in this study is proposed as negative attitudes and derogatory treatment of people of a different race or ethnicity. While the core belief of the perpetrators could be that physical and racial identity determine the way people think and behave, the essence of the experience of racism lies in the "felt sense" of exploitation and mistreatment.

An interesting but unexpected finding of the research is the reluctance of many Chinese people to approach the subject of racism. When called or approached to talk about their experiences, many politely refrained from talking while others claimed they have never been so treated. It was only after two months of persistent enquiries through friends and family and the cooperation of four voluntary workers at North Shore Hospital Asian Health Unit that eight participants were enlisted. Based on the researcher's (EYHG) understanding of Chinese culture, and implications from relevant studies, cultural factors of loss of face and fear of confrontation are proposed as potential obstacles Chinese people encounter in facing up to disclosures of maltreatment (Graham, 2001). According to Singelis, Bond, Sharkey and Lai (1999) members of collective cultures have stronger interdependent images of self which predicted higher levels of embarrassability, caused by concern for external evaluation and a desire to conform (Edelmann, 1987). In disclosing experiences of racial discrimination, Chinese people are made to look less favourable in others' eyes because harmonious relationships have been disrupted. Therefore, the loss of face (Cheng, 2000; Kwan & Sodowsky, 1997) could make Chinese people reluctant to talk about their racism experience.

In light of the above findings and other cultural differences seen in Chinese people (e.g., importance of family, filial piety, maintenance of interpersonal harmony, respect for authority) it is not difficult to surmise that huge obstacles exist for them in accessing and utilising mental health services. This would be especially so if the services are administrated by those who are, often unintentionally, perpetrators of stereotyping and discrimination.
UTILISATION OF MENTAL HEALTH SERVICES BY CHINESE PEOPLE

It is therefore not surprising that it is frequently noted that very few Chinese people utilise mental health services and even less will self-refer (Netto, Gaag, Thanki, Bondi & Munro, 2001). If help is sought, it is often when there is a crisis or if they enter into treatment, it will be terminated prematurely. The non-participation rate of Chinese people in Westernised psychological treatment centres may lead to erroneous assumptions being made about their mental well-being. For instance, a study by Netto and colleagues (Netto et al., 2001) found that common misperceptions were that Chinese people do not suffer mental illnesses because of the protective factors afforded by large family and social support networks; that Chinese people have a tendency to somatize their problems and therefore medical, rather than psychological treatment, is the appropriate treatment of choice; that fear of being stigmatised and shamed about talking to an outsider (i.e. the helping professional) about personal problems will mean that Chinese people will not fully discuss their problems with them; or that Chinese people are unable to articulate their emotions as they are taught to control expressions of strong emotions and distress.

These stereotypes have negative implications for Chinese people if they are experiencing distress or mental health problems. It is most likely that symptoms of mental illness will not be identified, that even if mental health issues were identified referrals to mental health professionals would not be undertaken because it would not be considered a useful adjunct to medical or traditional treatment, or the availability of mental health services for treating psychological problems would not be discussed with the Chinese client. Thus mental health services will not be considered beneficial for this population group and information not given out about psychological treatment and mental health services; limiting access to these services. Some of these misconceptions, however, are unfounded. A literature review by Ho and associates (2003) discovered that the prevalence rate for mental illness of Asian migrants in New Zealand was no different from that of European New Zealanders. In fact, recent immigrants had high levels of post-traumatic stress symptoms, depressive symptoms that were clinically significant, and greater levels of anxiety and emotional distress compared with other ethnic groups in New Zealand. Many of these mental health problems appeared to be associated with immigration; adjusting to a new life in New Zealand and experiencing discrimination, unemployment, language difficulties, isolation, and not feeling integrated into the New Zealand culture. Thus it would appear that many Asian people in New Zealand do experience some form of mental illness, some which are clinically significant, and that Westernised models of therapy may be suitable for this population group to address these mental health problems.

A COGNITIVE-BEHAVIOURAL THERAPY MODEL FOR WORKING WITH CHINESE PEOPLE

The literature on cross-cultural counselling has been a growing and expanding field over the past two decades as the rights of minority groups are acknowledged in having access to mental health services that are culturally appropriate and sensitive to their needs. A diverse range of subjects has been addressed in the cross-cultural counselling literature. These include differences between Chinese and Western
cultures and philosophies in the conceptualisation of mental health issues and the effect this has on efficacious therapeutic outcome when utilising Westernised models of therapy with the Chinese client (Bond, 1986) (Au, 2002); guidelines for improving Chinese people’s access and utilisation of mental health services (Netto et al., 2001); framework for developing rapport and engaging the Chinese client in psychotherapy (Hong & Domokos-Cheng Ham, 2001; Johnson & Nadirshaw, 2002). (Paniagua, 1998), ethnically matching clients and therapists (Alladin, 2002); issues of immigration and acculturation on family’s and the individual’s mental well-being (Roysircar, 2003; Williams & Aye, 2003); and ethical concerns surrounding competency and training of psychotherapists working with multicultural clients (Pedersen, 2003).

Of less attention, however, have been therapeutic frameworks that could be used for counselling Chinese people (for exceptions refer (Harper & Stone, 2003) (Higginbotham & Tanaka-Matsumi, 1981; Hong & Domokos-Cheng Ham, 2001) (Tanaka-Matsumi, Seiden & Lam, 1996). This paper proposes that a cognitive-behavioural therapy (CBT) model could provide a conceptual framework in which to assess and treat Chinese people with mental health concerns. It is frequently noted in the literature that Chinese people favour therapy that is directive, structured, and short-term. This style was found to be more effective in treatment outcome with Chinese people than a non-directive person-centred approach (Chu, 1999). It is proposed that the principles and practice of CBT would appear to be compatible with the expectations favoured by Chinese people in being more directive, structured and short-term compared to other therapeutic orientations. Unlike other countries, such as in the United Kingdom where the training is mostly in person-centred and psychodynamic orientations (Netto et al., 2001), CBT is the therapeutic orientation adopted by most clinical psychology training institutions in Aotearoa/New Zealand (Blampied, 1999).

In New Zealand, recent developments have seen CBT modified to provide appropriate cross-cultural treatment programmes for working with Māori people (the indigenous people of New Zealand). The CBT framework has been integrated with bicultural practices of kaupapa Māori; traditional Māori values and beliefs, such as knowing one’s Whakapapa, involving the client’s whānau (family) and kuia or kaumātua (respected elders) in treatment, and being aware of the effects of colonisation and acculturation on one’s identity (Evans & Paewai, 1999). Although there have been criticisms about the use of Westernised models of psychotherapy with Māori people, CBT treatment protocols that have incorporated kaupapa Māori have demonstrated superior efficacy in treatment outcomes compared to CBT used on its own (Nathan, Wilson & Hillman, 2003).

The rest of this article will, firstly, present a brief overview of the CBT model and then, next, propose a modified version of the model that could be used for working with Chinese clients.

The Cognitive Behavioural Therapy model

Aaron Beck (Beck, Rush, Shaw & Emery, 1979) first pioneered the development of cognitive therapy. Since then, cognitive therapy and cognitive behavioural interventions have been received with great interest, generating numerous studies
attesting to its effectiveness in treating a range of psychological problems, such as anxiety, anger, panic, jealousy, guilt, and shame (Greenberger & Padesky, 1995), and more serious disorders such as depression, panic and anxiety disorders, post-traumatic stress disorder, and eating disorders (Hollon & Beck, 2004). The fundamental purpose of cognitive therapy is to effect change by influencing one’s thoughts and beliefs (Hollon & Beck, 2004). It is based on the premise that thoughts are connected to one’s mood, behaviour, and physical responses (Greenberger & Padesky, 1995). Change in the cognitions will correspondingly effect change in mood, behaviour, and physiological reactions.

Padesky and Mooney (Padesky & Mooney, 1990) developed the Five-Part Cognitive Model that represents the relationship between emotion, thoughts, behaviour, physical, and that these, in turn, have been influenced by one’s environmental factors, such as genetics, culture, history, and the actual problem situation (see Figure 1 below). The bi-directional arrows indicate the dynamic interconnections between the various parts of the system, indicating that change in one area will create change in the other areas as well.

![Figure 1. Padesky and Mooney's 5-part cognitive therapy model.](image-url)

When the client is first seen at the initial interview, this generic model is used to systematically organise the various areas of the client’s problem. Typically the client’s presenting problem will be discussed and their reaction (i.e., in the domain of behaviour, physiological arousals, cognition, and emotions) to the problem elicited. In order to place the problem within context, environmental influences such as the client’s culture, background history, genetic or familial history, and other information specific to the client are obtained.

Generally when all the information about the nature of the client’s concerns has been gathered and the assessment procedures completed, typically by the second or third
session, the CBT model will be presented to the client. In explaining the model to the client, Padesky and Mooney (1990) suggests the following be used:

“This is a model we use to help understand (depression, anxiety, guilt, etc). All of us live in an environment – family, culture, weather, etc. We are affected by both our current environment (e.g. job and family stress and supports) and our past environments (whether we have had successes, losses, criticism). In addition, we each have four aspects to ourself – a biological or physical aspect, feelings, behaviour, and thoughts. …..Drawn lines between these aspects [indicate] each of these four parts is connected to the others. They all sit inside our environment and interact with it as well. What we feel is closely connected to our thinking, our behaviour, our physical responses, and our environment” (p. 128).

A personalised account of the client’s problem is then introduced, incorporating into the model the client’s unique information gathered during the assessment sessions. This session is particularly important in helping the client to conceptualise his/her problem and to perceive that different problem areas may be related. Once the client is able to understand their problem, the model is then used to develop a treatment plan based on the specific needs of the client. Throughout the whole process the client actively participates in a collaborative relationship with the therapist in making decisions about their treatment.

There are several advantages in using this cognitive behavioural model (B. Haarhoff, personal communication, August 18, 2004). Although the model is generic, it provides a diagrammatic analysis of the client’s own unique and idiosyncratic view of their problem, helps to collate complex and sometimes perplexing material in a succinct and unifying way, is “client friendly” in that the client can easily understand and explain the problem not only to themselves but to close family members, and lastly, the simplicity of the model engages the client early in therapy and gives them motivation and hope about finding a solution to their problem. The interconnectedness of the various parts of the model predicts that intervention could be initiated in any part of the system. Change, regardless how small, in one area will effect change in the other areas as well.

Proposed modified Cognitive Behavioural Therapy model for working with Chinese people

It is proposed that the CBT model can be adapted for working with Chinese people (see Figure 2). Although the basic structure of the model has been retained, it is important to note that parts of the model have greater prominence for the Chinese client than others. Because the Chinese client comes from a background that will differ from a New Zealander, environmental influences will need to be carefully considered and the impact this has on the Chinese client’s psychological wellbeing and general functioning. Some of points highlighted in Figure 2 will be discussed further below.

Environment influences

Culture: the influence of confucianist, taoist, and buddhist teachings remains strong despite westernisation and acculturation. They influence how mental illness is
perceived and the cause of the problem. For example, they teach the virtue of moderation in finding the right balance amongst the excesses of life as this will lead to tranquility of the mind, and in espousing the concept of liberation; that is, to trust and follow one’s destiny as it leads to fulfillment and peace. Traditional Chinese medicines are frequently used as an adjunct to other forms of therapy as physical and mental illnesses are not considered separate entities but are holistically interconnected.

Understanding the level of acculturation/enculturation is important for psychologists working with Chinese people as it has been shown that cultural identity is related to psychological health and help-seeking behaviour (Kim, Atkinson & Umemoto Dawn, 2001).

Situation/Problem: Because Chinese people value the collective over the individualistic nature of Western culture, problems will generally be regarded as social or relational, rather than individually oriented.

Expectations of the Chinese client: Chinese people regard professionals as authority figures, knowledgeable, and to be respected. In order to achieve acceptance of therapeutic counselling, a directive and didactic approach in the early phase of the therapist-client relationship will increase confidence and trust in the therapist’s ability to help. A facilitative person-focused approach to counselling does not conform to the image of a traditional cultural healer and taking this approach may negatively impact on the engagement of the Chinese client into a therapeutic relationship. Chinese people also believe in value for money so symptom relief needs to be achieved preferably in the first session and, in total, therapy sessions not last more than five to six sessions. However, the eagerness to get well and comply with the therapist’s requests will make the Chinese person an ideal client in completing out-of-session tasks.

History/Family: The strength of the Chinese family structure is in providing an environment for mutual support and interdependence (Cheung, 1986). For non-Chinese people, the close extended family unit may appear to be overly enmeshed. For example, the Chinese parents may seem to over-indulge their children, almost to the point of “drowning them with love”, and will be closely involved in many aspects of their life. Individual family members generally have a strong sense of responsibility and obligation to the family with great importance attached to academic and occupational achievement. Pressure on young children to succeed may appear excessive to non-Chinese people. The importance of the family and the influence it exerts on the individual family member’s behaviour can sometimes be difficult for non-Asians to understand (Curreen, 1997).

Biology, Cognitions, Behaviour, Emotions: The Chinese people’s emphasis on emotional restraint, moderation and control of one’s feelings and emotions will make disclosure and sharing one’s inner feelings uncomfortable. Disclosing private feelings can feel strange and there is generally a reluctance to discuss personal details with someone perceived as a “stranger”, even a professional. Talking about somatic complaints or issues of a more practical nature, such as financial or academic problems, is usually easier than expressing mental health symptoms. Instead of expecting the client to verbalise and express feelings, it may be more useful to focus
on the somatic symptoms and use problem-solving strategies early in therapy. As emotional and cognitive reactions may not be spontaneously expressed, direct enquiry into these psychological symptoms will be useful. Organic symptoms relabelled or reframed into psychological terminology may become more acceptable as rapport and trust develops. This is more likely to engender rapport building and enhance the Chinese client’s faith that psychological therapy is beneficial and effective.

SUMMARY AND CONCLUSIONS

The proposed modified CBT model for working with Chinese people is at a nascent stage. The authors are trained CBT practitioners and/or clinical psychologists and have worked extensively with this model with non-Chinese people, for a number of mental health concerns. However experiences with using the CBT model with Chinese people are limited, although initial indications are that it shows considerable promise. It is essential that research be conducted to establish the effectiveness of the modified CBT with Chinese people, and thus guide future practice in treating mental health problems for these people.

Furthermore, mental health professionals need to become more sensitive to the mental health needs of Chinese people and to develop culturally appropriate services. It is proposed that this modified version of the CBT framework can be used for working with Chinese people with mental health concerns.
Figure 2: REVISED COGNITIVE BEHAVIOURAL THERAPY MODEL FOR CHINESE CLIENTELE

Environmental Influences

EXPECTATIONS OF CLIENTELE
- Lower tolerance for ambiguity
- Greater respect for authority – desire to please therapist, complete out-of-session tasks
- Preference for practical and immediate solution for problems – “quick fix”
- Expect directive therapy process and authoritative therapist
- Expect value for money, brief therapy (5-6 sessions)
- Concern with good rapport

BIOLOGY/PHYSIOLOGY
Often expressed in somatic terms like aches and pains

HISTORY/FAMILY
- Drowning child(ren) with love and over-protective parents
- Pressure by parents for child(ren) to achieve
- The past may be seen as not significant to therapy
- Wider family members have role in therapy
- Non-nuclear extended family living situation

COGNITION
Difficulty expressing private thoughts due to lack of psychological sophistication or repression eg “thinking too much won’t help”

CULTURE
- Elements of Confucianism, Taoism, and Buddhism still retained in spite of modernization; e.g. filial piety, loss of face
- Influence of Chinese medicine and folk psychotherapy
- Collectivistic emphasis
- Levels of adjustment/acculturation to mainstream culture
- Country of origin, rural/urban upbringing
- Self-effacement
- For some individuals, English as second language

EMOTION
Difficulty expressing strong emotions due to lack of psychological sophistication or repression e.g. control of affective display since young.
Emphasis is not on “happiness” but on being at peace and in harmony with one self and others.

BEHAVIOUR
Problem-focused
Solution-focused

ACTUAL SITUATION/PROBLEM
- Problems usually regarded as social and/or relational issues
- Locus of control are seen as external to self
REFERENCES


ABSTRACT
This study compares the characteristics of New Zealand and Singapore mental health practitioners and their counselling and psychotherapy practices. Participants from both countries were divided into a mail questionnaire group of 300 each and a structured interview group of 12 each. Despite the relatively low response rates of 20% in the mail questionnaire group, the major findings were supported from the structured interviews. Results showed that there were similarities in practitioner training, applicability of therapy models, handling of religious issues and self-disclosure. Differences were found in practitioners’ years of experience and preferences of therapy models, and the nature of clientele problems, and availability of indigenous therapy.


Mr. Koong Hean Foo
Doctoral candidate
School of Psychology
Massey University
Email: fookoonghean@yahoo.com.sg

Associate Professor Paul L. Merrick
Coordinator of Clinical Training
School of Psychology
Massey University
INTRODUCTION

Counselling and psychotherapy have their origins in Euro-American models. Their use has spread from Europe and the United States to other Western and non-Western countries, in which New Zealand and Singapore are involved. All countries using counselling and psychotherapy are in various stages of development of these services. Research investigating the development of counselling and psychotherapy either within a country or among a group of countries is increasing, but comparative studies between two countries are few. The aim of this study is to compare the characteristics of New Zealand and Singapore mental health practitioners and their counselling and psychotherapy practices.

New Zealand has over 4,000 counselling and psychotherapy practitioners in mental health services across the nation. Singapore has aligned towards the West in many areas: English is used as the first language (Gupta, 1994), science, technology and medicine, including psychology (Elliot, 1999). It, too, has over a 1,000 mental health practitioners who have also adopted the Western models of counselling and psychotherapy in assessment, diagnosis and treatment of their clientele (Ang, 2001; Lee & Bishop, 2001). The composition of the populations of New Zealand and Singapore make comparisons viable. New Zealand’s population stands at 4.058 million (Statistics New Zealand, 2004) with Maori, Pacific Island peoples and Asians at varying levels of acculturation to the mainstream, of which reliance on traditional methods of healing is still present (Culbertson, 2001). Whereas Singapore’s population at 4.185 million (in updates of Statistics Singapore, 2003) with Chinese, Malays and Indians at varying degrees of modernisation and westernisation, many rely as well on the traditional methods of healing (Lim & Bishop, 2000). Malays in Singapore would tend to be more conservative (Ball, Mustafa & Moselle, 1994; Razali & Najib, 2000).

The first part of this study investigated the characteristics of mental health practitioners of New Zealand and Singapore, including their training in counselling and psychotherapy. The second investigated the suitability of Euro-American counselling and psychotherapy models in these practitioners’ practices, and their handling of traditional methods of healing, religious issues and self-disclosure in session.
MATERIALS AND METHODS

Participants were New Zealand and Singapore mental health practitioners in counselling and psychotherapy, namely, counsellors, psychiatrists, psychologists, psychotherapists and social workers. They were drawn from electronic or printed publications on counselling and psychotherapy services in both countries in 2001. Participants from available professional listings were systematically sampled. Sampling of participants from organisational listings, which did not feature individual professional information, was by way of estimation. The study design consisted of a mail questionnaire and a structured interview. Thus the participants were divided into two groups: one from each country for the mail questionnaire and one from each country for the structured interview. Steps were taken to ensure that participants for the structured interview were not sent the mail questionnaire.

For the mail questionnaire group, the 300 New Zealand participants were drawn from New Zealand’s Registered List of Clinical Psychologists, GM Resource and Referral Directory, Yellow Pages, White Pages and the websites of District Health Boards. The 304 Singapore participants were drawn from the Singapore Medical Association’s website, Directory of Social Services, Community of Mental Health Professionals, Yellow Pages, and websites of the Singapore Psychological Society and Singapore Association of Social Workers. The response rates were 20% (41/300) for New Zealand participants consisting of 18 males and 23 females (n = 41), and 26.6% (61/304) for Singapore participants consisting of 16 males and 45 females (n = 61). All returned mail questionnaires were usable for analysis. Reasons for non-participation by New Zealand and Singapore practitioners in the mail questionnaire are outlined in Table 1. Characteristics of the mail questionnaire participants are summarised on Table 2. For the structured interview group, 12 mental health practitioners each from New Zealand (n = 12; 4 males and 8 females) and Singapore (n = 12; 6 males and 6 females) were contacted by email, telephone or personally by the principal researcher. Characteristics of the structured interview participants are summarised on Table 3.

Table 1. Reasons for non-participation by New Zealand and Singapore Mental Health Practitioners in Mail Questionnaire.

<table>
<thead>
<tr>
<th>New Zealand (n = 19)*</th>
<th>Singapore (n = 20)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not able or in position to participate</td>
<td>Not participating</td>
</tr>
<tr>
<td>Not in department’s policy to participate</td>
<td>Function of organisation not suitable</td>
</tr>
<tr>
<td>Not time for study</td>
<td>Not having time to do</td>
</tr>
<tr>
<td>No counsellor present</td>
<td>Not suitable candidates</td>
</tr>
<tr>
<td>Person resigned or deceased</td>
<td>Does not fulfil criteria</td>
</tr>
</tbody>
</table>
Closing down business
Little clinical practice or not seeing clients nowadays
Not sure
Staff not professional counsellors or psychotherapists
Unable to assist in distributing questionnaires or gathering information

Note: *These responses include returned uncompleted questionnaires without reason given.

Table 2. Characteristics of New Zealand and Singapore Practitioners from Mail Questionnaire.

<table>
<thead>
<tr>
<th></th>
<th>New Zealand (n = 41)</th>
<th>Singapore (n = 61)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Job title</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Counsellors</td>
<td>2 (4.9%)</td>
<td>19 (31.1%)</td>
</tr>
<tr>
<td>Psychiatrists</td>
<td>2 (4.9%)</td>
<td>11 (18%)</td>
</tr>
<tr>
<td>Psychologists</td>
<td>29 (70.7%)</td>
<td>8 (13.1%)</td>
</tr>
<tr>
<td>Psychotherapists</td>
<td>4 (9.8%)</td>
<td>2 (3.3%)</td>
</tr>
<tr>
<td>Social Workers</td>
<td>2 (4.9%)</td>
<td>19 (31.1%)</td>
</tr>
<tr>
<td>Multiple roles</td>
<td>2 (4.9%)</td>
<td>2 (3.3%)</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Males</td>
<td>18 (43.9%)</td>
<td>16 (26.2%)</td>
</tr>
<tr>
<td>Females</td>
<td>23 (56.1%)</td>
<td>45 (73.8%)</td>
</tr>
<tr>
<td><strong>Ethnicity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caucasians</td>
<td>38 (92.7%)</td>
<td>3 (4.9%)</td>
</tr>
<tr>
<td>Chinese</td>
<td>-</td>
<td>48 (78.7%)</td>
</tr>
<tr>
<td>Malays</td>
<td>-</td>
<td>3 (4.9%)</td>
</tr>
<tr>
<td>Indian</td>
<td>1 (2.4%)</td>
<td>6 (9.8%)</td>
</tr>
<tr>
<td>Others</td>
<td>2 (4.9%)</td>
<td>1 (1.6%)</td>
</tr>
<tr>
<td><strong>Age range</strong></td>
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<tr>
<td>20-30</td>
<td>1 (2.4%)</td>
<td>18 (29.5%)</td>
</tr>
<tr>
<td>31-40</td>
<td>8 (19.5%)</td>
<td>20 (32.8%)</td>
</tr>
<tr>
<td>41-50</td>
<td>16 (39%)</td>
<td>17 (27.9%)</td>
</tr>
<tr>
<td>&gt; 51</td>
<td>16 (39%)</td>
<td>6 (9.8%)</td>
</tr>
<tr>
<td><strong>Religious affiliation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Buddhist</td>
<td>3 (7.3%)</td>
<td>5 (8.2%)</td>
</tr>
<tr>
<td>Christians</td>
<td>13 (31.7%)</td>
<td>46 (75.4%)</td>
</tr>
</tbody>
</table>
### Table 3. Characteristics of New Zealand and Singapore Practitioners from Structured Interview.

<table>
<thead>
<tr>
<th>Job title</th>
<th>New Zealand (n = 12)</th>
<th>Singapore (n = 12)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Counsellors</td>
<td>5 (41.7%)</td>
<td>3 (25%)</td>
</tr>
<tr>
<td>Psychiatrists</td>
<td>1 (8.3%)</td>
<td>2 (16.7%)</td>
</tr>
<tr>
<td>Psychologists</td>
<td>4 (33.3%)</td>
<td>3 (25%)</td>
</tr>
<tr>
<td>Psychotherapists</td>
<td>1 (8.3%)</td>
<td>1 (8.3%)</td>
</tr>
<tr>
<td>Social Workers</td>
<td>1 (8.3%)</td>
<td>3 (25%)</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Males</td>
<td>4 (33.3%)</td>
<td>6 (50%)</td>
</tr>
<tr>
<td>Females</td>
<td>8 (66.7%)</td>
<td>6 (50%)</td>
</tr>
<tr>
<td>Ethnicity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------</td>
<td>-------</td>
<td>-------</td>
</tr>
<tr>
<td>Caucasians</td>
<td>6 (50%)</td>
<td>-</td>
</tr>
<tr>
<td>Chinese</td>
<td>4 (33.3%)</td>
<td>9 (75%)</td>
</tr>
<tr>
<td>Indian</td>
<td>-</td>
<td>1 (8.3%)</td>
</tr>
<tr>
<td>Maori</td>
<td>1 (8.3%)</td>
<td>-</td>
</tr>
<tr>
<td>Malay</td>
<td>-</td>
<td>2 (16.7%)</td>
</tr>
<tr>
<td>Samoan</td>
<td>1 (8.3%)</td>
<td>-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age range</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>20 to 30</td>
<td>2 (16.7%)</td>
<td>1 (8.3%)</td>
</tr>
<tr>
<td>31 to 40</td>
<td>3 (25%)</td>
<td>4 (33.3%)</td>
</tr>
<tr>
<td>41 to 50</td>
<td>4 (33.3%)</td>
<td>7 (58.3%)</td>
</tr>
<tr>
<td>&gt; 51</td>
<td>3 (25%)</td>
<td>-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Religious affiliation</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Christians</td>
<td>3 (25%)</td>
<td>4 (33.3%)</td>
</tr>
<tr>
<td>Muslim</td>
<td>-</td>
<td>2 (16.7%)</td>
</tr>
<tr>
<td>Undisclosed</td>
<td>9 (75%)</td>
<td>6 (50%)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Employment status</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Government</td>
<td>9 (75%)</td>
<td>3 (25%)</td>
</tr>
<tr>
<td>Private</td>
<td>1 (8.3%)</td>
<td>5 (41.7%)</td>
</tr>
<tr>
<td>Combination</td>
<td>2 (16.7%)</td>
<td>-</td>
</tr>
<tr>
<td>Others</td>
<td>-</td>
<td>4 (33.3%)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Years of experience in therapy</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1-5</td>
<td>1 (8.3%)</td>
<td>4 (33.3%)</td>
</tr>
<tr>
<td>6-10</td>
<td>5 (41.7%)</td>
<td>3 (25%)</td>
</tr>
<tr>
<td>11-15</td>
<td>4 (33.3%)</td>
<td>5 (41.7%)</td>
</tr>
<tr>
<td>16-20</td>
<td>1 (8.3%)</td>
<td>-</td>
</tr>
<tr>
<td>21-25</td>
<td>1 (8.3%)</td>
<td>-</td>
</tr>
</tbody>
</table>

Note: All percentages are rounded off to one decimal place; hence the total percentage in each box may not add up to 100.

**Mail questionnaire**

The mail questionnaire consisted of five sections: Section A on background information of the practitioner; Section B on the practitioner’s training in counselling and psychotherapy; Section C on clientele; Section D on diagnostic system and assessment tools; and an optional Section E on handling of self-disclosure, religion, traditional healers and client’s requests. The answers were obtained from one of three formats: (1) ticking
boxes; (2) a 5-point Likert scale, from 1 (most frequent) to 5 (least); and (3) an open-ended format. Space was also provided for feedback on the questionnaire. Filling out the mail questionnaire took approximately 20 minutes. The mail questionnaire was sent to the participants with an information sheet on the study and a prepaid return envelope. A reminder letter was sent out four weeks later to urge participants on the return of the mail questionnaire. Anonymity for these groups of participants was assured as the mail questionnaire did not include personal information.

Structured interview

The one-on-one, 60-minute, audiotaped structured interview consisted of 10 open-ended questions covering the same content as that of the mail questionnaire; the aims were to provide validation for the responses from the mail questionnaire and in-depth examination into the investigated variables of the study. The interviews were conducted by the principal researcher and held at the practitioner’s place of employment. An information sheet about the interview and a consent form were given out at the time of interview. During the interview, notes were taken simultaneously as back up. At the end of the interview, the practitioners were thanked for their participation in the study and were asked for feedback on the interview. An identification code was assigned to each participant in the structured interview group to provide for anonymity.

Statistical analysis

The responses were analysed using SPSS for Windows, version 10, on a personal computer. Descriptive analyses were performed on data obtained from the mail questionnaire, and data obtained from structured interviews were analysed qualitatively.

Ethics

This study was approved by the Massey University Human Ethics Committee.

RESULTS

The results of this study are divided into two sections: practitioners’ characteristics, and counselling and psychotherapy practices of New Zealand and Singapore mental health practitioners. Responses from both groups of participants are combined (New Zealand, n = 53; Singapore, n = 73) as the mail questionnaire and structured interview are designed to measure the same variables. Major findings from the mail questionnaire group were found to support or augment the findings from the structured interview group.

Practitioners’ characteristics
There were two significant areas of similarities among practitioners of both countries (see Table 4). The first relates to training in counselling and psychotherapy: 31 (58.5%) New Zealand practitioners were trained in New Zealand, 26 (35.6%) Singapore practitioners were trained in Singapore, and the remaining practitioners of both countries had their training in other Western or non-Western countries. Regardless of the country of training, all practitioners had their training in the Western models of counselling and psychotherapy. The other significant similarity was found in relation to practitioners’ religious affiliation. Sixteen (30.2%) New Zealand practitioners named Christianity as their religious affiliation and 50 (68.5%) Singapore practitioners did so. Twenty-eight (52.8%) New Zealand practitioners abstained from naming a religious affiliation as did 10 (13.7%) Singapore practitioners.

Table 4. Similarities in Practitioners’ Characteristics between Mental Health Practitioners in New Zealand and Singapore.

<table>
<thead>
<tr>
<th></th>
<th>New Zealand (n = 53)</th>
<th>Singapore (n = 73)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training in own country*</td>
<td>31 (58.5%)</td>
<td>26 (35.6%)</td>
</tr>
<tr>
<td>Religious affiliation—Christians**</td>
<td>16 (30.2%)</td>
<td>50 (68.5%)</td>
</tr>
</tbody>
</table>

Note: *Only responses that clearly specified counselling/psychotherapy training are mentioned here. **28 (52.8%) New Zealand practitioners and 10 (13.7%) Singapore practitioners abstained from naming a religious affiliation.

Table 5 shows significant differences in characteristics found between practitioners from both countries. Thirty-nine (73.6%) New Zealand practitioners were 40 years of age or older and 35 (66%) had 11 years or more of experience in therapy, whereas 43 (58.9%) Singapore practitioners were 40 years of age or younger and 51 (69.9%) had 10 years or less of experience in therapy. In preference for therapy, 27 (50.9%) New Zealand practitioners based their choice on empirical evidence or recommended practices learned as part of their professional training whereas 15 (20.5%) Singapore practitioners did so.

Table 5. Differences in Practitioners’ Characteristics between Mental Health Practitioners in New Zealand and Singapore.

<table>
<thead>
<tr>
<th></th>
<th>New Zealand (n = 53)</th>
<th>Singapore (n = 73)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>≤ 40</td>
<td>14 (26.4%)</td>
<td>43 (58.9%)</td>
</tr>
<tr>
<td>Years of experience in therapy</td>
<td>New Zealand</td>
<td>Singapore</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>-------------</td>
<td>------------</td>
</tr>
<tr>
<td>≥ 40</td>
<td>39 (73.6%)</td>
<td>30 (41.1%)</td>
</tr>
<tr>
<td>≤ 10</td>
<td>18 (34%)</td>
<td>51 (69.9%)</td>
</tr>
<tr>
<td>≥ 11</td>
<td>35 (66%)</td>
<td>22 (30.1%)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Therapy preference based on</th>
<th>New Zealand</th>
<th>Singapore</th>
</tr>
</thead>
<tbody>
<tr>
<td>Empirical evidence/training</td>
<td>27 (50.9%)</td>
<td>15 (20.5%)</td>
</tr>
<tr>
<td>Practitioner’s personal preference</td>
<td>5 (9.4%)</td>
<td>11 (15.1%)</td>
</tr>
<tr>
<td>Client’s personal preference</td>
<td>11 (20.8%)</td>
<td>14 (19.2%)</td>
</tr>
<tr>
<td>Combination of above</td>
<td>7 (13.2%)</td>
<td>15 (20.5%)</td>
</tr>
</tbody>
</table>

**Counselling and psychotherapy practices**

Table 6 shows significant similarities in counselling and psychotherapy practices found among practitioners from both countries. The Western counselling and psychotherapy models were endorsed by 37 (69.8%) New Zealand practitioners and 49 (67.1%) Singapore practitioners to be relevant to their clientele; modification for non-Caucasian ethnic groups was advocated. Seven Singapore practitioners (58.3%) in the structured interview group rated the efficacy of these models at an average of 72%. Singapore practitioners generally considered counselling and psychotherapy practices still to be developing in their country, and found them more acceptable with English-educated Singaporeans. Pre-session education on the process of therapy was often necessary with clients. New Zealand practitioners cautioned that the degree of acculturation of Asians to mainstream New Zealand culture might affect their acceptance of therapy. They have included interpreters, cultural support groups and the client’s family in therapy sessions with non-Caucasian clientele.

Table 6. Similarities in Counselling and Psychotherapy Practices between Mental Health Practitioners in New Zealand and Singapore.

<table>
<thead>
<tr>
<th></th>
<th>New Zealand (n = 53)</th>
<th>Singapore (n = 73)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western models are ≥ 50% relevant to population, but modified for use with non-Caucasian ethnic groups</td>
<td>37 (69.8%)*</td>
<td>49 (67.1%)*</td>
</tr>
<tr>
<td>Use of DSM IV</td>
<td>47 (88.7%)</td>
<td>36 (49.3%)</td>
</tr>
<tr>
<td>Frequency of use of Wechsler’s Scales ≥ 50% of time</td>
<td>20 (37.7%)</td>
<td>15 (20.5%)</td>
</tr>
</tbody>
</table>

Frequency of use of Depression/Anxiety
### Frequency of Use of Therapy Interventions

<table>
<thead>
<tr>
<th>Intervention</th>
<th>New Zealand</th>
<th>Singapore</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behavioural management</td>
<td>22 (41.5%)</td>
<td>28 (38.4%)</td>
</tr>
<tr>
<td>Cognitive therapy</td>
<td>19 (35.8%)</td>
<td>20 (27.4%)</td>
</tr>
<tr>
<td>Cognitive-behavioural therapy</td>
<td>24 (45.3%)</td>
<td>29 (39.7%)</td>
</tr>
<tr>
<td>Marital therapy</td>
<td>22 (41.5%)</td>
<td>25 (34.2%)</td>
</tr>
</tbody>
</table>

### Client Main Presenting Problems

<table>
<thead>
<tr>
<th>Problem</th>
<th>New Zealand</th>
<th>Singapore</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anxiety</td>
<td>27 (50.9%)</td>
<td>29 (39.7%)</td>
</tr>
<tr>
<td>Behavioural problems</td>
<td>18 (34%)</td>
<td>33 (45.2%)</td>
</tr>
<tr>
<td>Major Depression</td>
<td>30 (56.6%)</td>
<td>34 (46.6%)</td>
</tr>
<tr>
<td>Marital problems</td>
<td>24 (45.3%)</td>
<td>30 (41.1%)</td>
</tr>
<tr>
<td>Personality problems</td>
<td>22 (41.5%)</td>
<td>24 (32.9%)</td>
</tr>
</tbody>
</table>

### Use of English in Session

- **Use of English in session**
  - 53 (100%) in New Zealand
  - 71 (97.3%) in Singapore

### Minimum Self-Disclosure

- **Minimum self-disclosure**
  - 40 (75.5%) in New Zealand
  - 44 (60.3%) in Singapore

### Discuss Religious Issues and Refer On

- **Discuss religious issues and refer on**
  - 43 (81.1%) in New Zealand
  - 49 (67.1%) in Singapore

### Acceptance of Traditional Healers

- **Acceptance of traditional healers**
  - 35 (66%) in New Zealand
  - 48 (65.8%) in Singapore

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Note: *Represents the average for the 3 main ethnic groups in New Zealand (Caucasians, Maori and Pacific Island peoples) and Singapore (Chinese, Malay and Indians) respectively.

There was relatively high consensus for the use of DSM IV from 47 New Zealand practitioners (88.7%) and 36 Singapore practitioners (49.3%). Two standard psychometric instruments frequently used by practitioners of both countries were the Wechsler’s Scales and Depression and Anxiety Scales (see Table 6). The DSM IV and psychometric instruments were considered by the practitioners as good supplementary guides to the diagnosis of clients’ problems. All practitioners, however, preferred to assess their clients through clinical interviews. The most commonly used therapy interventions by New Zealand and Singapore practitioners were Behavioural Management, Cognitive Therapy, Cognitive-behavioural Therapy, and Marital Therapy (see Table 6). The most frequently presented problems of clientele seen by New Zealand and Singapore practitioners were Anxiety, Behavioural problems, Major Depression, Marital problems, and Personality problems (see Table 6).
English was the main language used in therapy session by 53 (100%) New Zealand practitioners and 71 (97.3%) Singapore practitioners. New Zealand practitioners commented that poor command of English might be a barrier for Asian clientele in therapy in New Zealand. On the use of self-disclosure in session, 40 (75.5%) New Zealand practitioners and 44 (60.3%) Singapore practitioners consented to give out minimum information about themselves to clients. Practitioners in the structured interview generally concurred that self-disclosure was helpful in therapy for rapport building especially with younger clientele. On the topic of religious issues, 43 (81.1%) New Zealand practitioners and 49 (67.1%) Singapore practitioners consented to discuss it in session with clientele and then refer on. On the role of traditional healers, 35 (66%) New Zealand practitioners accepted the use of these services, and indicated that they allowed the traditional healer in session for certain cultural groups. Although 48 (65.8%) Singapore practitioners did not object to the services of traditional healers, they wanted it conducted outside of therapy sessions; Singapore Muslim practitioners, however, frequently prayed with their clients in session. Additional findings from the structured interviews revealed that indigenous therapy models exist but were not fully developed: for example, Just Therapy (Waldegrave, Tamasese, Tuhaka & Campbell, 2003) for indigenous peoples of New Zealand, and PADI (Yeo, 1993) for Singaporeans. Practitioners generally agreed that Western counselling and psychotherapy could be supplemented by traditional therapies like fortune-telling, shamanism, geomancy, Tai Chi, religious consultation with temple monks for Chinese clientele, ministers or pastors for Christian clientele, bomohs for Malay clientele, kaumatua or tohunga for Maori clientele; and likewise for more popular therapies such as meditation and aromatherapy.

Table 7 shows significant differences in counselling and psychotherapy practices found between the practitioners from both countries. New Zealand practitioners usually had more therapy sessions than the Singapore practitioners (see Table 7). Chinese practitioners of both countries commented that Chinese clientele generally preferred solution-focused, problem-focused, concrete, structured, quick-fix, advice-giving therapy sessions, 6 or less; some of whom might talk little in session and did not like delving into their background history. There were three client problem areas that were endorsed by practitioners of only one country. Only New Zealand practitioners indicated that they saw clients who had been sexually abused and/or had related post-traumatic stress disorder. Only Singapore practitioners reported seeing clients with financial problems and parenting issues New Zealand.

Table 7. Differences in Counselling and Psychotherapy Practices between Mental Health Practitioners in New Zealand and Singapore.

<table>
<thead>
<tr>
<th></th>
<th>New Zealand (n = 53)</th>
<th>Singapore (n = 73)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average session per client in 2001</td>
<td></td>
<td></td>
</tr>
<tr>
<td>≤ 5</td>
<td>10 (18.9%)</td>
<td>23 (31.5%)</td>
</tr>
<tr>
<td>6-10</td>
<td>11 (20.8%)</td>
<td>24 (32.9%)</td>
</tr>
</tbody>
</table>

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DISCUSSION

This study highlights similarities and differences in practitioners’ characteristics and counselling and psychotherapy practices between New Zealand and Singapore mental health practitioners. All practitioners from both countries had similar training in counselling and psychotherapy. This was based primarily on Western models. As already noted, both New Zealand and Singapore practitioners have adopted Western counselling and psychotherapy models for use with their peoples, but have modified them according to the cultural values and beliefs of the non-Caucasian ethnic groups. Chinese practitioners of both countries illustrated that modifications to the Western models could come in the form of using Mandarin or Cantonese in session, applying Chinese metaphors, using mere rapport-building sessions before therapy proper, and using reframing (Tan, 1994) of concepts to suit client’s cultural values and beliefs. Western trained practitioners of both countries were sensitive to cultural issues of their clientele, as in allowing traditional and modern therapies to complement therapy, working alongside traditional healers, discussing religious issues, making appropriate self-disclosure to gain rapport of the clientele, inclusion of the client’s family in session, and specifically for New Zealand, the inclusion of interpreters and use of cultural support groups and ethnic mental health services. Furthermore, Western counselling and psychotherapy could well be enhanced with indigenous therapy models as practitioners make efforts to familiarise themselves with this knowledge.

It is interesting to note that despite the predominant religious affiliations of Singaporeans are Buddhism and Taoism (Statistics Singapore, 2003), the majority of Singapore practitioners described themselves as Christians. One hypothesis to explain this interesting phenomenon may be by virtue of their Westernised upbringing and English education that Singaporeans have been differentially exposed to. This finding requires further investigation.

The New Zealand sample of practitioners is generally older with more years of experience in therapy. The reason for this phenomenon is unclear but perhaps reflects a sample bias. New Zealand practitioners rely more heavily on approaches that are based on Western models of treatment that have a strong empirical support. Singapore practitioners, by contrast, continue to put considerable weight on practitioner/client
preference and this probably reflects the long standing powerful influences of traditional spiritual and culture-specific beliefs and practices of everyday Singaporean life.

Unlike other cultural groups mentioned by practitioners surveyed, the Chinese clientele were notable for the culture-specific preference they desired of therapy. Practitioners noted that they preferred in general few therapy session, solution-focused, problem-focused, concrete, structured, quick-fix, advice-giving therapy sessions, 6 or less in number; some of whom talked little in the sessions and did not like delving into their background history.

There were three client problems specific to only one practitioner group. For reasons not clearly understood, the three problem areas were only reported by one or the other sample of practitioners. Given international reports of sexual abuse, it is highly unlikely that there is a total absence of sexual abuse in Singapore. A more likely explanation is that it is not culturally acceptable to more openly disclose the problem area. Similarly, it is highly unlikely that New Zealand practitioners do not have clients who present with financial problems and parenting issues. A more likely reason for the disparity between the two samples is that these problem areas were not specifically listed among the more commonly presenting client problems seen by practitioners and were reported as additional problems under the “other” category of clients presenting problems in the questionnaire.

LIMITATIONS OF THIS STUDY

The response rate for the mail questionnaire was 20% for New Zealand participants and 26.6% for Singapore participants despite the follow-up reminder letter sent four weeks after posting. While it is difficult to be certain about the relatively low response rate, several explanations are possible. Retrospectively, it was discovered that the New Zealand sample had been saturated by a series of research questionnaires over the previous 18 months, thus, influencing the willingness of New Zealand participants to complete yet another questionnaire. Again it is speculated that as far as the Singapore participants are concerned, the relatively low response rate may reflect a general lack of interest and culture surrounding research practices in therapy, and possibly some degree of suspiciousness among large Singapore organisations employing mental health practitioners.

This study represents an initial attempt to capture the characteristics and practices of New Zealand and Singapore mental health practitioners. Ideally, a fully representative sample of practitioners from both countries might be represented. There are significant practical difficulties, however, in obtaining up-to-date inclusive listings of mental health practitioner groupings in New Zealand and Singapore. To the extent that it was possible, considerable effort was made to obtain responses from a representative sample of practitioners working in mental health settings from both countries.
CONCLUSIONS

The findings of this study suggest that there are more similarities than differences between many of the practitioners’ characteristics and in some of the practitioners’ practices of New Zealand and Singapore. However findings from this study related to the influence of traditional spiritual and cultural beliefs on counselling and psychotherapy practices in both countries suggest that they are not well integrated. A clearer understanding and knowledge of traditional models of health and healing could well enrich current Western practices and increase the efficacy and acceptance of mental health practices on both countries.
REFERENCES


FOOTNOTES

1 This paper summarises the preliminary findings from a study of counselling and psychotherapy between New Zealand and Singapore practitioners in mental health settings.

2 New Zealand has 21 District Health Boards and approximately 400 non-governmental organisations in mental health service (New Zealand Health Information Service, 2004). There are 481 psychiatrists (Medical Council of New Zealand, 2004), 1,404 registered psychologists (New Zealand Psychologists Board, 2004) 2,500 counsellors (New Zealand Association of Counsellors, 2004), and an estimate of hundreds of social workers and psychotherapists.

3 Singapore has numerous public and private organisations in mental health service (exact numbers not available). There are 97 psychiatrists (Singapore Medical Association, 2003), over 300 psychologists (Singapore Psychological Society, 2004), 73 registered social workers (Singapore Association of Social Workers, 2004) and an estimate of hundreds of counsellors and psychotherapists.

4 New Zealand’s population of 4.058 million in 2004 comprises: 69% European ethnic groups, 13% Maori, 5.8% Asian ethnic groups, and 5.7% Pacific peoples.

5 Singapore’s population of 4.18 million in 2004 comprises 76.8% Chinese, 13.9% Malays, 7.9% Indians and 1.4% Other ethnic groups.

6 Religious affiliation was canvassed as some literature suggests that this might be directly incorporated into counselling and psychotherapy practices (Misumi, 1993).

7 Some researchers prefer that traditional therapy models resembled as indigenous therapy models (Lee & Bishop, 2001). For this study, indigenous therapy models refer to those designed along the structure of Westernised counselling and psychotherapy formats; whereas traditional therapy models are mainly based on traditional philosophical beliefs.

ACKNOWLEDGEMENTS

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The authors wish to thank all mental health professionals from New Zealand and Singapore who participated in the study.