INTERNATIONAL MEDICAL STUDENTS: FACTORS THAT ENHANCE AND INHIBIT LEARNING

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A thesis submitted for the degree of
Master of Health Sciences
at the University of Otago, Dunedin
New Zealand

April 2012
(Revised October 2012)

ABSTRACT

Aim: The aim of the research was to identify modifiable factors which affect learning experiences and outcomes for international medical students. Based on the results of the study, recommendations for improving the learning environment and student support services are made.

Background: Previous studies have considered the economic and educational benefits of hosting international students on New Zealand institutions and ways to promote the frequency and quality of intercultural contact in universities. Little research has specifically investigated international medical students' educational expectations, experiences and needs. There is anecdotal evidence to suggest that international students face special challenges pursuing medical education at Otago University and have unmet learning and educational needs. Proportionately more international students' names appear than domestic students at the Student Progress Academic Committee meetings, which discuss how to help students who are struggling or failing assessments. The reasons for this over-representation are complex and relate to a combination of communication difficulties, learning styles and attitudinal issues. The research explores some of the challenges faced by international medical students to provide insight into factors which enhance and inhibit learning in order to recommend measures to improve the learning environment.

Methods: Data for the study were collected at the University of Otago in 2009 on the experiences of international medical students. Funding came from two research grants. After obtaining ethical approval from the University and review by the Māori Ngai Tahu Committee, study participants were recruited by email, word of mouth and written information. Anonymity was assured. Questions in the semi-structured interview covered: factors that inhibited and enhanced learning, students' experiences of accessing University support services, and students' suggestions for improving the learning environment and support services to meet learning needs. Each interview was taped and transcribed. Thematic analysis of the data collected was initially undertaken using a software programme (Atlas-ti). Manual categorisation and coding of the thirty-one interviews was also carried out by the principal investigator to reveal common themes that were interpreted using both an inductive and deductive approach. Fifty-five students from nine different countries were interviewed at the Dunedin and Wellington campuses. There was a mix of group and individual interviews with students from Years 2-6 of the medical course.

Results: International students were generally appreciative of the learning experience in New Zealand. Few instances of racism were reported within the University, but marginalisation by staff and students in learning and social contexts was reported. The more interactive learning style in New Zealand was contrasted to didactic teaching in many of the students' home countries. Social events involving alcohol excluded many international students and inhibited integration with domestic students.

Conclusion: Participants' recommendations for improving the learning environment included: proof reading of written work, mentoring in years two and three, coaching for objective structured clinical examinations (OSCEs), and the organisation of social events without alcohol to facilitate socialisation with domestic students. There were also suggestions about preparing overseas students better for studying in New Zealand.

PREFACE

In 2006, after more than fifty years of living in the UK, we moved to New Zealand and I found myself in the position of being an outsider, an International Medical Graduate. I had qualified as a doctor nearly twenty-five years ago, but now I was required to be under supervision before I was allowed to register fully with the New Zealand Medical Council. I also had to adapt to a challenging new teaching environment as a Clinical Lecturer in the Department of General Practice in the Dunedin School of Medicine. I use the term "found myself", but actually I lost myself temporarily. I was homesick and bereft, suffered culture shock and the loss of all that was familiar to me apart from my husband and our twins. Our eldest child remained in the UK, another separation I found difficult to accept.

My personal experience made me look at the many international students I met with new respect and interest. If I had found it traumatic to change countries despite speaking the same language, enjoying two good jobs and being accompanied by three family members, how did these young students from very different cultures cope with the challenges of coming to New Zealand? As a member of the Student Progress Committee in Dunedin School of Medicine, I became aware that many of the students who caused concern were not native to New Zealand. The reasons for concern were varied and included communication and language skills, learning styles and attitude issues.

In my other role as a GP working at Student Health Services, I was seeing young men and women from all over the globe with their own health beliefs and cultural values which often challenged my narrow experience of working as a clinician in the Western biomedical model. Some complaints reflected the dis-ease of translocation and were physical manifestations of extreme homesickness and misery. How to help these students and accompany them on a journey I was also navigating, made me question what my University of Otago was doing to ensure these bright young people were being integrated in the learning environment. What academic and pastoral support was being provided so that they could fulfil their potential? I also wanted to explore the contribution that international students made to medical training in New Zealand, their Kiwi peers and the future practice of medicine.

ACKNOWLEDGEMENTS

I am very grateful to all the international medical students who participated in the research and shared their experiences about living and studying in New Zealand. Kate Marshall was a skilled interviewer and coded all the data for categories and themes. My colleagues Dr Martyn Williamson, Dr Chrys Jaye, Ms Sue Garrett, Mr Tony Egan and Dr Jim Ross in the Department of General Practice at Dunedin School of Medicine were invaluable in advising me about designing the research project and encouraging me to complete the work. The International Student Office Advisors, Ms Rebecca Burnip and Ms Sian Lloyd provided insight into some of the practical challenges faced by international students at the University of Otago. Further information and advice came from Dr Warwick Brunton, Associate Dean of Health Sciences (International) and from colleagues in the Medical Education Unit and Student Affairs Office.
Dr Peter Larsen and Ms Alice Jay organised the interviews with international medical students studying at the Wellington School of Medicine efficiently and with enthusiasm.

Back in the UK, I have been very grateful to my colleagues Ms Julia Hackett and Dr Gail Nicholls for reading a number of the interview transcripts and identifying themes that emerged to validate the thematic analyses that Kate Marshall and I had carried out.

Lastly, this thesis would not have been completed without the guidance, encouragement and advice of my supervisors Associate Professor Sue Dovey and Dr Katharine Wallis in the Department of General Practice, Dunedin.

After submitting the grant proposal, two awards were made in 2009 (a Committee for the Advancement of Learning and Teaching CALT grant and a Start-Up award) which paid for the part-time appointment of a research assistant, Kate Marshall (KM) who carried out all the interviews of international medical students in Years 2 – 6 of the medical curriculum between April 2009 and March 2010.

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ABBREVIATIONS

ALM	Advanced Learning in Medicine
Bru	Brunei
Dn	Dunedin campus
DSM	Dunedin School of Medicine
ELM	Early Learning in Medicine
GP	General Practitioner
IMU	International Medical University (Malaysia)
Ind	India
Indon	Indonesia
ISANA	International Education Association (the representative body for international education professionals in Australia and New Zealand, working in student advocacy, teaching and policy development.)
JPA	Jabatan Perkhidmatan Awam (Public Service Department of Malaysia which sponsors international study.)
Kor	Korean
Mal	Malaysia
MARA	Majlis Amanah Rakyat (Indigenous People's Trust Council, a Malaysian government agency which sponsors international study.)
Om	Oman
OSCE	Objective Structured Clinical Examination
OUMSA	Otago University Medical Students Association

OUSA	Otago University Students Association
Pac	Pacific
PBL	Problem-based learning
PGY1	Postgraduate Year 1
PGY2	Postgraduate Year 2
Sau	Saudi Arabia
Sey	Seychelles
Sing	Singapore
TI	Trainee Intern (6^{th} year of medical training)
Ton	Tonga
Wgtn	Wellington campus
WMSA	Wellington Medical Student Association
WSM	Wellington School of Medicine

People

AJ	Ms Alice Jay, Administrator Student Affairs Office, Wellington School of Medicine.
CJ	Dr Chrystal Jaye, Associate Professor, Department of General Practice, Dunedin School of Medicine.
ES	Dr Emma Storr, Principal Investigator, Department of General Practice, Dunedin School of Medicine.
DP	Dr David Perez, Associate Professor and Director of ELM, Dunedin School of Medicine
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MW	Dr Martyn Williamson, Senior Lecturer, Department of General Practice, Dunedin School of Medicine.
PL	Dr Peter Larsen, Associate Dean, Wellington School of Medicine.
SG	Ms Sue Garrett, Research Co-ordinator, Department of General Practice, Dunedin School of Medicine.
SW	Dr Sue Walthert, Professional Development Lead, Dunedin School of Medicine.
WB	Dr Warwick Brunton, Associate Dean for Health Sciences (International), Dunedin School of Medicine.

CHAPTER 1

OVERVIEW AND INTRODUCTION

1.1 STUDY AIM AND OBJECTIVES

The research was conducted to provide practical solutions and suggestions to enhance the learning environment for international medical students at the University of Otago. Recommendations from the participants to meet the learning needs of international medical students are made at the end of the thesis.

Objectives:

To identify and understand modifiable factors which affect learning experiences and outcomes for international medical students by:

1. Consideration of the learning and teaching environment including:

- the medical curriculum at Otago University
- learning and teaching approaches
- different types of educational and personal support

2. Describing international medical students' experiences in the domains listed above to reveal:

- factors in the teaching environment which inhibit or represent barriers to effective learning
- factors which facilitate or enhance effective learning
- international medical students' experience of accessing student support services and their perception of their usefulness and relevance
- international medical students' ideas and beliefs on how student support services might be further developed and improved to meet specific learning needs.

When the original research was planned and undertaken, the experiences of international medical students in other areas besides the academic environment were included. Enquiry was made about the transferability of their skills to their home country, the social and cultural differences that they observed between their native country and New Zealand, and participants' perception of what they contributed to the learning environment in the medical school. After the data had been collected, it was agreed with the Board of Graduate Studies at the University of Otago that the Master's thesis should concentrate on addressing international medical students' ideas and beliefs about how academic and support services might be further developed and improved to enhance the learning environment. Additional material collected at the time of the interviews will be analysed and dealt with elsewhere and is mentioned only when it is relevant to the main topic of the thesis.

1.1.1 BACKGROUND

This Master's thesis in Health Sciences arose from research in medical education that was carried out in 2009-10 at the Dunedin School of Medicine of the University of Otago. In comparison to medical schools in the UK, New Zealand has a higher proportion of international students studying medicine, many of whom have English as a second language. The patient-centred approach and integration of medical sciences with early clinical experience is characteristic of many curricula in the Western world, but may differ from more conventional training in the international students' countries of origin. The thesis explores the proposition that the learning and teaching environment for international medical students can be improved.

1.1.2 INTRODUCTION

In 2001, a literature review was undertaken which explored the social, cultural and educational impact of hosting international students in New Zealand institutions and the benefits to this country in economic terms (Ward 2001). Key findings were that interaction between domestic and international students was low although *"interaction with domestic peers is generally associated with psychological, social and academic benefits for the international student."* (Ward Ibid p.2). There was also evidence to suggest that educators at a tertiary level made little changes to the content or delivery of their teaching to make it more inclusive of an international perspective. A potential benefit to the education environment of hosting international students was an increase in cultural awareness, although the research findings were described as

patchy regarding this issue. Ward also found that international students experienced more health related problems than domestic students and made more use of the health services, although the overall usage of support services was low.

Subsequent research studies in education have considered ways to promote the frequency and quality of intercultural contact in universities. Initiatives have included the introduction of peer-pairing programmes, intercultural cooperative learning strategies and the development of written resources for students and teachers about other cultures (Deloitte 2008; Gresham 2008; Volet and Ang 1998; Ward 2001). Peer-pairing involves regular meetings outside of the learning environment between international and domestic students. According to Ward: "*these schemes have increased intercultural interactions and enhanced cultural awareness in domestic students"* (Ward Ibid p.3). Intercultural cooperative learning strategies involving groups of domestic and international students working together have been shown to reduce stereotypes and enhance academic performance (Smart et al. 2000).

A recent study looking at notions of quality of life and motivation to learn among Asian medical students in New Zealand revealed: *"significantly lower scores in terms of their satisfaction with social relationships compared to their non-Asian peers"* (Henning et al. 2011, p.437). International Asian medical students also appeared to be more anxious about assessment tests than Asian domestic medical students.

The globalisation of medical training and increasing international mobility of doctors makes research into international medical students' experiences of training in New Zealand particularly relevant. Medical schools in New Zealand, the United

States and Britain have been keen to widen the participation of applicants to medicine to reflect the national profile of ethnic and social diversity (McLachlan 2005). This inclusive approach has implications for the curriculum offered and the support services available within universities to sustain and retain students from a wide range of backgrounds.

International students face specific and complex challenges undertaking medical training in New Zealand and may be under-served by Student Services and have unmet learning and educational needs (Treloar 2000; Brebner 2008). The practice of medicine demands intellectual rigour and sophisticated communication skills, with an appreciation of the subtleties of language and colloquial terms used by patients. These factors are even more demanding for students who do not have English as a first language than for domestic students. Difficulties may arise both in conducting consultations with simulated or real patients and in assessments such as the objective structured clinical examinations (OSCEs), which rely on rapid student performance with fluent language skills. Studies have shown that international medical students may struggle to attain the same standard of competence in communication skills as domestic students unless specific intervention and help is offered during their training (Liddell and Koritas 2004; Hawthorne 2004; Chur-Hansen 1996).

1.1.3 THE HIDDEN CURRICULUM

There has been increasing attention paid to the “hidden” or “implicit” curriculum in the last twenty years because of its powerful influence on students during their

medical training (Hafferty et al.1994; Hundart et al.1996; Parker 2003; Lempp and Seale 2004). It is relevant to this study because the hidden curriculum reflects values and attitudes of the dominant culture, as well as the culture of medical practice which still tends to be hierarchical and sexist, despite seeing itself as "culture-neutral" (Taylor 2003). Taylor comments that medical institutions are integrally part of the broader socio-cultural order in which they are embedded and tend to reflect its patterns of thought and social action. Guarnaccia and Rodriguez (1996 p.432) described the double enculturation process for international students entering a profession and observed:

> *Professional cultures are variants of the dominant culture focused on particular sectors of society and social problems. Thus, dominant cultural norms and values are built into the frameworks for the training of professionals, for assessment of clients, and for developing treatment approaches. For someone from a different culture to become a professional involves at least two processes of acculturation – one to the dominant culture and the other to that of the profession.*

The "hidden" curriculum may be a major force in influencing the dual acculturation experienced by international medical students. As Turbes et al. (2002 p.209 point out:

> *In medical education, the hidden curriculum may consist of unintended messages communicated in lectures and other formal teaching; interpersonal interactions between faculty and students (both in clinical settings and in more informal aspects of classroom interactions); and the larger culture and structure of the medical establishment. This aspect of the curriculum may well be more influential than the structured, formal elements*.

Turbes et al. comment that while medical training programmes often claim to encourage cultural competency among students in preparation for interacting effectively with patients from any ethnic or socio-economic background, many

curricula still use white, male, heterosexual case examples as the "norm". They argue that: *"subtle messages about the central position of whiteness may marginalise health issues of other ethnic groups of color, weakening planned curricular emphasis on multicultural medicine."* (Turbes Ibid p.214)

International students who come to New Zealand for their medical training will encounter many different environments and contexts that influence their learning. Some studies have shown that stereotyping of students, based on their ethnicity or country of origin by teaching staff, may have a negative effect on their performance (Biggs 2003 p.136). Asian students in particular, may be perceived as overly reliant on book learning, reserved and unwilling to participate in class discussions and motivated by family pressure rather than personal interest (Henning et al. 2011). Negative stereotyping by staff, which lowers expectations about what some students can achieve academically, can become a self-fulfilling prophecy with such students underperforming and not reaching their full potential (Woolf 2008; Kingston and Forland 2008). The research study conducted as part of this Master's thesis, examines participants' experience of discrimination in the classroom and during assessments to explore whether negative stereotyping is an issue in the New Zealand medical school context.

1.1.4 THE LEARNING AND TEACHING ENVIRONMENT AT OTAGO

In this section, an overview of the medical course and aspects of the learning and teaching environment that are particularly relevant to international students are

described. Table 1. provides a brief outline of the curriculum (see Appendix VIII for more detail).

Table 1.

Student	Student	Student	Student	Student	Trainee	Doctor	Doctor
1st year Health Sciences	Early Learning in Medicine Year 2	Early Learning in Medicine Year 3	Advanced Learning in Medicine Year 4	Advanced Learning in Medicine Year 5	Trainee Intern Year 6	House Officer PGY1	House Officer PGY2

Currently, medical training at the University of Otago comprises a compulsory first year in Health Sciences. The student numbers for this initial intake average 2,000 from which 40 of the top scoring students are selected for medicine at the end of the year. In order to assure places for rural and Māori and Pacific island students, affirmative pathways are present for these groups, with the aim of broadening the mix of graduates and increasing their representation in the workforce to meet the needs of the New Zealand population. All students start their medical training in year two. In year four, the students divide into three groups of 80 students each, two of which relocate to the clinical schools in Wellington and Christchurch to complete years four, five and six. Final examinations are taken in the fifth year after which students must complete the trainee intern (TI) programme and work in the clinical environment before full registration as a doctor is granted.

Otago University medical undergraduate programmes have similar learning outcomes and assessment, but there are different ways of delivering the teaching at the various geographical sites (Wellington, Christchurch and Dunedin). Indigenous (Māori) health has been established as a core curriculum topic and is one of several vertical threads in years four and five. According to a recent article: *"This supports students' learning about indigenous health so that they are able to demonstrate cultural competence and safety in both a multicultural and bicultural contexts"* (McKimm et al. 2010, p.458)

1.1.5 EARLY LEARNING IN MEDICINE (ELM)

The Early Learning in Medicine (ELM) course was introduced in 2008 specifically to provide more community based learning in years two and three, as well as structured communication skills training with an emphasis on listening to the patient's ideas, concerns and expectations. There is less lecture based teaching than previously and more small group learning and team projects, facilitated by a range of health professionals from primary (general practice) and secondary (hospital) care.

The four ELM components consist of:

- The Module programme
- Clinical Skills
- Healthcare in the Community
- Integrated Cases

In the Module programme, students learn about body systems and the sciences underpinning medical practice. In the Clinical Skills sessions, students learn the basics of physical examination on each other, or using models and mannequins in the skills laboratory attached to the hospital. Healthcare in the Community covers a range of subjects including cultural differences in illness behaviour, care for the elderly in residential homes, and professional development. Integrated Case studies complement the lecture and tutorial teaching by providing realistic patient examples of conditions and an individual context in which to understand the anatomy, physiology, pathology and biochemistry of diseases. Students discuss the case studies in small groups with a clinician present to provide guidance and experience.

The educational approach outlined above is in contrast to more traditional curricula, which have taught the biomedical sciences as distinct disciplines in the first two years of the course, followed by three years of clinical experience. In line with international trends, there has been a move away from didactic lectures and more emphasis put on student-centred learning activities such as case-based discussions, small group tutorials, e-learning and self-directed projects (Perez et al. 2009). At Otago, there is a mix of "problem-based" learning (Barrows 1996), simulated patient work and bedside teaching. These various student-centred methods of delivering the medical curriculum have relevance for international students in particular. Many international students come from educational systems which model teaching from the "top down" and where it is considered disrespectful to challenge tutors or to express individual opinions (Klimidis et al. 1996; Kuteyi et al. 2009; Treloar et al. 2001). It requires substantial changes in attitude and confidence by overseas students, to adapt to a more interactive learning environment in which they are expected to voice their

opinions and discuss ideas openly with their teachers. Failure to interact in this way and behave in line with the educational "cultural norm" may result in the negative stereotyping of international students as mentioned above.

The interviewees in this research who had started the medical course prior to 2008 experienced a slightly different curriculum which included a third year module known as Patient, Doctor and Society. The Healthcare in the Community module mentioned above, replaced this course and developed further learning on social aspects of illness relevant to medicine, including teaching about culture and health.

1.1.6 ADVANCED LEARNING IN MEDICINE (ALM)

In the Advanced Learning in Medicine years four and five, there is an emphasis on a more direct approach to patient care. Students rotate through a range of specialties (such as paediatrics, general practice and orthopaedics), gaining clinical experience in both hospital and community settings. It is likely that community placements will increase as the numbers of medical students increase and the inpatient population decreases. It has been recognised that the majority of illness and disease is managed in primary care and only a small minority of patients end up in hospital (Green et al. 2001), so it is appropriate that community-based teaching is expanded.

Vertical modules (threads) running through years four and five include: bioethics, Māori health, professional development, and core science subjects such as microbiology and pathology (see Appendix VIII for more detail).

The sixth undergraduate year (trainee intern or TI year), provides an opportunity for students to work in a clinical team and is viewed as a practical apprenticeship overseen by the University, before full registration with the New Zealand Medical Council takes place. The emphasis is on preparation for the postgraduate year one (PGY1) house officer role after performing to an adequate standard during the TI period. Competence is assessed by supervising clinicians on the TI rotations. New Zealand students are paid a small annual grant during the TI year, whereas international students continue to pay fees during this time and do not receive any income.

Most international students who come to New Zealand complete a foundation year in sciences and often study English at the Language Centre at the same time. In the health sciences first year, all students take a diagnostic English test. If they fail this test on two occasions, they sit an English exam in the second semester which they must pass before proceeding to the medical course in second year. The foundation year provides a chance to adapt to the New Zealand education system, practice language and writing skills and acclimatise to Dunedin's varied weather.

1.1.7 INTERNATIONAL STUDENT RECRUITMENT

Occasional Pacific Island students were admitted to the University of Otago at least from the 1940s and maybe even earlier. These were probably informal arrangements that involved the British colonial administrations in the Pacific. The

Colombo Plan in 1950 led to the availability of New Zealand government scholarships and student assistance. The result was that students from Malaysia, Thailand and Indonesia came to study here and some settled permanently. By 1971 there were over 3,000 Malaysians living in New Zealand. At this time 30% of the foreign-born population were from countries outside the British Commonwealth, about twice the figure of 20 years previously.

Reforms in the education sector in the 1980s led to an ideological shift in which Universities were increasingly viewed as businesses which could compete for "clients" by offering courses at different costs (Butcher 2003). At the same time, Government funding for full-time fee-paying students was reduced and Universities became more reliant on other financial backing, including recruiting students from overseas. This led to a large increase in the number of international students enrolled at New Zealand universities, who were effectively subsidising domestic students as state expenditure diminished (Anderson 2008). Changes in the Immigration Act of 1987 also affected which countries were represented among the international student intake. This Act, which emphasised the importance of migrants' skills rather than their cultural background, led to an increase of students and migrants from Asia instead of Europe. Ministry of Education statistics show that in 2006, two-thirds of students enrolled in public higher education identified as European. Of the remaining third, the two largest minority groups were those identifying as Māori (17.5 percent) and Asian (12.3 percent). In universities alone during 2006, Asian students were the largest minority group, making up almost one-fifth of the local student population (Ministry of Education, 2007).

At Otago Medical School, contact between New Zealand and various countries developed in an ad hoc way in the 1990s as a result of overtures from abroad, approaches to foreign institutions and feedback from international posts. Malaysia, Brunei and the Seychelles were among these initial contacts. The early Malaysian scheme petered out in 1998 during the Asian economic meltdown but has been rekindled since 2002 through the International Dean's office. It has involved three Government sponsors: MAJLIS Amanah Rakyat (MARA), Jabatan Perkhidmatan Awam (JPA), and Petronas, the national oil company. In 2000, Saudi Arabia started sending students and Oman followed in 2003 (personal communication from WB, Associate Dean for Health Sciences International, Otago).

The Seychelles arrangement ceased in 2004 except for students currently enrolled, because of the financial plight of their government. Petronas stopped sending Malaysian students in 2006 as their sponsorship became restricted to engineering and geology students. The University of Otago ceased offering guaranteed places to Saudi students in 2010. As well as the government sponsored students, a substantial proportion of international medical students are private and subsidised by their families, often at considerable personal and financial cost.

In 2006, a new arrangement was made with Malaysia to host fourth year medical students from the private International Medical University (IMU) to complete their clinical training in New Zealand for three years. So far there have been less than twenty IMU students placed at either the Wellington or Christchurch campuses. In some ways, they face a bigger challenge to adapt to the teaching environment and practice of medicine, as they have not had the advantage of knowing their peers

throughout the previous three years of the medical training in New Zealand. Nine of these IMU students were interviewed in Wellington as part of this study and their perspective adds another dimension to the international medical student experience.

The presence of international medical students is viewed positively at the University of Otago in terms of providing cultural diversity, intercultural contact and financial advantages for New Zealand. The rich mix of students from all over the world contributes to globalisation of medical training and research, and the ability of doctors to work in many different countries and contexts. However, international medical students also pose challenges to the way the medical curriculum is delivered. Language and communication issues are particularly relevant. Different expectations of professional behaviour and of interaction with patients may be apparent in New Zealand, compared to the international students' countries of origin.

1.1.8 INITIAL WELCOME

When international students first arrive in New Zealand at the University, it helps to have a friendly, practical introduction to life in New Zealand and clear goals for their studies. The International Student Office in Dunedin at the University of Otago works hard to make students feel at home in their new environment. The Student Learning Centre and the Language Centre provide practical training and facilitation, particularly in the science foundation year in which international students generally enrol before the health sciences first year. The International Student Associations also play a crucial role in looking after students and provide a "buddy" system in which

senior students mentor new arrivals. These arrangements and more informal support are discussed below in the Student Support Services section.

The study and practice of medicine is particularly demanding for students who have English as a second language. The subtleties of communication with patients, particularly in the emotionally charged clinical contexts of illness and suffering, can be very challenging for overseas students who may not be familiar with the cultural expectations and values surrounding the situation. As Chur-Hansen (1996 p.413) points out:

> *"Students who are unable to master the nuances of informal language, or who cannot differentiate between literal meaning and metaphor, face major problems in clinical settings. It is hard for them to grasp what patients are saying, particularly when they are discussing symptoms of an emotional or intimate nature."*

As a result, international students may be seen as responding to patients in an inappropriate cultural manner with little empathy or too much formality. According to Hawthorne et al. (2004), if this inappropriate behaviour is noted, intervention and feedback by trained clinicians at an early stage in the curriculum can enhance international students' communication skills and lead to much more sensitive questioning of patients. The improvement in international students' communication skills is partly due to being better informed about the cultural "rules" of consulting in a patient-centred manner.

1.2 FACTORS THAT ENHANCE AND INHIBIT LEARNING

In this section, different factors that enhance and inhibit learning are discussed. Some of the factors are common to all students in tertiary education. Others are specific to international students because of the different cultures and traditions of learning that may exist in their own countries. Ways to enhance learning are considered and will be further expanded in the Discussion and Conclusion sections of this thesis.

1.2.1 LEARNING STYLES

Educational theorists have described different approaches to learning that may illustrate some of the difficulties students have when they encounter new cultures of learning and teaching at tertiary level. Gibbs (1992 p.5-6) identified five stages in students' understanding:

1. Learning as an increase in knowledge
2. Learning as memorizing
3. Learning as acquiring facts or procedures which are to be used
4. Learning as making sense
5. Learning as understanding reality

Points four and five relate to "deep learning" which entails making sense of what is going on, abstracting meaning in the process of learning and being able to explain the

facts as well as remember them. Understanding reality enables the learner to make links between different concepts and tasks, integrate ideas and perceive the world differently because of this learning. In contrast, "surface learning" is often confined to memorizing facts in order to reproduce them at an exam. Once the assessment is over, the learning may be quickly forgotten unless it is used again or understood in context and moved into meaningful learning, rather than instantaneous reproduction.

Kolb's (1984) model of experiential learning (see Figure 1) describes a four stage cycle (experience, reflection, conceptualisation and experimentation) and four different learning styles or preferences.

Kolb is careful to point out that learning styles are "preferred" rather than absolute and that students are usually strategic in their learning, using different methods at different times, depending on the context and type of assessments being used. With maturity we can learn to integrate all four learning styles.

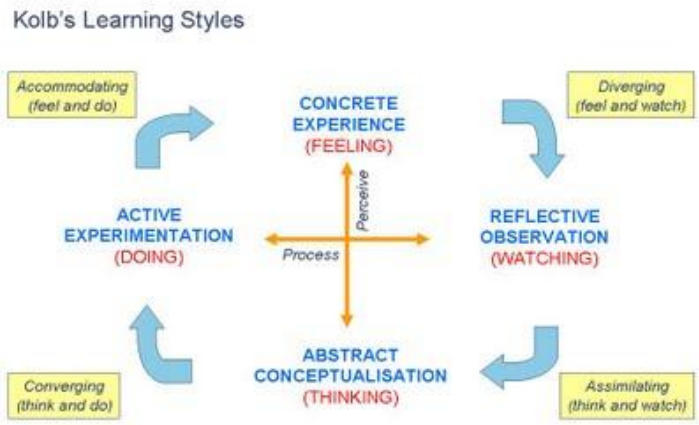


Figure 1.
http://3.bp.blogspot.com/_9L7Bz6BpvMY/StRkRFoQPrI/AAAAAAAAAbY/gn1wBLJ5MGg/s400/Kolb+learning+styles.jpg

The four learning styles identified are: **Accommodators,** who prefer learning by hands-on experience, both practical and experiential and are good at carrying out plans; **Assimilators,** who like abstract ideas and concepts, reflective observation and are good at logical inductive reasoning; **Convergers,** who are good at abstract conceptualization and active experimentation and therefore good problem solvers and decision makers, and **Divergers,** who prefer concrete experience and reflective observation and have good imaginative ability.

Kolb claims that there are also three stages in development that shape learning styles:

1. Acquisition – from birth to adolescence
2. Specialization – school, early experiences at work and as a young adult
3. Integration – mid-career to later life

The relevance of Kolb's theory to international medical student learning is that stage one and most of stage two will generally have taken place in a different culture and learning environment for the students, before they transfer to the New Zealand context. Broadly speaking, Asian education systems have been characterised as collectivist and based on Confucian philosophy which emphasises *"learning as a one-time process for the young as a collective group."* (Kingston and Forland 2008, p.207), whereas Western education is based on the Socratic tradition and stresses individual learning as a life-long process. Kingston and Forland refer to Hofstede's research in the 1980's which highlighted the cultural context in which education takes place and described five different dimensions along which cultures vary: power

distance between pupil and teacher, uncertainty avoidance, masculinity, long-term orientation, and individualism. They summarise Hofstede's argument as follows:

> *In low-power distance countries such as the UK, students are expected to be independent learners, to think critically, to challenge the teacher, and to be active participants in the class, whereas in high-power distance cultures such as China, teachers direct the learning process and demand a high level of respect, and students are expected to be passive in class, only speaking by invitation.* (Kingsland and Forland Ibid p. 207).

Using these five dimensions as a measure, Volet and Ang (1998) describe "cultural distance", a concept which refers to differences between home and host culture based on calculations of power distance x individualism/collectivism. The more extreme the cultural distance between countries, the more noticeable will be the difference between the learning styles of students from the home and host countries.

As Apfelthaler (2010 p.18) points out:

> *No matter what the dimensions, when cultures (or countries, as units of analysis) show different scores on these dimensions, this is bound to have implications for learning styles insofar as cultural patterns in a learning environment ultimately reflect the cultural patterns in the wider society.*

The implication is that while all international students coming to study in New Zealand experience a degree of "culture shock", students from Asian countries or the Middle East may suffer more "academic shock" than students from Europe or the USA, because the cultural distance is more extreme.

Kolb's theory and his model of the learning cycle have been criticized because they imply that learning styles might be constant individual traits. Anderson (1988) commented that there are different culturally-based cognitive and communication

styles which affect learning and that these have been ignored by ethnocentric, Anglo-European theories which dominate higher education. Tennant (1997) also suggests that Kolb's model may be too simplistic and lacks the capacity to measure the degree of integration of learning styles. However, he acknowledges that Kolb's learning cycle does provide a useful framework for planning teaching and learning activities and can be helpful as a guide for understanding student learning problems. Newer theories discuss how learning styles can change when the learning environment changes and suggest that deep and surface learning are behavioural responses to the situation, rather than attributes of learners themselves (Apfelthaler Ibid).

1.2.2 MEDICAL CULTURE

Educational literature about international student learning has tended to concentrate on the deficit model, according to Volet and Ang (Ibid), by considering what students from overseas find difficult, or fail to achieve at the host institution. They suggest that such an ethnocentric approach neglects to take into account the contribution that international students can make to the learning environment and the benefits of a multicultural perspective for all students during their education. Medical training in every country has its own culture and expectations, characterised as the "hidden curriculum" mentioned earlier. The process of becoming a medical professional and the training provided at the University of Otago are intertwined with cultural expectations of what it means to be a doctor in New Zealand. International medical students may be encouraged to conform to the New Zealand model of a doctor without exploration or acknowledgement of how the medical profession is

viewed in their native countries. There is often an assumption that students from overseas will adapt to the dominant culture, rather than promoting a more interactive process between cultures.

Educationalists argue that to avoid international students being marginalised and treated as "other", teachers need to become more student-centred and help students develop skills and strategies for meta-cultural sensitivity. As described by Louie (2005), this sensitivity will only come about if both teachers and students abandon the attempt to "gather cultural knowledge" about home and host cultures and develop awareness, acceptance and understanding. He suggests that teachers need to recognise their own "cultural baggage" and not view international students as "deficient" if they hold different cultural values and expectations. (Louie cited in Carroll ed. 2005 p.23). Deeper understanding and appreciation of cultural differences leads to more sophisticated awareness and a recognition that all cultures are dynamic and contain contradictions and differences within them. It is evident that this appreciation and cultural sensitivity are particularly relevant for doctors, who need to be able to interact with patients from any cultural background and develop a mutual understanding with them about their health problems and future treatment.

1.2.3 MEDICAL EDUCATION IN THE NEW MILLENIUM

Medical education has become an academic discipline in its own right in the last twenty years with many different theoretical models being proposed about the best way to train doctors. Problem-based learning (PBL) was pioneered by McMaster

University in Canada and adopted by many medical schools in Europe and elsewhere as a new educational method which would stimulate deep learning, retention of knowledge and convey the complexity of modern medicine. The rationale for this approach is that students acquire knowledge best by exploring realistic clinical problems or phenomena and researching the relevant scientific facts in each case. Advocates of PBL claim that the model encompasses the four principles of the process of learning which should be: constructive, self-directed, collaborative, and contextual (Dolmans et al. 2005). Disadvantages of PBL are that it is time-consuming and expensive compared to lecture based teaching which can be delivered to large groups of students simultaneously.

Systems based teaching is another approach in which basic sciences teaching is integrated with clinical cases so that subjects such as biochemistry, anatomy and molecular science are put into context using real patient scenarios to illustrate their relevance. While lectures remain an important part of systems based curricula, overall this method of teaching has declined in most medical schools. Small group work, tutorials and self-directed learning are now common in modern medical curricula. The apprenticeship model of learning medicine has been modified. Increasingly creative ways of delivering the medical curriculum have been developed including early patient contact, clinical skills training and community-based education. The medical course at the University of Otago provides a mix of learning opportunities that include both PBL and systems based teaching.

It is debatable which model of learning and teaching is most efficient for training doctors to be competent, compassionate professionals (Prince et al. 2005*)*. The nature

of medical practice requires a mix of theory and hands-on experience, some of which can only be obtained during years of clinical exposure, discussion with peers and suitable mentoring. Supportive feedback is also essential for students and junior doctors while they learn practical tasks and develop their clinical reasoning skills (Bligh 2002; Bleakley 2002). The practice of medicine is an art as well as a science. Intuition and listening carefully play an important role in assessing patients' problems which are often multi-factorial and complex. The medical curriculum at the University of Otago deliberately provides many different learning environments in both the hospital and community. The training for all students emphasises a patient-centred approach as opposed to a more old fashioned doctor-centred, authoritarian approach. There is also recognition that all doctors need to be aware of the internationalisation of medicine and the diversity of the population within New Zealand. One of the disciplinary attributes of a medical graduate from Otago (see Appendix V) is that they should have:

> *An appreciation of the global perspective of medicine, and an informed sense of the impact of the international community on New Zealand and New Zealand's contribution to the international community (Point 3.15).*

1.2.4 FACTORS THAT ENHANCE LEARNING

Mapping the areas of competencies required by a medical graduate has proved challenging and the list is long and idealistic. The necessity to achieve these desirable professional attributes is no different for international students than for domestic students, but the educational process and experiences that the two groups go through

on their journey through medical school may differ a great deal. International students usually have to cope with living away from their families at a young age, lack of support networks and losing familiar cultural landmarks. They need to negotiate a different way of doing things, whether this is in the social arena, study environment or physical climate. Studies from all over the world have shown that international students suffer more stress, loneliness and mental health issues than domestic students (Burns 1991 cited in Volet and Ang 1998; Cross 1995). Part of the isolation experienced by international students can be as a result of failing to make meaningful contact with local students. Research has shown that without regular institutional involvement in establishing intercultural social and academic events, domestic and overseas students will not necessarily interact beyond a superficial level or make lasting, supportive friendships which can help in their long term academic achievements (Ward 2001). As Brebner (2008 p.2) points out:

> *Researchers in the field of psychology…..underscore the critical link between friendships with host students and the cultural, emotional psychological well-being of sojourning students. Most of the studies correlate the academic success rate of international students with the positive relationships they enjoy with host nationals.*

In other words, social integration is as important as academic integration for international students to succeed in the host country.

Learning for all students is enhanced by understanding the academic and social expectations of the institution, particularly if this is based in an overseas country. Carroll (2005 p.27) suggests that teachers can help students best by becoming more knowledgeable about their own academic culture.

> *Once teachers can see their own academic cultures as 'systems of belief, expectations and practices about to perform academically' (Cortazzi and Jin, 1997:77), they can start to offer explicit help to students to learn in that academic culture. .....Once the system becomes visible, it is possible to move from assuming that international student will adopt Western academic values, to being clear about what can and cannot be adapted, so that it is possible for students to succeed as learners in the new academic culture.*

In Australia, the Faculty of Medicine, Dentistry and Health at the University of Melbourne instigated a specific support programme based on nine key strategies for international medical students, designed to identify difficulties students might have with the curriculum early on in their training. These strategies were:

- Identification of students at risk
- Analysis of students' specific English language abilities and cross-cultural needs based on implicit as well as explicit course needs
- Research into students' actual academic performance
- Provision of timely and targeted support in particular at critical academic transition points (course commencement, pre-examination)
- Location of support at students' actual learning sites in diverse areas
- Individualization of this support
- Monitoring of student outcomes throughout course completion
- Provision of information and/or methodological support for teaching staff at diverse sites
- Pre-departure internship support for exiting students so they could enter the global medical labour market

Hawthorne et al. (2004 p.153) describe this nine step model as providing "an exceptional level of linguistic and cross-cultural support", which emphasises individualized interventions and monitoring for students throughout the five year medical course. The programme also provides training and linguistic and cultural materials for the academic staff who are teaching international students. According to Hawthorne, this proactive approach to help international medical students achieve their full academic potential, has led to a substantial level of participation in the support programme (350 students per week) since its inception in 1997. A large number of academic staff has been recruited to develop and run the course. Teaching staff involved have also been very appreciative of the support they have received. While not all institutions have the finances and resources to instigate a similar support programme, the nine strategies described by the University of Melbourne provide a model for supporting overseas medical students which other institutions may want to adapt and introduce.

1.2.5 FACTORS THAT INHIBIT LEARNING

Negative stereotyping is a factor which can inhibit learning because international students may be marginalised, ignored or denied the same educational opportunities as domestic students. Carr and Woodson (2008 p.585) suggest these attitudes can be a particular problem in the clinical years.

> *Differences in cultural formality, linguistic differences in accents and communication styles can affect interaction between teacher and student and the ability of the student to connect with the patient.*

They comment that getting to know the individual student on a personal level is an effective way to overcome "stereotype threat." It also helps if teachers are aware of the negative attitudes and perceptions in the classroom which can influence interactions with people from ethnic minorities. Positive role modelling is important in encouraging students' transformation from pupil to professional. Unfortunately negative role models still exist within medicine and bullying or humiliation may occur. It is difficult to know if teaching by humiliation is really worse for international students than for domestic students as both report incidents on a regular basis (Walthert 2009).

Other factors that can inhibit learning among international medical students are: language difficulties, differences in attitude towards doctor-patient relationships, fear of failing and discrimination by domestic students and/or teaching staff (Liddell and Koritas 2004).

1.3 STUDENT SUPPORT SERVICES

In this section some of the student support services available to international medical students at the University of Otago will be discussed. There are two categories of services available. There are formal university bodies with designated roles such as the International Student office and Student Health Services. There are also student associations or societies which play an equally important part in providing information and support for students during their studies in New Zealand. The description will include resources within the medical school which relate specifically to overseas students.

1.3.1 UNIVERSITY SUPPORT SERVICES

The University of Otago is a signatory to the Code of Practice for the Pastoral Care of International Students published by the Ministry of Education, which provides a framework for service delivery for education providers and their agents. The code sets out the minimum standards of advice and care that are expected of educational providers with respect to international students. Areas covered in the code are: marketing and recruitment, accommodation, pastoral support, and legal issues.

The International Student Office is the administrative centre of the university which deals with the practical aspects of hosting international students. It provides information to prospective international students, registration and orientation when they arrive, and links to other departments such as the Language Centre. Two international student advisors work within this structure to provide confidential advice on areas such as homesickness, family support, health and well-being, and academic issues. They can provide student status documentation and help with finding accommodation. At the beginning of the academic year, the advisors organise many of the welcoming and social events for international students. In addition, they provide regular voluntary training for University staff in cultural competency and practical support for overseas students studying at Otago.

The International Mentor programme pairs international students with *"enthusiastic, friendly Otago students to help them settle into Dunedin, and adjust to life at the University."* (http://www.otago.ac.nz/international/intmentor.html) The

programme also organises regular social events for mentors and mentees and has an email loop where participants can communicate to organise trips or exchange information.

The University of Otago website has many pages devoted to international students with useful information on a range of issues such as tuition fees, visas, healthcare and insurance, financial aid and prospectuses as well as a link to the internet site Facebook, with news of past and upcoming events.

The Student Learning Centre is open to all University of Otago students and provides workshops in writing, presenting and study skills. Currently it provides a workshop on cultural challenges in the academic environment for international students. It is not known if this was available in 2009 when the research for this thesis was conducted. In 2008, a test in conversational and colloquial New Zealand English was introduced for all international second year medical students with remedial help available for those who failed the test. In the last two years, domestic students are encouraged to volunteer as "buddies" to international medical students to offer informal conversation classes (see section 5.4 for more detail) and colloquial language coaching.

1.3.2 STUDENT HEALTH SERVICES

Student Health Services in Dunedin provides primary care for all students and the vast majority of international students are registered with this practice. The health

centre offers a range of services including telephone advice, urgent appointments with a nurse or general practitioner (GP), healthy living advice, a sexual health clinic and counselling services. Most of the compulsory immigration medical examinations are performed at Student Health when international students first arrive in Dunedin, which is one way they are introduced to the service at the start of their academic studies. In Wellington, a similar Student Health Service exists, based at Victoria University campus. Most international students are covered by health insurance to meet the costs of seeing a GP or nurse, although if they had a pre-existing disease before coming to New Zealand, this may be excluded from the insurance schedule.

1.3.3 MEDICAL SCHOOL SUPPORT SERVICES

Within the Medical School, the Student Affairs office is often the first port of call for any student with academic or pastoral difficulties. The current administrator talks to any student presenting at the office for advice, many of whom are international students with queries about the medical course or assessments. Any absences from teaching sessions due to ill health or other reasons must be notified to the administrator. In this way, the administrator may become aware of students who are struggling with homesickness or family issues. The administrator is instrumental in advising students about other agencies that can help (Student Health Services, the Medical Education Group or the Dean of Students).

Another key contact is the Associate Dean of Health Sciences (International). The current Associate Dean, Dr Warwick Brunton, (WB), recruits, advises and supports

students from overseas who come to study medicine at Otago. WB visits Malaysia, Brunei and Oman annually to interview prospective students for medicine. He liaises with the main Malaysian organisations (International Medical University IMU, JPA and MARA) that sponsor medical students to study abroad and provides basic information about living and studying in New Zealand. Back in Dunedin, WB meets with international medical students on a regular basis, both individually and in groups. However, his responsibilities extend only to government sponsored students and not to international students who are privately funded. This position does not prevent him from counselling private international students from time to time, particularly when there are financial difficulties or visa problems, because of his extensive experience.

Mentoring for all medical students in Dunedin School of Medicine is arranged in years four, five and six as part of the Professional Development thread. A small group of students is assigned an experienced clinician to meet with four or five times a year to discuss issues which may arise from clinical practice in a safe and confidential environment. A similar scheme exists in Wellington School of Medicine.

1.3.4 STUDENT ASSOCIATIONS

There is a range of student associations and clubs, some based on religious belief and others linked to a particular country (see Table 2). Some of these are small, such as the Omani Student Association, because of the relatively few Omani students studying at Otago. An important role for the student associations is to arrange "buddying" for new students with an older colleague on the same course. The

buddying system seems to work particularly efficiently in the Malaysian Students Association, perhaps because of the large number of students from this part of the world and their years of experience of studying in New Zealand. The Pacific Island Centre has a well established role in supporting students from the Pacific area, whether they hold New Zealand citizenship or are nationals of their own country.

The Otago University Students Association (OUSA) is an umbrella organisation for all the clubs and societies that exist within the university. One of these is specifically for medical students, the Otago University Medical Students Association (OUMSA). OUMSA organises regular social events, film screenings, sports activities and trips around South Island.

Table 2. International Student Associations and Clubs at University of Otago

Afro-Otago Students Association

Brunei Students Association (BSA)

Cambodian Culture Club (CCC)

Dunedin Chinese Methodist Youth Fellowship

Indian Students Association (ISA)

Indonesian Community Association (ICA)

Japan Club

Korean Students Association

Otago Malaysian Students Association (OMSA)

Otago University Medical Students Association (OUMSA)

Muslim Students Association

Omani Students Association

Pacific Island Health Professional Students Association (PIHPSA)

Samoan Students Association

Singapore Club (OSC)

Saudi Student Club

Sri Lankan Students Association (SLSA)

Taiwanese Student Association

Thai Society (OuThsa)

Tongan Students Association

CHAPTER 2

METHODS

2.1 INTRODUCTION

In this chapter, the research approach is discussed and different theories and methods of data collection and analysis are considered, which are relevant to the qualitative study that was carried out. The research assistant who conducted the interviews is described. The issue of group and individual interviews is mentioned and language and cultural aspects of the study.

The demographics of the study population are described, followed by details on the procedures followed involved in obtaining ethical approval, recruiting participants, arranging the interviews and transcribing and analysing the data.

2.1.1 RESEARCH APPROACH

Collecting data through interviews has a long tradition in social science investigation. The scope of this study was broad and ambitious, covering many different aspects of international medical students' experience as well as exploring student support services to provide relevant background information. The research

enquiries were of a qualitative, descriptive nature exploring phenomenological or "lived" experience. This approach can be characterised as constructivist inquiry because:

> *It is human constructions being studied and because it is constructions the researcher is creating…..No ultimate truth exists: context-bound constructions are all part of the larger universe of stories* (Crabtree and Miller 1992 p.10).

Crabtree and Miller suggest that the constructivist inquirer performs an ongoing iterative dance of discovery and interpretation as the research progresses. Kuper et al. (2008 p.405) defined the constructivist approach as:

> *A belief about knowledge (epistemology) that asserts that the reality we perceive is constructed by our social, historical, and individual contexts, and so there can be no absolute shared truth..*

Within a constructivist framework, the research approach of this thesis could be characterized as "narrative" or one which uses personal accounts to help make sense of peoples' individual experiences or roles in society. Narrative analysis focuses on the story that people tell and according to Bleakley (2005), is a process of synthesis of ideas and experience within a particular cultural and historical context.

2.1.2 SCOPE OF THE INTERVIEWS

Semi-structured interviews were conducted to cover the main areas of enquiry suggested by the aims and objectives of the study. These were:

- the medical curriculum at Otago University
- learning and teaching approaches
- different types of educational and personal support

Interviewees were specifically asked about factors in the teaching environment which inhibited effective learning and factors which enhanced learning, as well as their experience of accessing student support services provided by the University and by the international student associations. Lastly, participants were asked to make suggestions about how to improve the learning environment for international medical students and develop student support services further to meet learning needs. As mentioned in the aims and objectives of the research, questions about participants' experience of living in New Zealand, the transferability of skills to their own country and their perception of what they contributed to New Zealand medical training, were included for interest and to gain a better understanding of the interviewees' perspectives.

2.1.3 RESEARCH ASSISTANT

Kate Marshall (KM) was the research assistant who carried out all the interviews with the international medical students. She was an experienced qualitative researcher who had spent many years in the field of education but was unknown to the international medical students. The fact that KM was **not** a doctor and had no connection with the medical school or medical students in any other capacity meant that she could position herself as a neutral, non-judgemental listener. She could

express genuine curiosity and interest in the students' narratives and acknowledge their concerns without the students worrying about any negative repercussions from their disclosures.

KM had an interview framework for guidance and to ensure the areas for discussion were all covered with the participants (see Appendix IV for list of questions). There was a mix of open-ended and closed questions with flexibility to pursue any issues raised by the interviewee (s).

Patton (1990 p.293) identified six types of questions (see Box 1) that can be asked in interviewing for qualitative research and suggested that these should be open-ended, neutral, sensitive and clear to the interviewee.

Box 1 Types of question for qualitative interview

1. Behaviour or experience
2. Opinion or belief
3. Feelings
4. Knowledge
5. Sensory
6. Background or demographic

The questions posed in this research were largely open-ended and of types 1-4 from the list in Box 1. Sensory questions (asking about what has been seen, heard, sensed, tasted and touched) were notably absent because the focus of the research was

on the students' academic and educational experiences. Background and demographic details of the participants were recorded on a separate sheet at the time of each interview.

To enable a rich and detailed coverage of the research topics, interviews were lasted between 40 - 90 minutes, with an average of 60 minutes. The questions posed by the interviewer had been discussed and agreed in advance by the research team. The team comprised three senior lecturers ES, JR and MW, one medical anthropologist, CJ, and one research co-ordinator, SG. All of the team were members of the department of general practice at the Dunedin School of Medicine. The questions had also been sent to three international students in years three and five for comment and to the University of Otago ethics committee before the final version was agreed. Each interview was audio-taped and then transcribed before being coded for categories and themes using a qualitative data software programme Atlas-ti.

2.1.4 GROUP AND INDIVIDUAL INTERVIEWS

Participants in the research were given the choice about whether they were interviewed on their own or in a small group. It became clear early on in the recruitment process that it was only on rare occasions that there were four or more participants, a pre-requisite for a focus group approach (Lingard and Kennedy 2007 p.10). The group interviews generally involved only two or three students. Some of the issues discussed were on sensitive topics such as racism and discrimination. The international students who chose to participate in small group interviews already knew

each other and self-selected with whom they would collaborate when they arranged to meet with the researcher. It can be hypothesised that these students may have been more likely to disclose their ideas openly and discuss sensitive issues, because they were allowed to choose the other group members.

There are advantages and disadvantages associated with doing research with individuals or groups. Interviewing individuals provides the chance to obtain data which may be more in-depth and uncontaminated by group dynamics. The disadvantage in individual interviews is the lack of breadth of experience which is more likely to emerge from interviewing a group. Group interviews on the other hand, are influenced by the relationships between its members, which may alter how questions are answered compared to a single interviewee (Crabtree and Miller 1992 p.16). At best, the discussion and emerging data will be enhanced by these different points of view, but the interchange may also reflect group dynamics involving power, gender and psychological issues. It will be made clear in the discussion of the results of the data how many interviews were with individuals and how many were with small groups.

2.1.5 LANGUAGE AND CULTURE

There is much debate in the literature on qualitative research about the objectivity and authenticity of narrative accounts or interviews, given that the interviewer is not a passive observer but interacts and responds to the interviewees so that they build

"reality" together. Many factors can affect this reality such as the place and time of interview, the gender, age and ethnicity of the participants and, very importantly, the language in which the interview is conducted. Only a few of the interviewees spoke English as their first language. As Denzin (1991) points out:

> *The subject is more than can be contained in a text, and a text is only a reproduction of what the subject has told us. What the subject tells us is itself something that has been shaped by prior cultural understandings. Most important, language, which is our window into the subject's world (and our world), plays tricks. It displaces the very thing it is supposed to represent, so that what is always given is a trace of other things, not the thing –lived experience –itself.* (Quoted in Silverman 2004, p.127).

In the thirty-one interviews conducted with fifty-five international medical students, their fluency with the English language varied, as did their understanding of the questions posed by the interviewer or their interpretation of the meaning behind the queries. KM was an experienced researcher and the sole interviewer (except for interviews one and eight), but inevitably the material gathered by her was influenced by how the interviewees responded to her, and also by how the interviewees responded to each other, if the interview took place in a group.

Richardson distinguishes between the "cultural story", based on accepted normative values and stereotypes within the culture, and the "collective story" which takes the point of view of the interview subjects and can *"give voice to those who are silenced or marginalized in the cultural story"*. (Richardson 1990, quoted in Silverman Ibid. p.130). It is suggested that interviewing in qualitative research is more likely to get past the cultural stories and allow collective stories to emerge, because self-reflection and self-revelation is built into the interview process. Participants'

ambivalence about certain values and ideas, which may conflict with the dominant norms, is more likely to be identified if the interviewer is not firmly entrenched in the mainstream ideology or aligned to particular cultural beliefs. Prior to the research study, KM was unaware of the details of the medical curriculum. She was also ignorant of the issues that international medical students might raise in relation to the academic and social environment. However, as a Pakeha middle-aged female who had spent most of her adult life in New Zealand, KM's own cultural perspective would have shaped her responses to the participants and might have led her to pursue some topics more than others in the interviews.

2.1.6 ETHICS APPROVAL

Ethical approval for the research was obtained from the University of Otago Ethics Committee (see Appendix IX) with certain conditions regarding confidentiality, anonymity and access to the research results by the participants (see information sheet in Appendix II). The research proposal was also endorsed by the Māori Ngai Tahu Research Consultation Committee (see Appendix X). One of the conditions mentioned by the University ethics committee was that the principal investigator (ES) would not take part in the recruitment of students to the research study because of her involvement in teaching some of the students concerned. She was also discouraged from leading any of the interviews.

In the following section, the demographics of the study participants are described, followed by details on the procedures followed involved in obtaining

ethical approval, recruiting participants, arranging the interviews and transcribing and analysing the data.

2.2 STUDY GROUP

An international medical student was defined as a student who did not hold New Zealand residency or citizenship at the time of the study, was paying full fees and required a student visa. This definition excluded students born overseas who had moved to New Zealand during secondary school education and had subsequently become residents.

In 2009 there were 209 international medical students enrolled at the University of Otago making up approximately 18% of the total number of medical students in years two to six of the course. There are around 240 total medical students in each year of the curriculum. The majority of international students come from Malaysia, reflecting the fact that the University has actively recruited students from this country since the 1990s. Much smaller numbers of students come from the Middle East, Asia, the Pacific Islands or Europe. There were five students from the Seychelles in years four and five. The University of Otago had a short term arrangement with this country to provide overseas medical training which has now ceased. Most of the international students studying medicine are sponsored by their governments or by educational scholarships which cover the cost of the fees. There are contractual arrangements in place to make sure the students return to their country of origin to work once they are

qualified doctors. A minority of international students are privately funded by their families.

While some of the interviews with international students were conducted in Wellington, it proved impossible to do the same in Christchurch because of time limitations and less administrative help than in Wellington.

2.3 PROCEDURES

2.3.1 ETHICAL ISSUES

The research was limited by the fact that there was an opportunity to interview the participants on only one occasion, although students were encouraged to get in touch with the interviewer afterwards if they had other points they wanted to add or clarifications they wanted to make. No-one contacted either the principal researcher or interviewer at a later date. Ethical issues relevant to the research were:

- information given to the students before taking part in the research study
- the relationship of the interviewer to the students
- emotional issues
- protecting interviewees' information

The information sheet and recruitment process for the research will be described in the following section 2.3.2. There were conditions imposed by the ethics committee

regarding what the interviewer should do if students became upset or raised issues which she thought needed further attention, but this could only be done with the students' permission. Students were assured that their contribution to the research would be treated as confidential and anonymous. Students could elect to erase the taped interview at the end of the process or erase a part of the interview. They were also advised that they could stop the interview at any point and leave if they wished.

The incentive for the international medical students to participate in the study was to be allowed to express their views openly and participate in research which might benefit their learning experience or that of other international students in the future. Their suggestions for improving the learning and teaching environment were recorded with the aim of ensuring some of the suggestions were then implemented at the University of Otago. The students were also offered a small amount of food and drink at the time of the interview.

2.3.2 ANALYSIS AND INTERPRETATION

The choice of method for collecting data affects the way the material is analysed. In this research there were no hypotheses to refute or prove. The narrative, discursive nature of the interviews and the wide range of topics covered in the semi-structured questions generated a wealth of material. To aid analysis, the thirty-one interviews with the international medical students were all recorded on audiotape and then transcribed into text documents. KM used the software programme Atlas-ti initially to identify common themes and categories within the transcripts. The themes and

categories were then sub-divided into related topics. For example, the theme of language barriers was broken down into: communication, classroom interaction, social interactions, language support, cultural and personal differences, and student strategies. Quotes from the texts relevant to these sub-divisions could then be grouped together and a thematic analysis of the data undertaken using both inductive and deductive methods (Strauss and Corbin 1998). Braun and Clark (2006, p.78) argue that thematic analysis of this sort *"provides a flexible and useful research tool, which can potentially provide a rich and detailed, yet complex, account of data."* The flexibility of thematic analysis is that it can be used within different theoretical frameworks:

> *Thematic analysis can be an essentialist or realist method, which reports experiences, meanings and the reality of participants, or it can be a constructionist method, which examines the ways in which events, realities, meanings, experiences and so on are the effects of a range of discourses operating within society. It can also be a 'contextualist' method, sitting between the two poles of essentialism and constructionism, and characterized by theories, such as critical realism…. which acknowledge the ways individuals make meaning of their experience, and, in turn, the ways the broader social context impinges on those meanings, while retaining focus on the material and other limits of 'reality'. Therefore, thematic analysis can be a method that works both to reflect reality and to unpick or unravel the surface of 'reality'.* (Braun and Clark Ibid. p.81)

Through the analysis, the interviewees' recommendations for improving the learning and teaching environment were identified. This research approach also borrows from the immersion/crystallisation model of analysis in which the researcher immerses themselves into the text and emerges after deep reflection, with *"an intuitive crystallisation of the text"* (Crabtree and Miller 1992, p.19).

It might be argued that the qualitative software Atlas-ti coding system allows more of an editing analytic technique than immersion/crystallisation. Crabtree and Miller

(1992) describe the editing analysis as more subjective and interpretive, which relates back to the thematic approach described above. The interpreter looks for meaningful units or segments of text that both stand on their own and relate to the purpose of the study.

> *Once identified, these units are sorted and organised into categories or codes. The interpreter then explores the categories and determines the patterns and themes that connect them.* (Crabtree and Miller 1992, p.20)

The potential for translation errors in both recording and transcribing the interviews will be discussed in the chapter on results.

In addition to the coding and categorization of the transcripts by KM, the principal investigator, ES, listened to each audiotape with the transcript present and made notes of relevant points and themes from each interview. These notes were used during the writing up of the results to recheck the transcripts and tapes and find relevant quotes on different themes. Immersion in the data by ES and constant checking and re-checking of the interview material led to corroboration and extension of themes and patterns identified by KM in the first analysis of the data. Three of the interview transcripts were sent to Associate Professor SD, supervisor of the principal investigator ES, for corroboration of the thematic analysis. Eight of the thirty-one transcripts were also given to two academic colleagues in the UK with experience of qualitative research, GN and JH, for independent coding of interview data.

2.3.3 RECRUITMENT AND INFORMATION

After obtaining ethical approval to contact all the international medical students at the University of Otago (Dunedin campus) about the research project by email, KM obtained their University email addresses from the International Student Office. The information sheet was attached which explained the aims and objectives of the research. There was also a section on what would happen if a student brought up topics that were distressing or appeared upset themselves. The contact details of the Student Affairs Office, Student Health Services, International Student Office and the Emergency Psychiatric Services were mentioned on the sheet as agencies which were available to offer support to students if necessary. Anonymity for participants was guaranteed. Students were advised that they could request a copy of the results of the research and that publications emerging from the research would be available in the University of Otago library.

KM contacted the international student associations' leaders and met with many of them to explain the research plan and ask for their help in recruiting students to interview. She approached the Pacific Island centre as there were a few international medical students from this region studying at Otago who were not New Zealand citizens. Any students who required further information were given the principal investigator's contact details. Four students did come and talk informally with ES to clarify the purpose of the research. On six occasions, KM addressed a whole year group in a lecture theatre and told them briefly about the research and left copies of the information sheet and her contact details so that interested students could get in

touch. Word of mouth was important in spreading information about the research project between the international medical students. Anecdotally, several students were recruited to take part in the interviews by their peers who had already participated and enjoyed the process.

Students who agreed to take part in the research were required to sign a consent form (see Appendix III). When they came to the interview they also provided the following demographic information:

- Nationality
- Country of origin
- Ethnicity
- First language
- Additional languages
- Year of study
- Age
- Gender
- Religion
- Year of arrival in New Zealand
- Private or sponsored
- Language courses attended
- Pre medical course
- Accommodation arrangements
- Family in New Zealand
- Marital status

2.3.4 INTERVIEWS IN DUNEDIN AND WELLINGTON

Students were given a choice of whether to be interviewed on their own or in a small group with two or three other students. KM tried to book the same room on each occasion for the interviews to take place. This was located in the Department of General Practice in the Hercus Building at the Dunedin School of Medicine and was light and airy. The timing of the interviews depended on the students' availability but generally took place after teaching sessions had finished in the late afternoon. Interviews with international medical students in Wellington were organised by the Associate Dean's Office. KM spent two days at the Wellington Medical School campus and conducted eleven interviews over this time, including interviews with nine IMU students from Malaysia who had joined the medical course in year four.

2.3.5 RECORDING, TRANSCRIBING AND CODING

Interviews were recorded using a small central microphone and audiotape and lasted between 40 – 90 minutes, with the average interview taking about 60 minutes. The majority of the tapes (over 23) were later transcribed by KM but eight were given to a temporary secretary within the University to complete because of time constraints. Each transcript was labelled with date, time, number of participants and interviewees' year of study, gender, age and country of origin but no identifying names. When transcribing the interview, KM gave each participant a letter to distinguish who was talking at the time. A licence for Atlas ti software was purchased

to enable KM to transfer the interviews from Microsoft word documents into a format which allowed subsequent coding of themes and categories from the data. The taped interviews were password protected on the computer and the transcripts were kept in a locked drawer to preserve confidentiality.

CHAPTER 3

RESULTS

3.1 DEMOGRAPHICS

Fifty-five students were interviewed during the research study, comprising approximately 25% of the total study population of 209 international medical students enrolled at the University of Otago in 2009. The figures in brackets in Tables 3 and 4 indicate how many students from each year and country were interviewed at either campus.

At the Dunedin campus, thirty-three international students were interviewed from Years 2-6 of the medical course. Nine of these interviews were in done in small groups and eleven were individual. The majority of these students were from Malaysia (14) with smaller numbers from Brunei (6), Oman (5), Saudi Arabia (3) Singapore (2), Seychelles (1), Indonesia (1) and India (1). There were 18 male students and 15 female students. A small number (5) were privately funded, whereas the rest (28) were sponsored by their governments.

Table 3.

Total numbers of international medical students at Dunedin Campus 2009 and those interviewed in each year

Country of origin	Year 2 Total (number interviewed)	Year 3 Total (number interviewed)	Year 4 Total (number interviewed)	Year 5 Total (number interviewed)	Year 6 Total (number interviewed)	Total
Malaysia	15 (6)	19 (6)	5 (2)	5	3	**47 (14)**
Brunei	9 (2)	8 (3)	2	2	1 (1)	**22 (6)**
Saudi Arabia	1	4 (2)	0	2 (1)	2	**9 (3)**
Seychelles	0	0	0	2 (1)	2	**4 (1)**
Oman	0	1 (1)	2 (2)	3 (2)	0	**5 (5)**
Singapore	0	1	2 (1)	1 (1)	0	**4 (2)**
Korea	0	1	1	2	0	**4**
China	1	1	0	1	0	**3**
Japan	0	0	0	1	0	**1**
Taiwan	1	0	0	0	0	**1**
India	0	0	0	0	1 (1)	**1 (1)**
Indonesia	0	1 (1)	0	1	0	**2 (1)**
Samoa	0	0	0	1	0	**1**
Fiji	0	0	0	1	0	**1**
Total IS	27 (8)	35 (14)	11(5)	22(6)	9(2)	**104 (33)**

IS – International Student: a student who did not hold New Zealand residency or citizenship at the time of the study, was paying full fees and required a student visa.

At the Wellington campus, twenty-two international students were interviewed. The majority were from Malaysia (16), three from Brunei (3), and one each from Seychelles (1), Tonga (1) and Indonesia (1). There were seven group interviews and four individual interviews. There were 13 female students and 9 male students. Government sponsored students numbered 14, and 8 were private students. There were 9 International Medical University (IMU) Malaysian students who had joined the medical course in year four.

Table 4.

Total number of international medical students at Wellington Campus 2009 and those interviewed in each year

Country of origin	Year 4 Total (number interviewed)	Year 5 Total (number interviewed)	Year 6 Total (number interviewed)	Totals
Malaysia	11 (3)	14 (10)	6 (3)	**31 (16)**
Brunei	2 (2)	3	3 (1)	**8 (3)**
Saudi Arabia	1	0	0	**1**
Seychelles	0	1 (1)	0	**1 (1)**
Singapore	0	1	0	**1**
Indonesia	1	0	1 (1)	**2 (1)**
Tonga	1 (1)	0	0	**1 (1)**
Tuvalu	0	0	1	**1**
Total IS in each year	35	40	30	**105 (22)**

Table 5 shows the first language spoken as identified by the interviewees from both the Dunedin and Wellington campuses, and their religion (see Appendices VI and VII).

Table 5. First language spoken and religious affiliations of all participants

Language		**Religion**
Malay 30		Muslim 30
English 13		Christian 7
Arabic 7		Christian 3
Mandarin 7		Buddhist 5
Indonesian 2		Hindu 7
Tamil 1		Unknown 8
Hindi 1		
Hokkien 1		

No interviewees became emotionally upset or raised topics that were thought to need intervention by any of the support services at the University. One participant asked for a portion of the interview to be erased from the audiotape because it was of a politically sensitive nature and this was duly carried out by KM.

3.2 DOMINANT THEMES AND CATEGORIES

The main objective of the study was to identify and understand modifiable factors that affect learning experiences and outcomes for international medical students. The interview questions explored participants' experience of the learning and teaching environment and their use of support services. In the following section, common themes highlighted by the interviewees will be described that relate to factors that inhibited or enhanced effective learning at the medical school and University. Wider issues relating to support services, alcohol at social events and preparation for life in New Zealand will be explored in the subsequent sections.

3.2.1 LEARNING AND TEACHING ENVIRONMENT

The framework for the interviews covered participants' experiences of living and learning in New Zealand and are listed in Appendix IV. While not every single question was asked in every interview, the main subject areas were covered and are listed below. The interviewees were asked about which learning situations they preferred (small group or lectures), their experience of teachers' understanding of international students' learning needs and whether they had experienced any racism or discrimination in the medical school or University. They were also asked to think about the benefits their presence and contribution brought to the domestic students and New Zealand more generally.

3.2.2 FACTORS THAT INHIBIT LEARNING

Language

Many of the interviewees mentioned the difficulty of understanding English when they first arrived in New Zealand because of the local accent, particularly if they had learned English in their own country from a teacher with American or British pronunciation. Equally, they found that they were not always understood because of their accent and this made them reluctant to talk. Barriers to fluent language acquisition included the fast speed at which people spoke, the unfamiliar colloquialisms and the slang terms used in different contexts.

> *Sometimes even…. consultants or your tutors …. use a lot of slang, and patients use a lot of slang……. There are a lot of …things that patients will say and there'll be five people listening to the same interview, but you will be completely lost…..' what is he talking about? – I mean I speak English but I don't know what he's saying' – and you get left out.*
>
> Singaporean female 4th year Dn (Tape 5 p.10).

> *Even….in medicine where…you just like give names to specific disease… that it's a community name that you don't really used to. Like I had a lecture this morning on dermatology, it's like about 'jock itch' …."*
>
> Malaysian male 4th year Dn (Tape 6 p.8).

> *Student AA: .... I didn't know there was so many things you could describe death as…..Like we had that tutorial last year…saying, okay… well, what can you name that, like the bucket as, and just sort of 'kicking over the bucket' …..I had no idea what that means….*
>
> *Student BB: Pop your clogs or something…*
>
> *Student AA: Yeah, see! I have no idea what those things are…I mean if you just talk about that, well why are you, what are you saying?*
>
> Brunei 3rd year students Dn (Tape 12 p.45).

Some tutors failed to call students by their appropriate name, either because of pronunciation or because they were unsure which part of a student's name to use in the case of the Chinese or Arabic nomenclature. This was irritating for those concerned and could lead to some overseas students adopting European names for simplicity.

> *A lot of international students have more than one name,….So…. like people call me S. back home, nobody calls me by my Mandarin name except my Mandarin teacher at school at primary school, and it's weird because I came here and because my Mandarin name comes first…Mandarin names have two like syllables, two words but it's separated – so I always get like half of my name or I don't know, just weird combinations of my name coming up – so every time someone calls me I don't even know it's my name.*
>
> Singaporean female 4th year Dn (Tape 5 p.5).

Many interviewees mentioned the difficulty of participating in tutorials because of their lack of confidence in spoken English and because they were unsure when and how to intervene in the dialogue. They talked about the time taken to process information, think about what they want to say and then translate it into English, by which time it was often too late to contribute to the group discussion. As a result, domestic students tended to dominate the conversation and international students felt that they missed out on some learning opportunities.

> *…another problem is, again back to the language, because like they use different slang and different language and you can't get into it. And like because English is not a first language so you need time to listen, translate and then think back what you would say at the same time. So it takes a long time.*
>
> Malaysian male 4th year Dn (Tape 6 p.10).

....because, I'm not too sure....'cause whenever, like I'm in a group I feel quite.. intimidated by others there, so whenever I want to say something..... I feel like, oh, what if it's not correct? 'cause sometimes I don't know that thing but then I'm afraid to ask, 'cause if I ask people it'll be like, oh, that thing, you don't know the answer to that!...

Malaysian female 5th year Wgtn (Tape 27 p.14).

International students could feel marginalised or misjudged by tutors whom they thought were critical of students who were quiet or did not participate, interpreting this behaviour as not being engaged or motivated. Some interviewees commented that quiet New Zealand students were not judged as harshly as international students and one participant talked about positive tutor bias towards domestic students.

Sometimes I think there is..... bias amongst the consultants and registrars. I mean they tend to favour the Kiwi students rather than the Asian student……There are some really nice consultants that engage all students but in rare cases they might like – because we tend to be a bit more quiet in a sense that we only say the information that we think is correct.....but the Kiwis are more outspoken and you know they say something and the consultant will tend towards him and ask him questions but ignore – I am totally at the backside of the room – like what's going on?

Malaysian male 5th year Wgtn (Tape 23 p.6).

There was also a perception that international students received less positive feedback from tutors when they were achieving highly, compared to the domestic students' and how important feedback is in building up confidence.

Maybe one of the most important things is that international student compare themselves with Kiwis....I'm not trying to be racist...but most of the international students they really work hard but they can't express it ..... and they say: oh I know more, but why Kiwis get distinctions so easily and they don't even study that hard? And we're really struggling with ourselves. We're really studying hard but we don't get that much. And, yeah, I think just give the international student the confidence.

Omani female 5th year Dn (Tape 1 p.36).

The type of English learned at school or in the foundation year courses may not always be relevant for interviewing patients because correct phrasing of questions to gain information about their medical and social history may be subtle and different to everyday conversation. For example, one interviewee mentioned she had asked a patient 'Do you **take** alcohol?' which sounded much more formal and less idiomatic than 'Do you **drink** alcohol?' Some of the international students found it helpful to note down commonly used phrases or terms, particularly slang names for parts of the body, to help their communication with patients.

Discrimination and racism

There was a particular issue raised to do with the OSCE (Objective Structured Clinical Examination) assessments, which many participants cited as unfair and prejudicial to their marks. In these exams, students rotate around eight to ten "stations" at which they perform a short task such as interviewing a patient about a particular problem or set of symptoms, or performing a brief examination. The task must be completed in eight minutes before moving on to the next station. An examiner is usually present during the process with a mark sheet. Some of the interviewees in this study had failed these assessments. They thought it was unfair to be judged on their communication skills by the same criteria as the domestic students when they did not have English as a first language.

> *There is just this issue about 5th year finals where all the Asians are failing ..... I personally believe that it's due to the fact that Caucasians perform at such a level and you know the majority of Asians don't reach that level so it's easy for the examiner to tell the difference and become more picky…. Caucasians usually speak much smoother…. they use much better phrases – the communication skills where they come out and they are really nice flash*

speaking…. So when consultants see it, it seems like it's a big difference and it's easy too to pick out all the mistakes – I personally feel so.

Malaysian male TI Wgtn (Tape 25 p.5-6).

They need to understand that the international students have some difficulties with these things [communication skills] *and they shouldn't be too harsh on them – because if you be too harsh from the beginning they will just drop out and fail – just give them some time to build up and learn those skills and they will eventually, they will.*

Omani male 4th year Dn (Tape 10 p.9).

One interviewee suggested that it would help to have OSCE training at the beginning of the academic year with clear expectations about how students are meant to interact with patients (Tongan male 4th year Tape 29). Clearly such training would be beneficial for all students, not just those from an international background.

Only a small minority of those interviewed mentioned overt racist or disparaging behaviour by tutors or other students. They recognised that any prejudice they experienced was largely due to ignorance and stereotyping of foreigners. In this extract three fifth year students, B and C from Oman, and A from Saudi Arabia, discussed the difference between the way international students are treated in their own country compared to their experience in New Zealand.

Student B: …even if they are Arabs but they are not from our country we'll – we'll treat them as they are from our country. There is no differences between us. So when we came here we find it really difficult to accept this. Especially when we were in second year if we're in a group and we give them an answer or anything, or in a discussion, they [other students] *will look at us and they're not believing what we are saying and they don't want to take our answer or something, unless they make sure it was right and, yeah, maybe after a month or two they will be okay.*

Student C: This is due to because we are Muslim and I know the media's giving the wrong message and these are just teenage graduated from school so they don't have any idea about what are these and why are they wearing the scarf and all that they know is like those scarfy people are stupid. They don't know anything. And especially that we come from a desert country, it's like where they think it's only deserts and oil.

Student A: Yeah, and tents and camels.

Two Omani females one Saudi Arabian female 5th year Dn (Tape 1 p.11).

Several participants commented on the ignorance of their fellow New Zealand students about other cultures.

……there is not much understanding….Like with some Kiwis you get 'oh why do you wear these scarves?'….And I think some Kiwi students don't know much about Muslims except for the September 11th thing you know…

Malaysian female 2nd year Dn (Tape 4 p.22).

There were instances of domestic students undermining international students' competence or contribution.

…. sometimes I feel like the Kiwi students don't trust me….. I remember last time when we did discussion and there are four of us and we discuss but we'll do our own individual chapter – and this person, one girl, she says to me – 'you should change yours' …..she say that the thing I do is not relevant – yeah, and next day in the group and we discuss about it and luckily these two other person was like – 'oh, I believe that's great' – and we just present it and the tutor quite like it – so yeah, so sometimes you know they block you….And the other thing is if we want to go with community or like with communication or anything…… I mean maybe they are trying to be kind, but… this one person she told the patient: 'oh she's an international student so if you don't understand her you may stop talking to her'…

Malaysian female 2nd year Dn (Tape 4 p.12-13).

The only Pacific Island student in this study cited the following instance of a racist remark from a tutor.

> *I remember at second year medical school… we were talking about….. I think it was Māori health, and we were just talking about the prevalence and stuff, and they were, like, saying how, why there's a huge number of Māori patients having all the different co- morbidities in this world… and always, Māoris having the higher rate of it. And then the tutor turns to me….. 'cause every time she was explaining the Māori stuff she was looking at me, and then she goes 'can you, um, explain to us, about, um, more about why the Māori people are…' and I was, like, 'I have no idea. I'm not Māori……' And she was, like, 'well you look all the same to us, anyway.'*

Tongan male 4th year Wgtn (Tape 29 p.8).

More commonly it was the overall attitude of staff to international students that made them feel they were treated differently to domestic students.

> *It's not the comments, as in you're Asian or something like that, no. You just know with the way they speak to you. I was on my anaesthesia run and this anaesthetist….. the way that he asked me the questions, he was quite intimidating and the comment he gave me like for the questions that I couldn't answer – he was like 'do you not listen while you were in lectures, did they not teach you stuff?' Whereas one of my friends, a Kiwi student, who were in the surgical attachment, and she wasn't even doing anaesthesia but we were in the same team and she just happened to ask the anaesthetist one of the anaesthesia questions and it was in exactly the same context that I'm asking. But the anaesthetist he just shoved me an answer that's not really - it's just the way that he answer, and you can see the difference – like he changed his tone and the way that he explain stuff like 180 degrees. It's not just because of me, I think it's more beyond that ….. it's something racist I think, yep – but that's just one, the others are really good.*

Malaysian female 5th year Wgtn (Tape 23 p.7).

Most instances of overt racism had occurred in the city and been associated with drunken youths being verbally abusive, and one international student had had eggs thrown at her on the street (Bruneian female TI Tape 18 p. 26) Much more common

was the perception that international students were sometimes marginalised within a teaching session or unfairly judged in exams and other assessments.

Cultural distance and power

Several participants commented on the power differential between teacher and pupil in Malaysia, Brunei, India, Saudi Arabia and Oman compared to New Zealand which affected teaching delivery and student interaction. Interviewees mentioned the "spoon feeding" approach to learning in their own country, the expectation that they should memorise huge amounts of facts and the impossibility of questioning the tutor because it would be seen as disrespectful. This latter point was raised as a cultural reason for why international students are often quiet and reserved in tutorials and lectures.

> *..... the learning and training back at home is more factual,... they teach you loads of facts and you are expected to memorise heaps of things like for example all the wee risk grades for heart failure.....but in New Zealand.... we are not like taught to memorise things..... We are taught more to do the train of thought like you know, to be able to think, to work things out and know where to get the information in case you don't know.*

Malaysian female 5th year Wgtn (Tape 30 p.14).

It takes students from overseas who have had this experience of being passive recipients of teaching some time to adapt to the New Zealand learning environment and gain confidence to speak out, think independently and undertake self-directed study. In the early part of the curriculum the lack of confidence and familiarity with how to interact with seniors can lead to international students missing out on learning opportunities.

..... in Malaysia, when a consultant comes in everyone sort of bows – it's top down and we tend to lose out to Caucasian students in term of rapport because we will be quite quiet and I wouldn't know what to say to a consultant and they be quite closed. And then from there….I started to find that it did create a whole series of problems for us. The first one would be of course in terms of impression – like we were unmotivated, uninterested, and – that's the impression they would get because I would be quiet and everyone else would be chatting away…..After that it became the fact that we lost opportunities to do things because everyone else would get the opportunities and when it comes to teaching you know you could be standing there and they wouldn't even notice that you are there….

Malaysian male TI Wgtn IMU (Tape 25 p.4).

Participants were also asked about the differences between the health systems in their own countries compared to New Zealand. Many of them commented that at home, the medical profession behaved in a more paternalistic manner to their patients and doctors and nurses were dictatorial about treatment and behaviour.

.....so like doctors are viewed as demi- gods – you get so much respect and attention and everyone wants your opinion – they will respect your opinion even though you are younger than them, just because you are in med school.

Malaysian female 3rd year Dn (Tape 7 p.5).

Some interviewees said that if they practised the communication skills they had been taught in New Zealand and asked about emotional issues, this would be seen as intrusive and irrelevant by patients in their own country.

.....whereas when we go back there is none of that structure [patient-centred approach] *at all – ok, what's your problem, ok, prescribe this….There's no 'oh how do you feel about it?'…Back home it would be like prying into their personal lives – it would be nosy.*

Bruneian female 3rd year Dn (Tape 7 p.18).

Although only a few of the participants had direct experience of working in the health system in their own countries, there was almost universal agreement that in New Zealand the patient-centred approach was commendable and preferable to the doctor-centred approach in their countries of origin. It appears that the educational and medical environments described in both New Zealand and in other countries mirror the power structures within these different societies. In the current medical training at the University of Otago, students and doctors are encouraged to communicate as equals with their patients and aspire to "shared understanding" about diagnosis and treatment. This approach contrasts with societies where the power differential between the professional and the general public is much greater and any questioning of authority is discouraged, leading to a passive acceptance by pupil or patient respectively of their teachers' or doctors' opinion.

To summarise: factors which participants identified inhibiting learning included language difficulties, unhelpful attitudes of staff and students and the lack of clear expectations of student participation in teaching sessions. The learning and teaching style in New Zealand was very different to interviewees' previous educational experience and required adaptation to a more interactive learning environment. Hierarchical medical systems in participants' countries of origin paralleled the education systems there and were contrasted to the more relaxed relationships in New Zealand between doctor and patient, and teacher and pupil.

3.2.3 FACTORS THAT ENHANCE LEARNING

Many of the issues discussed in the following section that cover facilitation of learning would apply to all medical students, not just the international students in this study. However, cultural differences in learning and teaching styles, as well as learning in a second language make the points raised particularly pertinent for students from overseas.

Group size and composition

In response to the question about the best learning situations, participants almost all preferred small group tutorials or bedside teaching rather than large group seminars or lectures. They valued getting to know their New Zealand peers better and modelling themselves on the behaviour they saw demonstrated by consultants and registrars with patients. They welcomed practising for the OSCE exams with native speakers of English who could correct and help them with communication and expressing themselves in a more colloquial fashion.

> *For me I like more tutorials, like not in lecture but tutorials in…small groups, like twelve. So that's…. good and you can ask a lot of questions if you don't understand about a thing.*
>
> Malaysian female 5th year Wgtn (Tape 30 p.15).

> *…Well all the slangs are a bit tough actually. It's best to listen to seniors or house surgeons and registrars' and the way they ask questions and I will write them down and I will bring them home and I will try and use it next time. It's mostly an experimental process, time and time again, just trying and trying …. I was lucky because I initially got a group of entirely Caucasians for OSCE practice and it was really good – really helpful.*
>
> Malaysian male TI male Wgtn IMU (Tape 25 p.11).

Some participants mentioned the importance of making sure groups were composed of a mix of international and domestic students so that the former were not isolated or felt that they were the only person who did not have English as a first language. Opinion differed as to whether it was better to be left alone in tutorials to contribute when the student felt confident to do so, or whether it was helpful to be asked directly by the tutor to talk because it forced the student to participate and practise their English.

> *…but there is just a barrier between us* [New Zealand and international students] *like – I don't know – what we expect of them and what they expect of us as well …… like you feel intimidated when you talk to them. I mean you try to speak, but you just can't speak to them, but if you know them for quite some time then maybe you can actually open up. Like I was the only international student in my group so it was quite hard to open up.*
>
> Brunei female 3rd year Dn (Tape 7 p.10).

Some participants preferred being in the minority with domestic students because it gave them opportunities to mix and practise their English. Only one interviewee said she liked learning from lectures rather than group work, which was because of her lack of confidence in contributing to tutorials in front of other students (Tape 13 Bruneian female 3rd year).

Learning the ' lingo'

Specific practical measures were suggested by many interviewees to help them acquire and understand the language and medical terminology necessary to practice medicine. Proof reading of any written material that they were required to submit during the medical course, was mentioned consistently as a useful service that could be provided throughout the training. In the last ten years, the medical curriculum has

introduced more written work that students must complete for a variety of courses and assessments. There are case reports to submit, small research projects and third year modules such as Doctor, Patient and Society (now replaced by Healthcare in the Community) which require group dissertations or individual essays. The foundation year courses in English Language and Science offer proof reading of work, but at the moment the medical school does not have this facility.

One participant thought it would be helpful to have teaching specifically on medical terms in the foundation year. This is partly because medicine has its own vocabulary and conventions of presenting patient case studies and medical "histories" that have to be learned in addition to the everyday English used in normal conversation. As she pointed out:

> *Student L:… I know like one of the teacher, language teacher, that still…. keep in contact with us and she said that if you want me to like proof read anything you want just let me know. Yeah, and then some of us do that.*
>
> *KM: I suppose I'm thinking is it important that it's a person who understands medical terminology and…*
>
> *Student L:….definitely, yeah…..because so far those who proof read things are just like language teacher…and they're not really used to medical terms and they can only like correct grammar….but not other things. So if you can offer that like someone who's good in medical terms, English at the same time, then make it like more like official or more people more aware of it, I think that would be helpful, especially for second year and third year students.*
>
> Malaysian female 4th year Dn (Tape 6 p.17).

Two participants also pointed out the difficulty of learning medical terms in English and then not being able to translate these back into Malay in their own countries (Tapes 11 and 12).

Another practical suggestion was being able to record lectures and listen to them later which could help not only with learning the factual content but the language and accent as well.

> *…. taking audio recordings of lectures, during health sciences that was the way I really revised my work by re-listening to some of the lectures….I found that was really useful….. because you can't really concentrate throughout 50 mins of lectures, you're bound to miss something. Things aren't always in the slides – it's just useful if we can re-listen to it again.*
>
> Indonesian female 3rd year Dn (Tape 3 p.15).

One participant pointed out the difference between **learning** English and **speaking** the language and the cultural variations in what is considered humorous. He also thought that the problem was shared by both domestic and international students:

> *It's quite difficult to cater for both* [domestic and international students] *because you can give a whole NZ English crash course for all international students and yet when all the international students… speak to Kiwi student, they still don't get it, because it's not the way that we converse. It's not the way that they would understand our intonation or expression. Our gestures does not convey the message we are trying to give. Some things that are funny to us might be insulting for them.*
>
> Malaysian male 2nd year Dn (Tape 9 p.5).

Several other participants from other countries besides Malaysia mentioned the lack of being able to share humour as a barrier between domestic and international students.

Tutor facilitation

The skill (or lack of skill) in involving international students in teaching, made a big difference to confidence and ability to contribute in the learning environment. In

the following quote the tutor was clearly well intentioned but chose an inappropriate subject on which to engage the students.

> *Sometimes it just bugs me so much when the tutor insists so much that we talk. We had this tutor one time….. I don't usually talk that much in tutorials – and what she decided to do is she gave each of us in the tutorial 3 cards and like everytime I talk I have to throw away a card – and by the end of tutorial I have to throw away all my cards. And it was so horrible because it was about the policy in New Zealand about disability and disabled people that I have never even come across, not even in Saudi Arabia – I don't even know the Saudi policy about it, the autistic people. I was like, what the? … I don't know what - I don't have anything to say, and I was like oh yes, but I have to – "you have to"!!! – It annoyed me SO much.*
>
> Saudi female 3rd year Dn (Tape 3 p.13).

Lack of clear expectations about the level at which all students are expected to participate in group discussions could lead to unfair assessment of the international students according to some participants.

> *….some tutors will actively involve international students you know try to get their opinions but some just – not ignore – but they don't take it into account and just carry on with the tutorial. I mean some of my friends they didn't do too well and got called into the Dean's office – but the tutor hadn't said anything to them before that so they were unaware….Unaware that they were being monitored and not doing so well in class so they didn't know they had to participate.*
>
> Bruneian female 3rd year (Tape 7 p.9).

According to one interviewee there could be more subtle differences in the way international students were asked to volunteer information about their home experiences in a teaching situation, particularly as New Zealanders' experiences vary depending on what part of the country they come from.

> *….there are times when we have discussions….. and they will go – 'so what's it like being from a different culture?' And sometimes it's not really much different*

because the world's getting more and more globalised….. I think I would rather they just say ' Does anyone have anything to say from their own growing up or their own cultural experience?' – instead of saying ' So what's it like being from a different culture?'

Singaporean female 4th year Dn (Tape 5 p.4).

Opportunities to share experience from their own culture were apparent in particular parts of the curriculum.

Patient, Doctor and Society…..where they talk about differences in people and culture, how to deal with different people, and they make you share about like how you see things and how your people interact and how your people perceive medicines and stuff. So I think it's a good opportunity to share with others and then at the same time like learning from others as well.

Malaysian male 4th year Dn (Tape 6 p.6).

It was helpful if the tutor asked specific questions to the international students about their culture, people and country in the teaching session to give them a voice and inform the domestic students.

…. we do have a lot of opportunities to talk about our culture especially in the Health and Community module [a second year course]. *…..Last year my tutor he used to ask me a lot about Oman and how's it like and just to compare the cultures and how people react to death to certain situations…. and what does Islam think about this and most of my classmates were interested and positive about me explaining these things …..*

Omani male 3rd year Dn (Tape 10 p.7).

Interviewees were appreciative of positive discrimination by some tutors towards international students which they thought could also facilitate learning.

Most of the consultants are really nice and understanding and some of them I felt they give us more attention than the Kiwi 'cause they see that we are more keen to learn, maybe we are overcoming problems of language, understanding

the culture…

Omani female 5th year (Tape 1 p.24).

An important point was made about the importance of being culturally aware and sensitive when dealing with patients from anywhere in the world.

….. those cultural issues they come up in every single thing, it's not just Health Care in the Community. They come up in respiratory system, in cardiovascular system in – basically in every stream of medicine – especially the clinical side of it. For example the physical examination is quite different if you are dealing with someone from Asia compared to a western society and how do you actually approach it? – and I think it is quite essential because NZ is becoming quite a multicultural society so even Kiwi students, they need to know how to approach the physical examination from different cultures – from a different view.

Omani male 4th year Dn (Tape 10 p.7).

Several interviewees mentioned that it would help if tutors understood why international students were sometimes reluctant to contribute verbally in class. They thought some tutors were impatient and judgemental. They wanted teaching staff to be tolerant of their lack of confidence in speaking English and more appreciative of the fact that the learning and teaching style in New Zealand was very different to most of the international students' experience in their home countries.

…maybe just increase their awareness that some international students might not be as vocal as others and maybe try to get the tutors to get some opinions to actively involve the international students.

Bruneian female 3rd year Dn (Tape 7 p.8).

It could be difficult for students to know exactly what they should do and how they should improve their communication skills when tutor feedback was general rather than specific.

….but one consultant – he just say 'you need to practise more' - *but what*

specifically things I should practise he didn't say. I was quite frustrated, but I don't know…

Malaysian male 5th year Wgtn (Tape 23 p.9).

I think more feedback on how we can better ourselves here – like, say in tutorials – like more feedback on, 'oh, you did this well' . Like it's the general feedback usually that you get on consultations skills and just on knowledge, but it's best probably for us maybe more detailed or more personal feedback on how we could do better – "oh you would do better if you do like this."

Malaysian female 5th year Wgtn (Tape 23 p.8).

Several participants thought that international students also had a responsibility to learn how to communicate better in group teaching and adapt to the more interactive style of learning that exists in New Zealand. There was a recognition that it was not just up to tutors to provide opportunities for everyone to participate, but also for international students to take up the challenge and be proactive in their learning. The following interviewee acknowledged the tutor's dilemma of how to facilitate a student group fairly.

I guess it's quite difficult to be in their position [the tutor] *because they have to consider both. The majority of the group would be of domestic students and for them to help us, to aid us, would be to deprive them – attention wise…. But it doesn't really help us to express ourselves and besides it's quite difficult for them to help us because basically the communication barrier isn't something that you can just – help.*

Bruneian male 4th year Dn (Tape 9 p.3).

Advice for new international students

When asked about advice to a new medical student arriving in New Zealand to study for the first time, many interviewees said it was important to "get out there" and not just stay in a group with students from their own country. They thought

international students should talk and interact with domestic students as much as possible in order to gain confidence in the language and learn about the society and the country generally. In some cases, senior students provided informal mentoring to new arrivals from the same background.

> *....there are things that we have learnt .....that the senior have learnt they will just show to us. It's like they talk to us about some of the stuff that we have to do and the importance to keep relationship with the New Zealander and international student. Yeah, not to like mingle with Malaysian guy only just make sure that you don't feel awkward when you are placed among the Kiwi .*
>
> Malaysian male 2nd year Dn (Tape 8 p.20).

This sentiment was echoed by another participant interviewed in Wellington.

> *don't be too comfortable in your own shell .. with your own group of friends or try to sort of branch out....I mean you don't have to be too chummy but at least sort of try to make friends outside your own group of friends or your race - your own race or culture.*
>
> Bruneian female 5th year Wgtn (Tape 28 p.31).

An IMU participant thought it was important to ask for help if it was needed.

> *...keep an open mind. Try to adapt as much as you can. If you can't... seriously go for help you know. Don't keep it to yourself. I mean, you try coping it yourself, and you seem to...be unable to do it...Go and find help, because people here are...they are willing to help you. So go for it.*
>
> Malaysian male 4th year IMU Wgtn (Tape 22 p.36).

3.2.4 ACADEMIC EXPECTATION AND ENCOURAGEMENT

Several interviewees mentioned the difficulty of not knowing what was expected of them in tutorials or more generally in the academic environment.

I think just also letting the students know the expectation at the beginning of ….the sessions and stuff, like saying that I can be expecting you to contribute and give your opinion…… that's something I think that would be quite useful.

Malaysian male 4th year Dn (Tape 16 p.10).

One of the main things when we first came here is we weren't used to the fact that everyone is quite outspoken – so we go for …. meetings and the lecturer will say 'why don't you just give your opinion now?' and we don't really understand what's going on so I guess one of the things could be some kind of orientation on the sort of talking styles and interaction.

Malaysian male TI Wgtn (Tape 25 p.2).

It was suggested that international students would appreciate being told what to do by teaching staff and that instruction and direction from tutors was expected in Malaysian culture**.**

Like if you feel like we don't talk enough in classes, like, maybe you could just co-direct me, like, just tell….. international students should speak more, or … like encourage us….Be clear what is the expectation instead of letting us do what we want, and stuff like that.

Malaysian female 5th year Wgtn (Tape 27 p.24).

On the other hand, one Malaysian female participant clearly felt liberated by being able to talk and argue in a way that would not have been acceptable in her own culture.

It's seen as being disrespectful with your teachers to go against the teacher, even if the teacher is making a mistake – so I used to do that a lot back in Malaysia – because the way I was brought up maybe – yeah, watch out for this girl - so here [New Zealand] *was like heaven for me…*

Malaysian female 3rd year (Tape 7 p. 18).

Many interviewees mentioned that they would like more feedback and encouragement when they were performing well in the medical training. While all students appreciate constructive feedback and guidance, this may be particularly necessary for students from overseas who are facing cultural challenges and language issues as well as the heavy demands of the medical curriculum. Studying with domestic students in small groups was very helpful, particularly for the OSCE exam.

> *Yeah, we…. like form a group of OSCE, like just to practise and I found it very helpful if we include Kiwis as well, as part of the group…..'Cause just by seeing how they talk and using the right questions to ask…. from the patient is definitely helpful.*

Malaysian female 5th year IMU Wgtn (Tape 27 p.28).

Another suggestion was to have a tutor specifically for coaching in OSCEs for international students because putting on a good performance in practical exams and interacting with patients was potentially more difficult than for the domestic students.

> *... I think OSCE is really important, 'cause I think a lot of the…. other cultures, …. they are real quiet and … they're real submissive. Like they don't really wanna say stuff in front of patients and touch them, and all of this…..I think it would be best, … just like we need someone there to, to…look out for us.*

Tongan male 4th year Wgtn (Tape 29 p.15).

3.2.5 MENTORING

Mentoring of fourth and fifth year students was introduced several years ago at the University of Otago to provide support during the clinical years and provide a

confidential forum to discuss professional and ethical issues in a small group with a clinician. Many participants thought that the mentoring system should be introduced earlier to provide support for international students in the first two years of medical training as well.

> *Student C: And it would be a really good idea if we have it from second year for international student and all those from the same country maybe in one group, it would be really helpful.*

> *Student B: And I think it's really good for second and third year to get the mentor as well 'cause there's lots of things that we're not aware of that – like the policies in New Zealand or what we should do, what we shouldn't do, what's allowed and what's not allowed culture-wise.*

Omani females 5th year Dn (Tape 1 p.31).

Student C thought mentoring carried less stigma than counselling and could be a useful psychological support for international students who were struggling in the early years of the medical course.

> *'Cause most of the student in second and third year they were having problem. I told them: why you don't go to counsellor? They say: no we're not crazy. I said: counsellor not for crazy. But they just can't accept it, they say: oh we can help our own – we can deal with our own problems we don't need to go to someone else to talk about our – our problems. But if there is a mentor there always someone to talk to, even just it's like a sound board.*

Omani female 5th year Dn (Tape 1 p.33).

There was recognition that the early years of the medical training were stressful, even if there was less clinical contact with patients at this time. Some interviewees suggested mentoring at this stage would be particularly helpful.

…..I really like the idea of having a mentor in the beginning of your medical training – I know they have it in the clinical years where you have a specialist or a medically qualified person looking after you….. discussing issues around how you are coping with medicine and things, so it would be a really good idea right from 2nd year, especially for international students I think they really need that kind of support and assurance – you're doing good, you're on track.

Omani male 4th year Dn (Tape 10 p.14).

The suggestion that it would be useful to have more information about New Zealand's medical system, laws and social policies was raised both in the social and medical context, despite the existence of a course in third year on New Zealand healthcare (see Appendix VIII). International students could experience exclusion from conversations with their peers if they were ignorant of some of these issues. They could also be unsure of legal situations and community agencies when interacting with patients.

….I read quite a bit of newspapers and that kind of thing, but I felt that coming to NZ there is a cultural change… Because I've got a bit of background doing psychology papers and law, I am more aware of the legal system, like the mental health acts and things….I think if it was an international student coming just like – not knowing much about NZ it would be a big thing. Because a lot of medicine is about knowing people….. I think the more you know about a place and the culture and the legal system, just the legislation on certain areas – so I think that could sort of be emphasised.

Singaporean female 4th year Dn (Tape 5 p.8).

3.2.6 INTERNATIONAL MEDICAL UNIVERSITY (Malaysia) IMU students

The IMU students who went to Wellington to study in the fourth year found that they were more experienced than their New Zealand counterparts in performing

physical examinations of patients. This is a conversation between a fifth year IMU student addressing her Malaysian colleagues who had been in Otago for four years whereas she had arrived in New Zealand 18 months ago.

> *I think it's kind of different for you guys …. Because… you guys started the first three years of doing pure…. biomedical science study but whereas we come from IMU and we were exposed to…. clinical skills and patient care since we were in the second semester…So we know like how to do a cardiovascular exam respiratory exam and all these things and we have had OSCEs since we were in semester three… so…. doing that is not so much… you know, not a problem for us.*
>
> Malaysian 5th year female Wgtn IMU (Tape 30 p.17).

Similarly, another IMU student, now in sixth year, commented on their superior clinical knowledge and exposure to patients back in Malaysia compared to Otago students.

> *KM: Are there any sensitive parts of the curriculum?*
>
> *Student S: Yeah, gynaecology I think,… well I guess students should be taught properly how to examine female genitalia properly before they go to clinics… I mean I came from IMU and they did teach us very well so I, a few of us didn't have much problems when we did it but…. we did have very intensive clinical experience – so it was good because I had already had opportunities to do a lot of examinations. Apparently when I asked around there has been …. got some problems with gaining opportunities.*
>
> Malaysian male TI Wgtn IMU (Tape 25 p.10).

In summary, factors suggested by participants to enhance the learning environment for international medical students were: small, mixed domestic and international student teaching groups, language support such as proof reading and coaching in colloquial English for interactions with patients, sensitive tutor facilitation and

feedback, and mentoring from a senior clinician in years two and three of the medical course. Participants also mentioned international students' responsibilities to be proactive in their learning, ask for help from staff when needed, and interact with domestic students more to improve their knowledge of the language and culture. IMU students from Malaysia who joined the Otago medical course in fourth year were relatively more experienced in performing clinical examinations than New Zealand medical students in the same year and this was helpful to them to boost their confidence.

3.3 UNIVERSITY SUPPORT FOR INTERNATIONAL STUDENTS

As well as asking about the learning and teaching environment, interviewees were invited to comment on their knowledge and use of student support services at the University. In the following section, participants' views about these services are cited and some suggestions made for how they might be extended.

3.3.1 INTERNATIONAL STUDENT OFFICE

The International Student Office in Dunedin offered important practical advice for all new under and postgraduate students from overseas when they first arrive. They arranged a variety of social events and orientation sessions to the University of Otago and to the city of Dunedin.

They have got international student advisors that help you basically everything that you need like insurance and health – if you're homesick or you need someone to talk to – or official things like visas or getting in trouble.

Bruneian male 3rd year Dn (Tape 7 p.14).

Food fairs organised by the office were mentioned as one way international students could introduce domestic students to their country's cuisine and culture. While some of these fairs have taken place already, more cooking events generally with food from around the world were thought to be an excellent social event to encourage intercultural student communication.

3.3.2 ACADEMIC SUPPORT

In Dunedin, the Associate Dean for Health Sciences (International), WB, was often the first person that international students on Government sponsorship contacted if they had academic, financial or personal difficulties. Most of the Malaysian students had met him in their own country when he had gone over to recruit overseas students to the medical course at Otago. He also organised regular meetings to check how the students were getting on**.**

For us we have this advisor, special advisor, ...that's helpful really and we have like regular meeting with him, like every three months just to see how things are going. So that's another thing that's quite helpful 'cause he's kind of like the link between us and University and our sponsors.

Malaysian female 4th year Dunedin (Tape 6 p.22).

In Wellington, the international medical students contacted PL and his administrative assistant AJ at the Student Affairs office in the Medical School if there were any problems with their studies or for pastoral care. These two people were cited as being very approachable and helpful.

> *…the International Student Dept has been doing a very good job….*
> [AJ and PL]. *... we would just go straight to them, and it was good 'cause we would get – like if we get sick or anything we can get a clinical appointment through the office, or anything like that they are there for us..*

Malaysian male TI Wgtn (Tape 25 p.9).

> *Student UU: The Student Affairs Department are really good…. They are very approachable.*
>
> *KM: Yeah. So you could go to them for anything academic or any…?*
>
> *Student UU: For anything.*

Malaysian female 5th year IMU Wgtn (Tape 24 p.18).

Several participants mentioned the lack of University support for international students who are privately funded compared to government sponsored students.

> *….maybe they could have a sort of an International students support group – not like an association or club kind of thing, just for people that who are actually private students you know with no support system to help them to cope… If you come from a government sponsored group you kind of know at least 5 or 10 other people. But…if you're private… you are just on your own pretty much so it's quite hard – I don't really have family or relatives here so it was a lot of adjusting….*

Singaporean female 4th year Dn (Tape 5 p.14).

The lack of formal support for private students could lead to a feeling of isolation.

> *And there's one more issue about…..private international student……*
> *I think that the sponsored students have their government bodies, or like*

someone that is looking after them, or someone that they can voice up, or the seniors that they can voice up, like they have a bit of a system… a support system…..but….for private internationals…like, where are we in that kind of a support system, or feedback system?

Malaysian female 5th year Wgtn (Tape 24 p.32).

There may be added pressure on private students because of the sacrifices their families have made to meet the financial costs of sending them overseas to study.

3.3.3 STUDENT ASSOCIATIONS

The international student associations and clubs at the University of Otago played an important role in supporting overseas students, particularly on first arrival in New Zealand. Many participants mentioned these associations and the "buddying" system as the main support for them when they were new to the country and academic environment. More informal arrangements included family connections, meeting fellow countrymen and attending church. Some participants mentioned the importance of friends, telephoning family at home and being able to buy familiar foods to comfort them in strange surroundings.

One interviewee talked about the role of the Malaysian Students Association:

….it doesn't do so much of pastoral support per se…….though having said that they have socials and stuff like that and then you get to meet the older students and you know, they sort of like keep an eye on you…

Malaysian female 4th year Dn (Tape 16 p.5).

Some help had also been provided by the sponsoring body in Malaysia and senior students already in New Zealand.

> *We had like a briefing with our sponsor. They helped us prepare everything and gave us a small briefing about New Zealand and how it's different than Malaysia and our seniors from New Zealand actually came down and gave us their contact details so that when we come here we are not going to be lost.*

Malaysian female 3rd year Dn (Tape 7 p.3).

The Otago University Student Association (OUSA) and the Otago University Medical Student Association (OUMSA) both organised social and cultural events to facilitate integration between domestic and overseas students.

> *.....and the OUMSA…. they are initiating…. a programme called 'Origin' .....It's like basically each month or each two weeks they have students from a particular country – medical students - to present and talk about their country and to talk to the whole class medicine and present it in the OUMSA magazine. So they take turns, the Malaysian, the Bruneians, the Chinese and Omani.*

Omani male 4th year Dn (Tape 10 p.8).

The Saudi club became involved in academic issues, providing weekly classes in English in collaboration with the Language Centre at the Dunedin campus. One participant also indicated that the club sometimes mediated between Saudi students enrolled in foundation year courses and the University on problems with attendance and attitude (Saudi male 3rd year Dunedin Tape 15). The Saudi club was active in arranging social events at the Mosque which included Muslim students from other countries such as Bahrain and Oman. Members had also prepared written information for prospective Saudi students about airlines, visas and how to set up a bank account in New Zealand. The information included reminders about foods that you could not

bring into New Zealand (honey and dates) and important things to bring with you (warm clothes).

Similar practical help had also been offered to students from Brunei.

> *We had a good support system through the Brunei Students Association as well, and they do a really good job of showing us around and opening bank accounts and phone lines and things like that…*
>
> Bruneian female 3rd year Dn (Tape 7 p.2).

In some cases, there were only a few students from one country such as Oman and the importance of the Omani Student Association to them was crucial.

> *...some students they find themselves okay without* [a national association] *- and sort of just experiencing a different culture… so sort of mix with it. But for me….. I don't know the roots or the sense of being affiliated, and being part of the Omani culture is really strong, and I can't sort of live without it* [Omani Student Association].
>
> Omani male 4th year Dn (Tape 14 p.10).

3.3.4 STUDENT HEALTH SERVICES

There was mixed experience of visiting Student Health Services. One participant said that Malaysian students tend to be conservative about accessing health services and were worried that the doctors and staff would not understand their problem because they were not international themselves (Tape 16).

Another interviewee had found it helpful when a nurse from Student Health

Services had addressed international students directly about how to use the service and what was available to them (Tape 19).

In Wellington, the Student Medical Association had just created the post of international student representative to help IMU students particularly.

> *……this year now – At IMU we would have an international rep, international cultural society, all these different things to help you. And they really help you. Like I have a few international friends back in Malaysia as well and…..just say I had a Kenyan friend and if a Kenyan student was coming…..they will call this Kenyan person….. my friend to play, to be an entourage* [tour guide?] *and ease them of the city and stuff. So, they actually do all that, which I guess helps, you know…..*
>
> Malaysian male 4th year Wgtn IMU (Tape 22 p. 44).

3.4 ALCOHOL AND FOOD

Alcohol and food were mentioned so frequently as important cultural issues for international medical students that they warrant a separate section within the results of the research. When asked about cultural differences between their home country and New Zealand, nearly all interviewees mentioned the consumption of alcohol by students and the general population as something that struck them particularly. It was not only the drinking culture that shocked them, but the fact that almost all social events organised by the University or Medical School seemed to involve alcohol. As one participant pointed out, it was worrying that medical students were not looking after their own health when they drank too much alcohol, even though they were well aware of the dangers. Many of the interviewees in this study from religious backgrounds other than Muslim, were uncomfortable attending occasions where

people might become drunk. Most had never seen anyone intoxicated before. There were also incidents of racism associated with drunken behaviour.

> *…. when I first come…. because I wear the head scarf and then….if I'm like walking back from the hall from today and usually there are all the drunks - they'll be shouting, like….Go back to your country! Yeah, pretty shocking, but I - you get used to it.*

Bruneian female 4th year Dn (Tape 26 p.1).

> *……in the eighteen years that I lived in Oman I didn't see anyone really drunk, from the second day I came to NZ I saw people drunk…"*

Omani male 4th year Dn (Tape 10 p.23).

Many of the student social events organised by OUSA and OUMSA in orientation week at the beginning of the semester involved alcohol.

> Student F: …..*I think one of the disadvantages for us especially. Med started with the whole orientation programme and most of those events are alcohol orientated – so a lot of the Muslims didn't attend it – myself included. So we didn't go to the pirate party at Larnach castle, we didn't go ……..*
>
> *Student F: – there was treasure hunt ….*
>
> *Student G: – yes, on Friday at 1-2, which is basically our time for meditation so basically we just didn't go. And that was when people started to get to know each other, so that was right in the start of med school – when people are starting to get to know each other….*

Saudi and Indonesian males 3rd year Dn (Tape 3 p.21).

Because most socialising at weekends by domestic students involved drinking, international students could feel left out and unable to contribute to the conversation.

> ***…..****But for me myself, I mix with Kiwis in my tutorial. Like if I come early and they come early so we talk, talk about general things…can't really go*

with them because they always talk about party – or what they have done last weekend.

Malaysian female 2nd year Dn (Tape 11 p.17).

I reckon it's also a very important factor whether you can mingle with the Kiwi students as well. I mean if you don't drink then it's hard to hang out with them as well.

Malaysian female 4th year IMU Wgtn (Tape 23 p.16).

Because for us to have conversations with domestic students we need their common ground to talk on, and not having a social event together or things to talk about, like movies and things like that, we don't go to any of those event with them, we don't have as many common grounds as domestic and domestic students would have. So it's quite difficult for us to even have small talks.

Bruneian male 3rd year Dn (Tape 9 p.11).

The use of alcohol after sporting events also excluded students who did not drink. The following participant was a member of the varsity soccer team.

I'm not very good friends with all of them because they go out together and drink together and I don't with them so I feel kind of left out – and same thing for some of the activities that are run by the med school association and they have balls and a lot of drinking – always alcohol.

Omani male 4th year Dn (Tape 10 p. 24).

Another problem for - for Muslim students in the medical school is like when they are organizing a social event anything that involves alcohol normally we won't go…..We can't go. So that's probably…. more than half of the social events.

Malaysian female 4th year Dn (Tape 6 p.20).

Being left out of domestic student activities was mentioned in many of the interviews as well as some dietary preferences that made joining in group meals during or at the end of a clinical placement difficult.

.....there's also a problem like if someone going to do… a group dinner and I have a problem like… I would start thinking about going to the pub or they wanted drinking and I can't really join them so that kind of put off me from going to the group dinner…..Yeah and then I would have to ask can you all please do it on a vegetarian restaurant…. that sort of thing….

Malaysian female 5th year IMU Wgtn (Tape 30 p.18).

.....it come more pronounced when we first get into second year medicine, that's all the events it's associated with alcohol and every time they ask us: why you girls don't want to come with us? And we just told them: we can't go anywhere with alcohol. And they felt that yeah we're not really cool girls.

Omani female 5th year Dn (Tape 1 p.7).

However, the participant from Oman quoted above had also had the experience of being included in a group outing by her peers, a fact she had greatly appreciated. The occasion was a meal out which had been organised by a domestic student who found a vegetarian Halal restaurant and arranged that there would be no drinking alcohol until after the meal was finished.

Lack of experience of a drinking culture could also interfere with communication with patients according to one interviewee.

I feel that people here, the Kiwi students…. when you ask questions about alcohol or when they try and talk to the patients they can relate personally because they have gone through it when for us because we have not gone through it, it's one of those life experiences that we can't….

Malaysian female 5th year IMU Wgtn (Tape 23 p.16).

When asked what would help international students integrate more with domestic students, many participants commented that it would be useful to have more social activities organised by the University and medical school without alcohol at all.

According to some of the interviewees, OUMSA and the International Student Office were putting on more events such as movie and quiz nights and meals for all students that were alcohol free (Tape 10). One Omani fourth year male participant was cynical about whether this would actually happen as he had been a representative on OUMSA and thought it was *"all talk, no action"* (Tape 14 p.8).

Only one participant commented that she loved wine so she did not mind attending social events with alcohol (Bruneian female 2nd year Tape 13), but she also thought it was important that New Zealand students realised it was possible to party hard without alcohol and suggested quiz nights to bring domestic and international students together.

The importance of sharing food together was mentioned by several interviewees as a positive way of domestic and international students interacting and getting to know each other. There were also big differences in the way parties were organised in New Zealand compared to similar events in the international students' home countries.

> *It was funny but the first party that I actually attended over here…. –with Kiwis - I thought it would be like a party with Malaysians. You go to the house and there will be heaps of food, just 3-4 tables of just food and then we have a huge cake and everybody eats and everybody sings and everybody eats and everybody sings – and everybody plays games and eat and talk and that kind of thing. And I came here and I was like where's the birthday cake? and there was like one table of alcohol drinks – and I was like wow! – and then there was this other table with like chips – and there was dancing but it was so dark and I was like – where's the FOOD?"*
>
> Malaysian female 3rd year Dn (Tape 7 p.4).

Another issue was the lack of eating together as a family and the different timing of meals in New Zealand compared to at home. Obviously this point is not just related to

international students but the experience of all students leaving home for the first time. The following was a conversation between two students from Oman.

> *Student T: The kind of food that we are used to – not the kebabs and falafels and that sort of stuff – but …..the usual lunch meal in Oman is rice.. and here it's like changed – and like lunch is the main meal of the day back in Oman and everything sort of shuts down in the afternoon……because it's really hot and sunny. But here you have like 45 minutes break, and you just have to rush to the store, get a sandwich – so it's quite different….*
>
> *Student U: The other thing is the family connection – actually you lose once you arrive in New Zealand because you are a student…. and you have a busy schedule studying from 9 till 4 or 5 and you don't actually get the time to sit with your family and to eat something – which is quite different. I guess it's a new life, a student's life but… it's a big…. because back home you eat breakfast, lunch and dinner with your family plus snacks as well so we get together, the whole family and we sit in the same area and we eat together and we discuss things….*
>
> Omani males 4th year Dn (Tape 10 p.2).

Bringing food to tutorials was mentioned as a good way to bring the group together and one interviewee had had the experience of weekly sharing of snacks initiated by the tutor but then carried on by the students. She suggested that this had facilitated communication and broken down barriers between the domestic and international students (Bruneian female 3rd year Dunedin Tape 12 p 29). Several interviewees also mentioned the importance of Halal food provision at Cumberland Hall (one of the large student accommodation halls in Dunedin) and living on an alcohol-free corridor there.

One participant suggested that the University could organise more expeditions for international and domestic students as a way to encourage integration.

> *The trip must be like educational purposes and not like just go to the bar and something like that…maybe go to the marae and then go to the other places, for example, Wellington….to go shopping or something…so that*

we can mingle with these other students, I mean for two days or three days ..... We can go like do tramping or trip, a fishing trip, something like that.....

Malaysian male 2nd year Dn (Tape 8 p.19).

3.5 PREPARATION FOR COMING TO STUDY IN NEW ZEALAND

While the main focus of the research was on international medical students' experience of the learning and teaching environment in New Zealand, it is relevant to consider the information the interviewees had received in advance about the host country and University of Otago before they arrived there. From the interview material analysed, there appeared to be a range of experience among the participants, on how much preparation they had been given in their own countries before coming to New Zealand. Some students had only had a few days notice after taking exams before they boarded the plane and left home to start their studies abroad. There was a particular problem for students from Brunei who reported arriving a month after term had started so that they had missed orientation week and the introduction to the health sciences first year (Tape 12 p.12). One participant had actually arrived on the Easter weekend when most shops and the medical school were closed.

……yeah, cold, rainy Good Friday. I wasn't used to the cold back then, I mean I was used to like average 32 degrees.....And I think - I was in a home-stay, because I was….how old was I when I came? 17……Maybe I was feeling quite homesick back then. And, I really wanted to stay with my friends but instead I got separated and, so got so depressed.....

Bruneian female 5th year Wgtn (Tape 28 p.3).

Some interviewees mentioned the usefulness of the New Zealand studies course as an introduction to the host culture. The course had been offered in the foundation year before health sciences first year.

The IMU students who joined the medical course in fourth year in Wellington had less than a month to prepare for coming to New Zealand.

> *Student P: ….before coming over we have to prepare a lot of stuff, get our visa done and yeah… not much time to know a lot about NZ.*
>
> *Student QQ: …..we have that system called the matching system where you are matched by different Universities around the world so you basically find out which country you are going to towards the end, so have less than a month …*
>
> Malaysian male and female 5th year IMU Wgtn. (Tape 23 p.2).

These interviewees thought that a bridging course specifically for IMU students would be very useful and more information about accommodation options in Wellington.

> *….probably for the transfer students like us it's good to have probably a transition course – to help us with the things we don't know - what have the class learned in the past and what have we learned, is it similar? Is it the same? – or you know – stuff like that…*
>
> Malaysian female 4th year IMU Wgtn (Tape 23 p.11).

One of the IMU students who had been in the first cohort of Malaysian students to join the medical course in fourth year in Wellington in 2007 mentioned the three day orientation course in Christchurch as particularly useful as it included teaching on ethics and health topics that were relevant for the final exams (Tape 25 p.1).

Clearly it is more difficult for the IMU students to integrate with the domestic and international medical students who have formed their own friendship bonds and cliques by fourth year.

> *….it's not really that easy to mingle with the Kiwi friends – they tend to stick with their own group…. we tend to do the same, stay with our own friends from the same country – and so I think it takes a while for us to know each other – and especially students from IMU, you know we have not been with them like in the past few years ….*
>
> Malaysian female 4th year IMU Wgtn (Tape 23 p.14).

International students who had started the medical course in Dunedin and then moved to Wellington campus in the fourth year commented on the relative lack of support for them in Wellington because there was no International Student Office and the Associate Dean for Health Sciences (International), WB, was based in Dunedin. However, there was acknowledgement that the situation had improved since PL had been appointed in the Student Affairs Office to take responsibility for international students.

> *I think in Dunedin I just found it easier to sort of know what I was meant to do or just to get directions on where to go or what to do, whereas in Wellington I'm more on my own and have to figure out my own way to do things.*
>
> Seychelles female 5th year Wgtn (Tape 21 p.7).

According to several participants, there were also fewer international student associations and University organisations such as Clubs and Societies in Wellington. It is difficult to know if this perception was correct or the clinical rotations in fourth, fifth and sixth years allowed less time to explore wider University activities.

> *I was homesick* [for Dunedin] *when I moved to Wellington….. Because we had all this, I was quite active in third year, in OUSA and things. And then suddenly it's gone.*
>
> Indonesian female 5th year Wgtn (Tape 28 p.23).

The lack of student halls providing accommodation was also an issue in Wellington. International students, particularly the IMU students, found it challenging and difficult to go about renting a flat for the first time in an unknown city in a new country.

Preparation for coming to study in New Zealand among the interviewees varied as did the amount of time they had between completing their studies at home and moving abroad. The amount of prior information given to international students depended partly on whether the Associate Dean for Health Sciences (International), WB, visited the country concerned on a regular basis or not. The student associations played an important role in providing initial induction, contact with senior students who could act as mentors and on-going support for social and cultural activities. The International Student Office in Dunedin was also very helpful and the Student Affairs Office in Wellington offered a mix of practical and academic support.

To summarise, in this chapter the demographics of the international medical students interviewed have been described. Participants' perceptions of factors that inhibit and enhance learning in the educational environment have been considered. The University and student support services have been discussed including the role of international student associations and Student Health Services. Issues concerning food and alcohol featured often in the responses to questions about cultural differences

between New Zealand and the international students' home countries. These issues have been highlighted to show how integration between domestic and international students can be hampered by different social mores regarding the use of alcohol. Many of the social events organised by the University or medical school excluded international students from participating because alcohol was present and was often consumed in excessive quantities by the domestic students. Therefore, opportunities for intercultural exchange and learning between domestic and international students were lost. Finally, preparing international medical students for studying and living in New Zealand has been described with particular reference to the experiences of the IMU students in Wellington, who join the medical course in the fourth year of the curriculum.

CHAPTER 4

DISCUSSION

4.1 OVERALL FINDINGS

It was encouraging to find in this qualitative research project that the vast majority of international medical students enjoyed studying and living in New Zealand. Many students mentioned the friendly welcome they had received, both from the University and from residents in the country generally. While it could take some time for international students to adapt to the cultural and academic environment, the medical training with its emphasis on safe practice and a patient-centred approach was perceived as excellent.

In this chapter, the main themes emerging from the results will be discussed and linked to previous studies of international medical students. Participants' experiences in the academic environment and their use of various support services will be considered and new insights from the research will be identified. Suggestions from participants about how to improve the learning and social environment, and specific support that could be offered in the future are discussed within each topic area.

The strengths and limitations of the study are discussed at the end of this chapter.

4.1.1 ACADEMIC ENVIRONMENT

It is important not to make sweeping generalisations about cultural differences in learning styles and recognise that international medical students tend to be high achieving adult learners who can adapt how they learn. Nevertheless, it was striking that almost all participants commented on the interactive learning and teaching style of the medical course at the University of Otago and contrasted this with the more didactic teaching style in their home countries. This was true not just for the interviewees from Asian countries but also for those from Middle Eastern countries such as Oman, Saudi Arabia and Brunei. Two participants from the Seychelles were more familiar with interactive teaching methods, but thought the manner in which New Zealand students talked to tutors would be seen as disrespectful and loud in their own country.

Many of the international medical students interviewed had experienced "academic shock". Ryan and Hellmundt (2005) describe this phenomenon as occurring when learners are in unfamiliar social and cultural environments and cannot assimilate new knowledge because it does not fit in with their previous experiences in their home context. The dissonance that can result is psychologically disturbing and can lead to *"feelings of exclusion and alienation, perhaps damaging self-esteem and further hindering the learning process"* (Ryan and Hellmundt Ibid p.14). Some of the interviewees mentioned the alienation they experienced in the learning environment when they could not participate, were ignorant of certain social or cultural practices, or when they struggled to understand the colloquial language used. As the

international students progressed through the medical course, their linguistic confidence improved. The improvement in their language skills may have been partly due to the small group teaching they received in the ALM years, which provided a less intimidating educational experience than learning in a large group setting. Increased familiarity with idiomatic language and cultural practices over time also facilitated participants' confidence in speaking and talking to patients and staff.

Several interviewees talked about the spoon-feeding approach to education at home (Tapes 7, 9, 15, 26 & 27), involving the rote learning of facts which may lead to "surface learning" as opposed to "deep learning" (Gibbs 1992 p.2). Others have disputed this premise and suggested that the process of memorizing facts may lead to deep learning as well (Biggs 2003 p.126). One could argue that all education at a tertiary level should encourage "deep learning" and how to think abstractly in new situations. However, the interactive approach to learning and teaching emerged as one of the most stressful aspects of the curriculum for the international students, perhaps because of the "cultural distance" in learning styles they experienced between their home and host cultures. Previous research among international students studying creative arts courses in the UK reported similar findings of stress and "study shock" (Slovic 2008), which suggests that these problems are often generic for students coming to study abroad, irrespective of the actual degree course involved.

Several participants contrasted the style of teaching in New Zealand which emphasised the importance of learning to think and work things out from first principles, with teaching in their home country which concentrated on students memorizing facts. It suggests that in the New Zealand medical curriculum, priority is

given to teaching students to develop deep learning strategies as described by Gibbs (1992 p.6) in his description of levels of student understanding with levels four and five respectively, characterised as: learning as making sense, and learning as understanding reality.

Participants were not asked specifically what sort of learning style they preferred, according to Kolb's (1984) descriptions cited earlier. However, it appeared that the mixed methods of teaching and learning used in the medical training at the University of Otago provided plenty of opportunities for all styles of learning. Many interviewees had clearly adapted to the interactive style and embraced unfamiliar methods of learning. However, some participants in this study identified problems with assessments such as OSCEs and cited larger numbers of international students failing these exams than domestic students. Research by Wass et al. (2003) showed that students from ethnic minorities in the UK (though not necessarily international students), performed at a significantly lower level than that of white students in a final year objective structured clinical examination. They suggested that subtle differences in communication style by a small group of male students could account for their poorer performance, as well as examiners' assumptions about what constituted good communication. Wass et al. (2003, p.802) concluded: "*Issues of diversity in test construction and implementation must be addressed to ensure that students from ethnic minorities are not disadvantaged."* Interviewees in the research at the University of Otago mentioned their dissatisfaction at the assessment process in OSCEs and mentioned examiner bias. Communication issues are discussed further in the following section 4.1.2.

Participants' suggestions about how to improve the learning environment at medical school in New Zealand reflect findings from previous studies on international students carried out in other parts of the world. Kingston and Forland's study (2008) of international students studying in disciplines other than medicine in the UK, proposed various recommendations about how to meet these students' needs at an institutional level.

> *Participants agreed that, at first, it was a riskier and more nerve-racking option to study abroad but argued that rather than hindering them, this risk actually motivated them to work harder. Finally, with respect to how the university could improve its international students' experience of Higher Education, all participants agreed it would be useful to gain insight into the expectations of the UK's education system and university's policies of learning and teaching before, or early on in their courses. It was suggested that this could be remedied by sending information to students before they came to the UK, and/or by developing an induction week, or set of workshops early in the first term. Other suggestions involved a proof reading service (which has since been implemented) and better publication of available support services.* (Kingston and Forland 2008, p.216)

Many of these points overlap with the results from this study in New Zealand and demonstrate the generic issues facing international students worldwide.

Participants' suggestions to improve the learning environment for international medical students were:

- Clearer information about the interactive learning environment before coming to New Zealand. (Information would include: expectations about student participation in large groups, students being independent learners, challenging ideas, and entering into discussion with their peers).
- Encouragement and feedback during the medical training. It would help to receive specific feedback at the time of assessments.

- Sensitive tutor facilitation, perhaps through giving tutors more information about the backgrounds of the international students and the academic learning and teaching styles in their native countries.

The last point about informing tutors about the academic learning and teaching styles in different countries is contentious. There is a danger of stereotyping national educational practices and failing to recognise the dynamic changes that may be taking place within secondary and tertiary institutions as a result of globalisation and new educational pedagogies.

4.1.2 COMMUNICATION

Communication issues underpinned many of the difficulties that interviewees mentioned when asked about the learning environment at medical school. Particularly at the beginning of the course, participants commented on the problems they had with understanding different accents, being understood themselves and having enough confidence to communicate with staff, patients and peers in a second language. Some participants expressed resentment that they might be judged by tutors to be disinterested in learning because they did not always participate in class discussions. Similar research findings have been documented before among international students in the UK, USA and Australia enrolled in a variety of courses including medicine (Kingston and Forland 2008; Steele 1997; Hawthorn et al. 2004). Interviewees gave several reasons for their reluctance to join in group interaction: lack of fluency in

English, previous experience of being a "passive" learner, and being inhibited by the more dominant behaviour of their New Zealand peers.

Many of the interviewees in this study talked about the problems of failing various formative and summative assessments. They attributed their poor performance to their lack of linguistic fluency, hesitancy and not always knowing the right way to phrase questions or interact appropriately with patients, but not to their lack of commitment or work. The perception that teaching staff underrated the international students' abilities, relates to Woolf's finding of "stereotype threat". In her study of ethnic minority students in the UK, stereotyping by tutors led to underperformance of Asian medical students in the clinical years (Woolf Ibid). Research from other parts of the world has found similar results. There is often also a mismatch between the expectations of teaching staff and international students' regarding academic performance (Bartram 2007; Brebner 2008; Pang 2008; Woolf 2008).

Hellsten (2002, p.10) comments on the dual problem of language and acculturation for international students coming from a different educational tradition:

> *It seems apparent that the transition between "passive" (non-Western) and "active" (Western) classroom cultures coupled with the insecurity imposed by adverse cultural know-how and less than adequate competence in language skills carries a particular kind of vulnerability. In light of such uncertainty, one may find oneself a silent participant of a critical classroom discussion regardless of one's preferential teaching/learning style.*

Previous research has shown that lack of good communication and cross-cultural skills in medicine can affect international students' grades and performance

(Hawthorne et al. 2004; Liddell and Koritas 2004), which may account for the disproportionate number of international students failing the OSCE assessments.

Some interviewees also commented on the challenge they faced in writing essays or case reports. These findings have been reported in many other studies and are not a surprise (Johnson 2008), although there is little in the literature about the added difficulties of learning a whole new technical language within medicine for overseas students. It can be difficult for international students to translate medical terms learned in English back into their native language and this fact was mentioned by several of the interviewees. Training in colloquial New Zealand English relevant to medical consultations would be helpful and has been shown to improve confidence and competence in communication among international students in Australia (Chur-Hansen 1996).

Some participants commented that the patient-centred approach encouraged in New Zealand medical training, would not be an appropriate way to conduct a consultation in their own countries. It is beyond the remit of this thesis to explore the transferability of skills from the University of Otago's medical curriculum to other countries, but it raises other relevant research questions which could be addressed in future studies.

Participants' suggestions for improving their communication and familiarity with colloquial New Zealand English were:

- Training in colloquial language used in medical consultations (this is already happening in year two for some international students).

- Proof reading of written work by someone who was knowledgeable of medical terminology.
- Audiotapes of lectures and lecture notes available on Blackboard (the University's virtual learning site).
- Coaching for performance-based assessments such as OSCEs.
- Small group work with a mix of domestic and international students to enhance language acquisition and ways to relate to patients.

4.1.3 EXPECTATIONS AND CLARITY

If we do not see the failure of certain assessments during the medical training as a deficit specific **to** international students, but rather as a failure of the teaching and preparation of the students **for** these assessments, it begs the question of how to remediate the situation. Pang (2008) comments that the academic learning needs of international students have largely been ignored by host institutions, which expect overseas students to adapt to the academic norms of the providers. The result is that international students can be underserved and overlooked, as well as not reaching their full potential (Pang Ibid. p.3). He suggests that:

> *From the 'distributive justice' perspective, students who do not share similar academic traditions with New Zealand must be given assistance to integrate into the teaching and learning cultures and prepare them to meet the academic requirements.*

It is not clear in current academic thinking whether students from overseas are expected to adapt to the New Zealand educational system and pedagogical traditions, or whether (and to what extent) the host institution has a responsibility to assess and

respond to these students' learning needs. There is no easy answer to this dilemma. At the time this study was carried out, remedial help was generally only offered when a student failed an assessment or task in the medical training. This approach is in contrast to the nine point programme offered at Melbourne University (Hawthorne Ibid.), which is proactive in identifying problems that international medical students may be having very early on in the course and offering extra help at this stage. Developing and delivering such a programme is expensive and relies on specialist training of motivated staff and support for students, particularly in the areas of communication, attitudes and learning styles. The advantage of providing a structured intervention tailored to individual student need is that it may allow students to succeed rather than fail, and to progress through the training more effectively and efficiently. Ultimately patients will also benefit from seeing doctors who are linguistically competent and culturally sensitive.

There was little response to the question about whether extra training in certain specialties such as psychiatry or gynaecology would be useful to international students in particular. It is probable that many of the participants had not had clinical experience in these areas yet or did not perceive these specialties as requiring additional communication skills.

4.1.4 ACADEMIC ADVISING

Pang (2008) suggests that academic learning advising is one strategy that can help international students overcome learning barriers and would support the Ministry of

Education's international education strategy of 2007 which recognises the importance of engaging international students of Asian backgrounds in particular. The strategy is learner-centred, concentrates on the development of academic skills over time and involves active participation by the student, rather than solutions being "prescribed". He emphasises the importance of : "*accepting students 'as they are', using their learning experiences as a foundation for capacity building, and avoiding passing judgement on them as deficient or incapable of forming personal learning strategies."* (Pang 2008, p.4)

Clearly the content and focus of the academic advising process would vary depending on the demands of each different course. Medical training requires a range of practical and conceptual skills which challenge all students, not just those from overseas. Academic advising offered at the beginning of the medical training, might meet some of the participants' desire for more preparation for the learning environment they are entering. It could also offer clear academic expectations and build on international medical students' prior skills and knowledge so that they could develop their learning strategies effectively and fulfil their potential.

4.1.5 FACILITATION OF LEARNING

Participation by international medical students in many different learning situations was facilitated by sensitive tutoring and encouragement. Small group work with the domestic students also helped to break down barriers, develop language skills and confidence in talking. This was mentioned by interviewees particularly from the

later years of the course (ALM), when they were doing regular consultations with patients and presenting oral case studies on the wards or in the general practices. A recent study (Johnson 2008) in New Zealand among social science students is relevant to the finding of the benefit of small group work. In this research project, lecturers were observed teaching so that the types of language and instructional styles they were using could be elicited. Both lecturers and international students were interviewed to find out which aspects of degree study the students found most difficult and how effective the lecturers thought their course was overall.

> *What emerged from the interviews was the fact that EAL* [English as an additional language] *students liked and coped best with practical 'hands-on' types of tasks. Importantly, through engagement in such activities, they were able to establish rapport with domestic students. This contrasted with discussion-based group work in which it was rare for domestic student and EAL students to cooperate and interact.* (Johnson 2008, p.238)

Medical training involves a mix of learning scientific facts and developing deductive reasoning skills, as well as an appreciation of individual patient experience of disease. In the fourth, fifth and sixth years (ALM), practical hands-on training builds on students' existing knowledge and hones their clinical intuition and judgement. Students also learn about and practise communicating effectively with patients, peers and colleagues in order to become safe practitioners. The clinical rotations in the ALM part of the course ensure that the students work in small groups in a hospital or community setting, composed of both domestic and international student members. It was clear from the interviews that ward-based (bedside) teaching in small groups and OSCE study groups were highly valued by the participants and seen as less threatening than discussion-based teaching in large groups.

In Ward's review (2001) of the impact of international students on domestic and host institutions in New Zealand, she found that:

> *Those who have greater contact with domestic students appear to "fit in" better (Kagan and Cohen, 1990). They also develop greater communication competence….and more confidence in the use of their second language…. Additionally, there is some suggestion that greater contact with locals is associated with more positive assessment of teaching quality….and greater academic satisfaction (Perucci and Hu, 1995).* (Ward 2001, p.6)

Treloar's (2000) study of international and domestic medical students at Newcastle University in Australia reported similar findings and concluded that students who felt alienated and isolated from the medical school community tended to withdraw from learning opportunities based largely on verbal interaction and group activities (Treloar Ibid. p.714). If greater contact with domestic students is beneficial to international students academically, it suggests that both the learning and social environments need to be taken into consideration by the medical school and University when planning how to maximise international student engagement with the medical course.

Participants' suggestions to enhance learning included:

- More multicultural learning opportunities.
- Mixed group work with domestic and international students exchanging ideas.
- Clearer academic expectations during the training.
- More social activities organised by the University at which domestic and international students could mix.

4.1.6 DISCRIMINATION AND RACISM

Interviewees in this study reported few instances of racism within the University, apart from one Pacific Island student, but many had experienced occasional racist remarks in the wider community. One Bruneian student had had eggs thrown at her. These instances occurring in the city streets were put down to youthful drunken behaviour in Dunedin. Muslim women wearing a headscarf are clearly more visible and identifiable as "other" than international students from non-Muslim backgrounds or Muslim males. Many participants mentioned the problem of being overlooked in class, marginalised in the teaching environment and discriminated against by examiners in performance based assessments such as the communication skills exams or OSCEs. These experiences could contribute to a feeling of being an outsider and treated differently to the domestic students. Beagan (2003, p 857) calls this "everyday racism" in which the dominant group asserts its power over the racialised minority and conveys messages about "belonging and not belonging." She comments:

> *Most dominant group members do not actually want to enact racism, although we may be reluctant to give up power, which is an essential component of challenging racism. Most everyday racism is unthinking .....one step towards unlearning everyday racism is to be more mindful of our own practices, be more self-reflective, turning a critical eye on ourselves to see in what ways we enact the processes of everyday racism.* (Beagan 2003, p.859)

In the interviews conducted in the research, reasons for any discrimination experienced were attributed to a number of different causes. These included: tutor preference and prejudice, negative stereotyping by both domestic students and staff, and ignorance on the part of the New Zealand students who had limited experience of travel or interacting with peers from overseas.

Although the majority of participants interviewed came from Malaysia, racist remarks and discrimination had also been experienced by several interviewees from other countries. It may be relevant that there are very few role models from the same country as the international medical students within the Medical Faculty at Otago. The majority of consultants and general practitioners are Pakeha and male, with a minority of doctors from the Asian south continent or Middle East in positions of authority. Much of the teaching revolves around patient case scenarios which are also of European origin, despite New Zealand's increasing multicultural society. This latter point illustrates Turbes' point that the "hidden curriculum" plays a subtle role in modelling "norms" to which many international students may find it difficult to relate.

Previous studies have found mixed views from both staff and students about the benefits and disadvantages of domestic and international students working together in groups (Volet and Ang 1998; Bartram 2007; Kuteyi et al. 2009; Summers and Volet 2008). In this research at the University of Otago, when positive discrimination of international students by peers and teaching staff did occur, it was highly appreciated by interviewees. Examples were cited of good, inclusive teaching practice which gave the international students a voice and valued ways to contribute in the classroom. For instance, in the new medical curriculum introduced in 2008, there were more occasions than previously at which international students were invited to talk about their own experiences and cultural practices in their native countries. The module in Culture and Health in year two is a welcome innovation where some of this interactive discussion takes place. Bedside teaching on the wards by registrars and

consultants was mentioned as particularly helpful for overseas students, as they felt able to ask questions in a safe environment.

In Woolf's (2008) qualitative study at a London medical school, which explored ethnic stereotypes and underachievement, clinical teachers were interviewed as well as students from ethnic minorities. An important conclusion was that:

> *Asian clinical medical students may be more likely than white students to be perceived stereotypically and negatively, which may reduce their learning by jeopardising their relationships with teachers. The existence of a negative stereotype about their group also raises the possibility that underperformance of medical students from ethnic minorities may be partly due to stereotype threat. It is recommended that clinical teachers be given opportunities and training to encourage them to get to know their students as individuals and thus foster positive educational relationships with them.* (Woolf 2008, p.211)

It is encouraging that some interviewees reported ward-based teaching in such a positive way, as both domestic and international students have complained about the "teaching by humiliation" practices that still exist and are regularly described in the Thought Provoking Episode Reports (Walthert 2009) which students write in years four, five and six of the course as part of the professional development thread. The reports are intended to promote critical reflection and analysis of students' experiences with patients and staff, and encourage lifelong reflective practice.

4.2 SUPPORT SERVICES

Many interviewees mentioned the important role of the Associate Dean for Health Sciences (International), WB, in providing support, practical information and a link to

the agencies sponsoring their study in New Zealand. Participants who had moved from Dunedin to Wellington campus for the ALM years commented that they missed the regular meetings with WB and felt that there was generally less support for international students in Wellington. Despite the lack of an equivalent post to WB in Wellington, there was universal praise for PL and his administrative aide AJ at the Student Affairs Office.

The lack of support for private international students was mentioned by several of the thirteen private students interviewed in the study. While these students could access student services in the medical school and wider University, they clearly indicated that they would also appreciate regular formal meetings with an advocate and adviser such as WB to offer practical and pastoral support.

Use of other support services such as the Student Learning Office or Student Health Services was variable among the participants. There was no evidence that the international medical students were overusing University support services. If anything, they were probably under using counselling services and getting help for psychological difficulties, perhaps because of different attitudes to mental health issues in their own countries. The International Student Office was reported as particularly helpful when participants first arrived at the University in providing an orientation programme and cross-cultural social events. The international student associations were also crucial in providing information, help with accommodation, a 'buddy' system for new arrivals with more senior students, and giving cultural reference points. Support from domestic students was not mentioned apart from a few individual instances when help had been forthcoming. In line with previous research

(Bochner et al. 1977), this study did not suggest that there was close association and friendship groups between the international medical students and their domestic peers.

At the institution level, intercultural interactions were limited to a few instances when international students had been invited to contribute their experiences within a teaching session on learning about "other" cultures. As Ward (2001) pointed out in her literature review:

> ….s*tudies converge in the finding that the incidence of intercultural interactions is low and that greater contact is expected and desired by international students…..Significant intercultural interaction is unlikely to occur spontaneously to any large extent, and it is almost certain that interventionist strategies would need to be introduced to promote more and better intercultural activities.*(Ward 2001, p.2)

Some interventions had been introduced at the University of Otago which were seen as helpful in promoting multicultural interaction. These were the International Day event in Dunedin at which students played traditional music from their own countries and put on performances of martial arts, and the food fairs celebrating cuisine from different countries. Also, OUMSA had organised a programme called "Origin" in which medical students were invited to do presentations about their backgrounds for their peers. Other suggestions to improve intercultural contact and specific to the medical school were to have an equivalent of the Māori immersion week teaching for other cultural minorities and more organised recreational trips at weekends with mixed groups of domestic and international students. There was also appreciation that OUMSA was trying to arrange more social events without alcohol in recognition of the fact that many international students from a range of religious backgrounds would not attend if alcohol was included.

Many participants mentioned the responsibility that international medical students had to interact with the domestic students, learn about New Zealand culture and acquire the necessary language skills. Almost all interviewees recommended new international students to "get out there and get involved", to be brave about mingling socially with domestic students and to not spend all the time with their own cultural and language group. However, as many studies have shown, it is not easy for international students to initiate contact with domestic students and both academic and social interaction has to be organised at an institution level to be effective (Volet and Ang 1998 p.20).

4.2.1 INTERNATIONAL MEDICAL UNIVERSITY (Malaysia) IMU STUDENTS

Support for the IMU participants who came into the fourth year of medical training in Wellington School of Medicine was limited to a short bridging course to orientate them to life in New Zealand and the medical environment. While this course was useful, several IMU interviewees wanted more information on academic expectations in the ALM years, styles of learning in New Zealand, and coaching in colloquial language usage. They also found it hard to socialise and integrate with the domestic students because of the lack of a shared cultural background and not having trained with New Zealand students in the first three years of the course.

4.2.2 MENTORING

While a mentoring programme organised by the International Student Office is provided for all new international students studying at the University of Otago, many participants in the study mentioned the desire to have mentoring within the medical course extended to the ELM years two and three, in addition to the existing ALM arrangements. It is not known if this would be welcomed equally by domestic medical students, but some studies have shown that academic staff are a more important source of social support for international students that for domestic students (Jou and Fukada 1996 quoted in Ward Ibid. p.11). While informal mentoring was clearly taking place by senior students of junior students, usually from the same country, more formal academic and pastoral support was recommended by interviewees. One participant suggested it would be useful to have a senior international medical student appointed to the role of mentor for all new overseas students.

Participants' suggestions for extending support for international medical students included:

- Immersion programmes on other cultures in addition to Māori
- More information about accessing services such as Student Health
- Extension of the mentoring programme into years two and three of the medical course
- Pastoral and academic support for private students that equalled that provided for sponsored international students.

4.3 ALCOHOL AND FOOD

In the discussion so far, the emphasis has been mainly on academic issues, communication problems and the use of support services. A new finding was the extent to which alcohol was often an integral part of social life for domestic medical students and how often the presence of alcohol excluded international students from participating in social events. Lack of inclusion in parties at weekends, or celebrations after sporting occasions meant that the international students could not share stories afterwards with their domestic peers. While the majority of interviewees were Muslim, participants from other backgrounds and religions were also uncomfortable attending events where drunken behaviour was the norm, provision of food was minimal and the main aim of the occasion seemed to be to drink as much as possible.

Volet and Ang (1998) talk about "cultural-emotional connectedness" in group formation and the significance of cultural distance between groups of students in international, multicultural classrooms. They suggest that unless students perceive benefits from intercultural mixing, most students will choose "*the less emotionally straining option of forming teams with peers from the same cultural background."* (Volet and Ang 1998, p.20)

In the research conducted for this thesis, it was apparent that generally the participants socialised mainly with other international students because the drinking culture was "not the way we do it", even if they came from cultures where alcohol was freely available such as the Seychelles and Tonga. Interviewees mentioned the limitation that this imposed on their relationships with New Zealand students, which

were perceived as more superficial than with co-nationals or students from a similar culture.

Bartram (2007) commented on the alcohol issue as a social obstacle to intercultural mixing in relation to Muslim international students studying in the UK. One of his interviewees expressed similar views to many of the participants in this research.

> *And mostly, when people organise things, they just go to the pub, and I don't want to go there, I don't feel comfortable. The culture's different and I don't feel comfortable with that. ….I don't feel I have much in common with people, so I do things with my other Muslim friends.* (Bartram 2007, p.210)

Brebner's study in a New Zealand university in 2008 corroborated Bartram's research and mentioned stereotyping of the Pakeha students by their Asian international peers. She commented:

> *Asian students in general tend to think that Pakeha students attach little significance to university education because most of them do not rely on parental support financially. Unlike the Asians, there is little or no pressure on Pakeha students to excel academically and they can therefore afford to spend more time socialising or pursuing other interests. While some Asian students are envious of Pakeha's independence and freedom, most are not drawn to the Pakeha way of socialising through drinking and partying. This explains in part why there is little mixing and mingling between the two groups.* (Brebner 2008, pp.5-6)

While interviewees were not asked specifically about how many hours they spent studying, the impression gained from reading the transcripts is that most participants worked extremely hard to gain a medical degree and socialising took second place.

There were some comments made about the different ways in which food was eaten and when in New Zealand, compared to experiences overseas. In many of the

participants' countries, eating with the family was a central part of their way of life. While all students who leave home to go to University may have to adapt to eating alone or in halls, it was clear that part of the culture shock and homesickness that the interviewees experienced was due to not being able to obtain foods they wanted, not sharing meals and the early closure of shops in Dunedin so they were not able to go out late in the evening to eat.

There was almost universal agreement that more social events without alcohol would lead to better international student involvement and allow mixing with domestic students in a positive way. Comparisons were made between the collective Māori way of life, which felt familiar to many international students, and the more individualistic Pakeha culture, which participants viewed as less inclusive. While alcohol and food may not initially seem to be factors which could inhibit learning, the lack of opportunity to socialise with peers and participate in a common cultural activity may negatively affect group cohesion and identity. As mentioned above, previous studies (Ward 2001; Treloar 2000) have shown that integration between domestic and international students is beneficial for the latter to minimise isolation and enhance their academic achievement.

Participants' suggestions to improve domestic and international student integration included:

- University and Medical School organised social events without alcohol.
- Food at teaching events (one participant talked about students and staff taking it in turns to bring snacks and the importance of sharing food to break down barriers).

- Information on where to obtain Halal food and vegetarian restaurants.

4.4 STRENGTHS OF THE RESEARCH

The original aims and objectives of the research were broad and ambitious. The study provided an opportunity for international medical students across all five years of the medical curriculum to voice their opinions without fear of academic, political or economic consequences. As this is a group that reports feeling marginalised or neglected some of the time, the research gave them a chance to redress the balance and contribute their views openly. It is the first time such a large cohort of international medical undergraduates has participated in a qualitative study in New Zealand. The interviewees' opinions and experiences have been considered in depth. Many useful insights were gathered which add to previous studies considering how to improve international students' learning in New Zealand and enrich intercultural and multicultural interactions.

Participants' suggestions for enhancing the learning environment at a national, university and medical school have emerged as a result of the research and are included in the practical recommendations in chapter five of the thesis.

KM was a skilled research interviewer and became more confident and fluent in her questioning as the thirty-one interviews progressed. She was able to follow up on cues and individual comments by participants, as well as covering the questions in the semi-structured interview schedule. There was a lot of laughter and good humour

expressed during the interviews. Although laughing may be due to embarrassment or to cover shyness, listening to the audiotapes it sounds as if both KM and the interviewees were genuinely relaxed and enjoying the process much of the time.

Coding and thematic analysis of the audiotapes and transcripts of the interviews was carried out by both KM and ES to ensure concordance. Both supervisors of the thesis, SD and KW, read through several transcripts and approved the thematic analysis approach. Two other academic colleagues of ES in the UK independently coded six of the thirty-one interview transcripts. The results were almost identical to the themes that had been identified previously and validated the thematic analysis approach.

The principal investigator, ES, has gained insights into international medical students' experiences which are valuable for planning teaching in the future and addressing the learning needs of overseas students. Many of the suggestions for improving the learning environment are generic for all international students and therefore transferable globally. Some of the recommendations (such as clearer learning expectations and tutor facilitation of inclusiveness) apply equally to domestic students and are a useful reminder of good teaching practice.

4.5 LIMITATIONS OF THE RESEARCH

Silverman (2006) points out the danger of what he calls "romanticism" in qualitative research. He suggests that romanticism is evident when researchers view

the experience of the study population as authentic and valid, while neglecting to recognise the fact that all experience is shaped by cultural forms of representation. He describes the "tourisitic" researcher who may be so focused on cultural and sub-cultural differences between their own culture and those which they are studying, that they fail to see the similarities and commonalities between peoples (Silverman 2006 p.6). Both KM, research assistant, and ES, the principal investigator, were aware that participants' experiences and identification of factors that enhance learning were also shaped by their cultural backgrounds and a multitude of social and academic processes that were going on during their medical training. Some important modifiable factors that are relevant to international medical students' learning may not have emerged during the study.

The danger of highlighting difference and neglecting "sameness" is perhaps inherent in this research project. The study group of international medical students was by its nature "other" and culturally different to the domestic medical student body. There was diversity within the group of fifty-five participants, who came from nine different countries. Unfortunately, there was no opportunity to interview domestic medical students to see if they raised similar issues concerned with the learning and teaching environment as their international peers. There is also the potential problem of stereotyping students from similar cultural and national backgrounds and making assumptions about their experiences and outlook. As Kleinman (2006) points out:

> *Anthropologists emphasise that culture is not a single variable but rather comprises multiple variables, affecting all aspects of experience. Culture is inseparable from economic, political, religious, psychological, and biological conditions. Culture is a process through which ordinary activities and conditions*

> *take on an emotional tone and a moral meaning for participants……..Cultural processes frequently differ within the same social or ethnic group because of difference in age cohort, gender, political association, class, religion, ethnicity, and even personality.* (Kleinman 2006, pp.1673-4)

In other words, people from the same culture may have widely varying experiences and views. Culture is not the same as nationality or ethnicity, although the concept is often used erroneously in this way and may lead to false assumptions about peoples' health beliefs or values, based on the fact they come from a particular country or region.

Quotes from the interviewees in the research carried out for this thesis, illustrate participants' different outlooks and individual experiences in a "narrative" fashion. Where there was agreement about topics such as learning styles in their countries of origin, or reactions to alcohol consumption in New Zealand, the discussion makes it clear that this was the majority view from participants from a range of different backgrounds.

The largest number of interviewees was from Malaysia (30) with the next largest group being from Brunei (10). The eight other nationalities represented by participants were in very small numbers and there was only one Pacific Island student out of a total of four Pacific Island international medical students studying at Otago in 2009. While Malaysians form the biggest group of international students across both the University of Otago and the medical school, the results of the research are limited by not having sampled a wider ethnic and cultural mix of medical students with a range of religious and social backgrounds.

4.5.1 INTERVIEW PROCESS

Originally it was thought that the interviews would be conducted with students from the same country across different years of the medical curriculum. In practice, this proved impossible because of timetabling issues. The majority of the interviews were with small groups of students from the same year of study and often from different countries of origin. In the first interview in Dunedin, KM was joined by one other member of the research team, SG, although KM still took the lead in asking questions. In interview eight, KM was joined by the principal investigator, ES, so that she could experience the interview process at first hand. In this particular interview, the student was in the second year of the medical training and therefore had no contact with ES and would not be taught by her until 2012. The research team considered that this did not breach the point raised by the Ethics Board that ES should not be involved in recruiting or interviewing students whom she was currently teaching in fifth year in case this altered participants' responses.

The advantage of KM doing the majority of the interviews was that she was unconnected with the medical curriculum and participants could discuss issues without fear of judgement by a faculty member, who they might meet later in a teaching context. The disadvantage was that KM was unfamiliar with the medical course and sometimes had to seek clarification about the structure and content of the training.

4.5.2 LANGUAGE ISSUES

Forty-two of the fifty-five international students interviewed did not have English as a first language whereas KM was a native New Zealander. There was potential for misunderstanding of the questions asked by the interviewees or misinterpreting the point of some of the queries. Equally, some of the interviews were difficult to hear or interpret when transcribing because of students speaking quietly, or with accents that may have obscured the true meaning. Audio recordings of the interviews were generally of good sound quality, but background noises or interviewees talking over each other could have led to mistakes in transcribing. As there was no video recording of the interviews, the body language, facial expressions, group dynamics and interactions between the participants and the interviewer were missing. Transcriptions of the interviews may have also altered the meaning in a few instances by errors in punctuation or the actual words recorded. However, the principal investigator, ES, listened to each tape recording and corrected grammar and text on the transcripts as necessary. The re-editing was minimal and in the few situations where a few words could not be distinguished, blanks were left in the text and avoided when looking for suitable quotes to use as illustrations.

The transcripts of the interviews with participants were not sent back to them for corroboration and no participants contacted the research team after the interviews or asked to read through the transcripts so validation by respondents has not been carried out. The reason for this was partly a long delay between conducting the interviews and transcription taking place. Also, many of the participants had moved to different clinical sites during the two years that the research project was running. The principal

investigator, ES, moved back to the UK in 2010, making it more difficult to have contact with the interviewees and with KM, if needed, and removing her from the social and academic environment in which the research was carried out.

It was not possible to carry out triangulation on the research data as domestic students and teaching staff were not included in the interviews for comparison. In the future, it would be helpful and informative to hear the opinions of these groups about international medical students training in New Zealand as well.

The use of new technology, such as e-portfolios, iPhone applications, web-based learning tools and IT language support, was not considered in the interview questions about the learning and teaching environment at the University of Otago. It may be that many of these technological developments can offer further support to domestic and international medical students in the future.

Interviewees were not asked about their learning experiences in different contexts such as the community or hospital settings. This study did not investigate whether the physical environment (hospital or community) were perceived as enhancing or inhibiting learning, as well as whether attitudes of the tutors varied according to where the teaching took place.

Participants were not asked about discrimination they might have experienced due to gender, rather than their status as an international student. It is well recognised that sexism still exists within medical training and this aspect of discrimination would be interesting to research further among international students.

CHAPTER 5

RECOMMENDATIONS

5.1 SUMMARY

The data collected in this qualitative research study were extremely rich and varied. It is difficult to do justice to all the points raised by participants within the focus of the thesis. Previous educational research has identified relevant factors that affect international student learning including culture shock, academic shock, and lack of familiarity with the dominant educational pedagogy (Ryan 2000; Turbes et al. 2002; Apfelthaler et al. 2010). The influence of the "hidden curriculum" was evident from comments by interviewees about the lack of explicit academic expectations and unfamiliar teaching styles within the medical course. New factors which participants identified as relevant to their learning in the academic setting were: group size and composition, communication issues when talking to patients and their lack of familiarity with slang and colloquial terms. There were concerns about the fairness of formative and summative assessments based on international students' participation and performance. Some of these factors affecting learning are modifiable, but many rely on the availability of extra resources to provide support for international medical students at key points during their training. For example, increasing small group work in the ELM years may require an increase in teaching staff to facilitate these groups.

The "cultural distance" between New Zealand and the countries of origin of the interviewees was highlighted by participants' comments about differences in power relations, both between doctors and patients and between teachers and pupils. The drinking culture of New Zealand and student life in particular, emerged as a significant barrier to the fostering of close intercultural contact between domestic and international medical students, even when the latter were not from religions or countries that banned the use of alcohol. It is hypothesised that this lack of social contact may also be a factor in overseas students struggling to "fit in" with the medical school culture and underperforming academically. Racism and discrimination had been experienced by many participants, mainly in the community outside of the University and particularly by females who wore a headscarf for religious reasons and were therefore more visible as "other". Marginalisation of international students by teachers and domestic peers was common and attributed to ignorance and negative stereotyping.

The use of support services within the University was variable. The importance of the international student associations was clear. Survival in an unfamiliar culture was linked to emotional and practical support from co-nationals and senior students. Suggestions for extending the role of some of the University services were proposed and are listed in the recommendations section.

Participants from the Wellington campus suggested that there was less support for international students there than at the Dunedin campus and accommodation was more difficult to find. The IMU students interviewed commented on the difficulty of joining the medical course in fourth year and integrating with the other medical

students. However, their clinical experience in Malaysia was reported by them as superior and more extensive than the equivalent training in New Zealand, which gave the IMU students more confidence in some learning situations than the domestic students.

Preparation for coming to study in New Zealand was mentioned as a factor that would enhance learning. Suggestions included better planning for the timing of the arrival of international students, more information on the health and legal systems of New Zealand and a clearer description of the expected learning and teaching styles.

Factors that were suggested by participants that enhance learning were: sensitive facilitation by tutors who would attend to international students' needs and ensure inclusiveness in classroom activities, opportunities for international students to talk about their own cultures and experiences (which helped educate both their peers and tutors), and the opportunity to have small group or one-to-one teaching sessions. These factors are not necessarily peculiar to international medical students but likely to be more pertinent because of the dual acculturation process that students from overseas undergo.

Suggestions for staff training to understand the learning needs of international medical students were not made by participants in this research, although several students commented about the need for greater awareness by staff of their educational backgrounds. At the moment, there is no obligation on teaching staff at the medical school to attend the Higher Education Development Centre (HEDC) training workshops on cultural competency which are offered to all University staff. Teaching

materials to facilitate interactions with international students can be obtained from organisations such as ISANA (International Education Association Australia and New Zealand), but these may need to be made specific to the medical curriculum and the subtleties of communication within doctor-patient consultations.

There was acknowledgement by participants in this research that it was not just up to the University or domestic peers to help international students to integrate in the learning environment. Many participants recognised that they had a responsibility to be proactive in seeking academic and psychological help when needed, socialising with students and learning to communicate effectively within the host culture. When interviewees were asked what they thought they contributed to the New Zealand learning environment, many of them mentioned the importance of fostering multicultural understanding and increasing awareness of a range of health and cultural beliefs. One participant simply commented: "We add colour."

5.2 FUTURE RESEARCH

Future research on international medical students' experiences of training in New Zealand might include interviewing domestic medical students and teaching staff for their views about factors that enhance and inhibit learning and suggestions for improving support services. One area that did not form part of the enquiry of this thesis was the international students' intentions about their future careers. Statistics are currently being collected on medical graduates from the University of Otago to find out which branches of medicine they move into and where in the world they

travel to work following qualification. These figures would provide further insight into the number of international students who return back to their native countries to practice medicine, those who remain in New Zealand and gain residency, and those who migrate to other countries such as Australia or the UK. At the moment, international students who qualify in medicine take second place to domestic students when applying for trainee intern and junior doctor posts. The issue of future employment plans is a sensitive one as many international students are bonded to return to the country which sponsored their education. However, there is good evidence that not all students from overseas do return home on graduation from the medical degree as originally intended. A proportion of these newly qualified doctors choose to remain in New Zealand or work elsewhere outside of their country of origin.

The transferability of skills from the New Zealand medical training context to other countries in the world would be an important area to research further. The medical course is designed to train doctors to work primarily in the New Zealand context. The current curriculum content potentially neglects the learning needs of international students who will return to work as doctors in their countries of origin at the end of the six years. Several interviewees in this study commented on the lack of teaching on common tropical diseases prevalent in their native countries, an area of medical education which would provide them with important and appropriate clinical skills on graduation.

5.3 RECOMMENDATIONS

The following recommendations are based on participants' practical suggestions that emerged from the research. Any additional recommendations by the principal investigator are identified by the initials, ES.

Recommendations for the Ministry of Education New Zealand:

The Ministry of Education should provide:

- Material for prospective international students which gives an overall view of the learning and teaching styles in medical schools in New Zealand. (This might be a DVD of a teaching session with sub titles in different languages ES).
- Information about the legal system and health service structure in New Zealand (ACC, alcohol and drug services and help for victims of domestic abuse were mentioned specifically). This could be a brief document or power point presentation in different languages, but as WB pointed out, such a resource would be helpful also for domestic medical students.
- A national strategy to ensure that students from overseas arrive at the beginning of the medical course so they can benefit from induction and orientation programmes run by the University.
- Academic advisers to work with international students, particularly when they start new tertiary courses and the learning environment and assessment processes are unfamiliar (ES).

Recommendations for the University of Otago:

The University of Otago should provide:

- Training of medical faculty teaching staff in cultural competency. Workshops including information about teaching and learning styles, cultural beliefs and ways to enhance inclusion of international students in the learning environment (ES). (The International Office at the Dunedin campus already runs an excellent general workshop for teaching and administrative staff in this area).
- Information packs for students from each country on arrival in New Zealand with practical information about accommodation, travel and food.
- Pastoral and practical support for private international students that matches the support provided for government sponsored students.
- Internationalisation of the content of teaching material to ensure that it is not "ethnocentric" or providing inappropriate stereotypes of ethnic minorities (ES).
- Proof reading of written reports and essays throughout the medical training.
- Clearer information about job prospects and lack of remuneration at trainee intern level for international medical students.

Recommendations for the Dunedin School of Medicine:

The Dunedin School of Medicine should provide:

- Social events for domestic and international medical students that are alcohol free.
- Explicit academic expectations that students will be independent learners, participate in class discussions and express their own opinions.

- Coaching on colloquial language use and interactions with patients.
- Audio tapes of lectures.
- All lecture notes available on Blackboard.
- Mentoring by clinical staff in second and third year.
- Clear information on the role of Student Health Services.
- More opportunities in the curriculum for cross-cultural learning and teaching.
- An equivalent course to the Māori immersion week on other cultures.
- Specific coaching for performance-based assessments such as OSCEs

Recommendations for the Wellington School of Medicine:

The Wellington School of Medicine should provide:

- Clear information about how to find accommodation and travel.
- Regular meetings with the Associate Dean responsible for international student welfare.
- More opportunities to socialise with domestic students and alcohol free events.
- An International Student Office similar to the one that exists at the Dunedin campus.

As indicated in the two previous chapters, some of these suggestions for improving the learning environment were already taking place informally through initiatives by the participants themselves or by OUMSA. There is clear evidence from previous studies that intercultural interaction between domestic and international students is unlikely to take place regularly unless it is organised at an institution level. Medical schools in New Zealand can address this issue by thinking of creative ways to promote cross-cultural activities which do not include the consumption of alcohol, if

they want to encourage participation and integration of all students, irrespective of their nationality or cultural beliefs. Developments which lead to improved integration of international and domestic students are likely to improve academic achievement by international students.

5.4 NEW DEVELOPMENTS

At the Dunedin campus, colloquial language testing (involving spoken phrases and a multiple choice questionnaire) was introduced in 2008 for second year students, although no-one interviewed in this research study made reference to the testing. Students who do not reach the required standard are offered conversation classes with domestic students acting as "buddies", a move which is likely to promote intercultural exchange and cooperative learning. There are also screenings and informal discussions of the TV series "Shortland Street" (a medical soap opera), to help non-native speakers understand doctor-patient consultations and idiomatic expressions (personal communication DP).

A new teaching session on diversity has been introduced into the general practice fourth year course by one of the original research team members, JR. Objectives for the diversity session include: critical reflection on the concept of cultural competence, culture and its relationship to medical practice, links between diversity and patient-centred medicine, and strategies to deal with the diverse needs of different patients and patient groups.

5.5 CONCLUSION

Globalisation of health, increasing mobility and the increasing trend for medical graduates to work anywhere in the world mean that specific measures to meet international medical students' educational needs and allow them to reach their full academic potential are required. This thesis has highlighted some of the areas that warrant attention and has put forward participants' practical suggestions for improving academic and support services within the University of Otago.

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Appendix I

International Student Associations and Clubs at the University of Otago

Afro-Otago Students Association

Brunei Students Association (BSA)

Dunedin Chinese Methodist Youth Fellowship

Cambodian Culture Club (CCC)

Catholic Society (CathSoc)

Indian Students Association (ISA)

Indonesian Community Association (ICA)

Japan Club

Korea Students Association

Malaysian Students Association (OMSA)

Medical Students Association (OUMSA)

Muslim Students Association

Omani Association

Otago University Students Association (OUSA clubs and societies)

Pacific Island Health Professional Students Association (PIHPSA)

Samoan Students Association

Singapore Club (OSC)

Saudi Student Club

Sri Lankan Students Association (SLSA)

Taiwanese Student Association

Thai Society (OuThsa)

Tongan Students Association

Appendix II

INFORMATION SHEET FOR PARTICIPANTS

International Medical Students: factors that enhance and inhibit learning

Thank you for showing an interest in this project. Please read this information sheet carefully before deciding whether or not to participate. If you decide to participate we thank you. If you decide not to take part there will be no disadvantage to you of any kind and we thank you for considering our request.

What is the Aim of the Project?

This project is being done by researchers in the Department of General Practice, Dunedin School of Medicine. The aims of the project are to:

Identify and understand things which affect your learning experience as an international medical student by:

1. looking at the learning and teaching environment including:
   - 2.1 the medical curriculum at Otago University
   - 2.2 ways of learning and teaching
   - 2.3 different types of educational and personal support

2. Describing international medical students' experiences in these four areas to understand:

   - factors in the teaching environment which get in the way of learning
   - factors which are helpful for learning
   - international medical students' experience of accessing student support services and what they think of their usefulness and relevance
   - international medical students' ideas and beliefs on how student support services might be further improved to meet learning needs.

What Type of Participants are being sought?

International medical students, that is, a student who does not hold New Zealand residency or citizenship, is paying full fees and requires a student visa. Participants will be drawn from Years 2-6 of the medical curriculum

What will Participants be Asked to Do?

Should you agree to take part in this project, you will be asked to come to an interview of approximately 40 minutes to one hour duration. This may be a small group interview with other students from the same country as you, or it may be an individual interview. You will have a choice about how you would like to be interviewed.

The interview will involve being asked about your thoughts and experiences of being a medical student at the University of Otago with particular focus on your learning. Some of the topics that might be covered include:

- Talking about factors that help your learning (Eg, small group work, teacher approach, learning styles, , support of domestic students, help to catch up).

- Talking about factors that get in the way of your learning (eg, context of teaching, teacher approach, New Zealand student attitudes, language, racism and/or racial stereotyping, gender, prejudice, relevance of topic,).
- What you think of existing student support that helps your learning, including specialist training in areas of sensitive patient issues that might cause you difficulty.
- Talking about your ideas for how the University could help you more with your learning and encourage cultural sensitivity generally.

You don't have to talk about anything you don't want to. You can ask for the interview to stop at any time without giving a reason (individual interview) or you can leave the interview at any time without giving a reason (group interview).

If a serious issue is raised during the interview (eg, you talk about something that happened to you or others which is unacceptable and requires a formal complaint about a fellow student or tutor/lecturer) the interviewer will discuss this with you following the interview. If you agree, then the interviewer will provide information on the complaints process and may suggest talking to the appropriate student support services such as the University Mediator. If the interviewer is very concerned about your mental or physical health, this will be discussed with you individually. The interviewer may recommend you see someone from services such as the Emergency Psychiatric Service and/or Student Health. With any serious issue raised, you will be recommended to contact the Student Affairs Office which deals with confidential personal or health related matters that may affect your studies (see p.16 in Years 2 & 3 Student Handbook 2008).

Can Participants Change their Mind and Withdraw from the Project?

You may stop participating in the project at any time and without any disadvantage to you.

What Data or Information will be Collected and What Use will be Made of it?
Interviews will be recorded and written out. Participants will also be asked to give the interviewer information such as their country of origin, nationality, first language, ethnicity, religion, marital status, date of birth and gender.

The personal information will be used by the researchers to describe the type of people who were interviewed. This information will be reported in a way that will not identify you.. If you feel that by giving this information you will be identifiable then you do not have to give it (apart from country of origin).

This project will use an open-questioning technique where the type of questions which will be asked have not been decided in advance, but will depend on the way in which the interview goes. Although the University of Otago Human Ethics Committee is aware of the general areas to be covered in the interview, the Committee has not been able to review the exact questions to be used. If the questions asked make you feel uncomfortable or you don't want to answer them you are reminded of your right to decline to answer any particular question(s) and also that you may stop participating in the project at any stage without any disadvantage to yourself of any kind.

The results of the project may be published and will be available in the University of Otago Library (Dunedin, New Zealand). Any information directly identifying any participants will be removed from the interview data before it is reported on. You are most welcome to request a copy of the results of the project should you wish. (see Consent form)

Members of the research team, including the interviewer will have access to the data. The person who types out the interviews will also have access to the data. Typed and recorded interviews will be kept on a password protected computer. Consent forms will be kept in a locked filing cabinet.

At the end of the project any personal information will be destroyed immediately except that, as required by the University's research policy, any raw data on which the results of the project depend will be kept in secure storage for five years, after which it will be destroyed.

Reasonable precautions will be taken to protect and destroy data gathered by email. However, the security of electronically transmitted information cannot be guaranteed. Caution is advised in the electronic transmission of sensitive material.

What if Participants have any Questions?

If you have any questions about our project, either now or in the future, please feel free to contact either:-

Dr Emma Storr
Department of General Practice
Phone: 479 8437

Sue Garrett
Department of General Practice
Phone: 479 4134

This study has been approved by the University of Otago Human Ethics Committee. If you have any concerns about the ethical conduct of the research you may contact the Committee through the Human Ethics Committee Administrator (ph 03 479 8256). Any issues you raise will be treated in confidence and investigated and you will be informed of the outcome.

Appendix III

International Medical Students: factors that enhance and inhibit learning

CONSENT FORM FOR PARTICIPANTS

I have read the Information Sheet concerning this project and understand what it is about. All my questions have been answered to my satisfaction. I understand that I am free to request further information at any stage.
I know that:-

1. My participation in the project is entirely voluntary;

2. I am free to withdraw from the project at any time without any disadvantage;

3. Personal identifying information, including audiotapes will be destroyed at the conclusion of the project but any raw data on which the results of the project depend will be retained in secure storage for five years, after which they will be destroyed;

4. This project involves an open-questioning technique where the precise nature of the questions which will be asked have not been determined in advance, but will depend on the way in which the interview develops and that in the event that the line of questioning develops in such a way that I feel hesitant or uncomfortable I may decline to answer any particular question(s) and/or may withdraw from the project without any disadvantage of any kind.

5. The interview may touch on subjects that make me feel uncomfortable or I do not wish to talk about, if this happens, I know I can leave the interview or ask for it to be stopped.

6. If a serious issue is raised (eg, an incident that appears to warrant a formal complaint about a fellow student or tutor/lecturer) the interviewer will discuss this with me following the interview. If I agree, then the interviewer will provide information on the complaints process and may suggest contacting appropriate student support services such as the University Mediator. If the interviewer is seriously concerned about my mental or physical health, this will discussed with me individually. The interviewer may recommend referral to services such as the Emergency Psychiatric Service and/or Student Health. With any serious issue raised, I will be recommended to contact the Student Affairs Office which deals with confidential personal or health related matters that may affect my studies (see p.16 in Years 2 & 3 Student Handbook 2008).

7. The results of the project may be published and will be available in the University of Otago Library (Dunedin, New Zealand) but every attempt will be made to preserve my anonymity.

I agree to take part in this project.

.....
(Signature of participant)
(Date)

I would like a copy of the results sent to me ☐

This study has been approved by the University of Otago Human Ethics Committee. If you have any concerns about the ethical conduct of the research you may contact the Committee through the Human Ethics Committee Administrator (ph 03 479 8256). Any issues you raise will be treated in confidence and investigated and you will be informed of the outcome.

Appendix IV

Questions for the semi-structured interview

Living in New Zealand

- What preparation did you receive for studying in New Zealand? (English language courses, orientation/induction/ information from Otago etc)
- How is the medical profession viewed in your own country?
- How appropriate is the medical training here for the needs of your own country of origin (as far as you can tell). If there are gaps, can you identify these?
- What cultural differences are there that you have noticed between your country of origin and New Zealand? (this might relate to both the educational environment and the predominant culture – attitudes to teachers, alcohol, etc)

Learning in New Zealand

- What learning situations do you find suit you best and why? (small group, lecture, seminars etc)
- What is your experience of your teachers' understanding of international students' learning needs?
- How have you been treated by the New Zealand domestic students?
- Are there any differences in the approach to learning and teaching here compared to your own country of origin?
- Do you think you have encountered any racial prejudice or discrimination from staff or students during your training in New Zealand? If so, what were the circumstances?
- What do you think you bring to the learning environment that might enhance it for students?

Student Support Services

- What support services are you aware of and which have you used? (overseas student associations, International Student Office, religious bodies, buddy schemes etc)
- Which of these services has been most useful to you and why?
- What would you say to a newly arrived international medical student that you wish you had known when you first came here?
- How have you managed to 'survive' and learn about 'the way things are done around here'? (hidden curriculum, culture, tacit understanding, slang etc)

Suggestions for improving international medical student support

- What services or training do you think would be most helpful to support your learning in the New Zealand context i.e. language support, specialist training in clinical areas such as Gynaecology, Psychiatry or Geriatrics
- What else might the University do to promote intercultural understanding among students and staff?
- Any other comments?

Appendix V

Medical Graduate Profile

University of Otago

On completion of the Otago University MB ChB programme, the graduate should be competent to practise safely and effectively as a first year doctor (intern) and have an appropriate foundation for further training in any branch of medicine. Specifically, the graduate should have the following skills and attributes;

1. Personal Attributes

1.1 The capacity to be a critical thinker, capable of weighing, evaluating and integrating new information into his or her understanding of issues.

1.2 The ability to evaluate his or her own professional functioning and to act to remedy limitations of knowledge, skills and attitudes throughout his or her career.

1.3 The ability to extrapolate from knowledge and principles to solve new problems.

1.4 An awareness of his or her professional limitations, and a willingness to seek help when these limitations are met.

1.5 The ability and willingness to learn and to appreciate that learning continues throughout life.

1.6 The ability and willingness to facilitate the learning experience of individuals, groups and communities, both within and beyond the health sector.

1.7 Information literacy, including the ability to locate, evaluate and use information in a range of contexts.

1.8 The ability to be organised and the skills for time management, so that time and resources are used effectively and efficiently.

1.9 A dedication to appropriate ethical behaviour, based on a well developed awareness of his or her own moral values, and knowledge and application of principles of medical ethics.

1.10 An awareness of his or her own needs as a person, how health needs might impact on competence to practice and an ability to access appropriate support or healthcare for him or her self.

1.11 A commitment to the fundamental importance of the interdependence between research, medical knowledge and professional practice.

1.12 A commitment to advocate for the health needs of individuals and communities.

2. Interactive Attributes

2.1 A caring and empathetic attitude to others.

2.2 Respect for, and an ability to co-operate with colleagues, competence in teamwork and an understanding of the roles of other health professionals and healthcare teams.

2.3 A respect for patients and a dedication to work with patients to optimise their health and wellbeing.

2.4 Respect for, and an ability to respond to the cultural context and aspirations of patients, colleagues, other health care workers and communities.

2.5 An understanding of and an ability to respond to the obligations of the Treaty of Waitangi.

2.6 Oral and written communication skills, including an ability to communicate effectively with individuals, groups and communities, both within and beyond the health sector.

3 Disciplinary Attributes

3.1 A sound knowledge of the philosophical, scientific and ethical principles underlying the practice of medicine and an ability to apply this knowledge as part of competent medical practice.

3.2 A sound understanding of the legal framework surrounding medical practice in New Zealand.

3.3 A sense of social responsibility and an understanding of the contribution of doctor, health services, society and political influences to the health outcomes of patients.

3.4 A commitment to the principles of patient-centred medicine.

3.5 Knowledge of factors impacting on inequalities in health outcomes.

3.6 Knowledge of factors impacting on the health status of Māori and other cultures.

3.7 Skills in eliciting, documenting and presenting the history of a patient's problems and the relevant physical examination findings.

3.8 Skills in problem solving and formulation of differential diagnoses.

3.9 Skills in the management of common medical conditions, including; informing and negotiating, the performance of relevant clinical procedures, assessment of prognosis, prescribing skills, knowledge of drug therapy and care of the dying patient.

3.10 Skills in the management of emergencies and other serious medical conditions.

3.11 An awareness of, and the skills to manage, uncertainty in medical interpretation and decision making.

3.12 An ability to maintain proper boundaries between personal and professional roles.

3.13 An understanding of the role played by individuals and society in the development of disease and the maintenance of well being.

3.14 A sense of social responsibility and an understanding of the roles and functions of healthcare institutions in the social and political environment.

3.15 An appreciation of the global perspective of medicine, and an informed sense of the impact of the international community on New Zealand and New Zealand's contribution to the international community.

Appendix VI

Demographics of International Medical Students interviewed at Dunedin Campus 2009-10.

Partpt	Ntnality	Country of origin	Ethnicity	1st lang	Other langs	Yr	M/F	Age	religion	Yr 1st in NZ	Spor Pri	Lang course	Pre-med	Living	Family	Marital
A	Sau/Canad	Canada	Mid Eastern	English	Arabic	5	F	25	Muslim	2005	S			Flat/Share	N	
B	Omani	Oman	Mid Eastern	Arabic		5	F	24	Muslim	2005	S		hsci	Flat/Share	N	
C	Omani	Oman	Mid Eastern	Arabic		5	F	24	Muslim	2005	S		hsci	Flat/Share	N	
D	Seychelles	Seychelles	Seychelles	English	Creole	5	F	24		2005	S		hsci	Flat/Share	N	De facto
			Chinese		French											
			African/Euro													
E	Singapore	Singapore	Singaporean	English	Chinese	5	F	23	Christian	2004	Prv		Fn hsci	Flat/Share	Sister	
					Mandarin											
					Cantonese											
F	Saudi	Saudi	Mid Eastern	Arabic/Eng		3	M	21	Islam	2005	S		Fn-hsci	Flat/Share	N	
G	Indonesia	Indonesian	Indonesian	Indonesian		3	M	20	Islam	2006	Prv		fn	Flat/Share	N	

Partpt	Ntnality	Country of origin	Ethnicity	1st lang	Other langs	Yr		Age	Religion	Yr 1st in NZ	Spor Pri	Lang course	Pre-med	Living	Family	Marital
H	Malaysian	Malaysia	Malaysian	Malay		2	F	20	Islam	2008	S		hsci	Flat/Share	N	
I	Malaysian	Malaysia	Malaysian	Malay		2	F	21	Islam	2008	S	OU - Lang	hsci	Flat/Share	N	
J	Malaysian	Malaysia	Malaysian	Malay	Mandarin	2	F	21	Islam	2008	S					
			Chinese													
K	Singaporean	Singapore	Sing/Chinese	English	Mandarin	4	F	25	Christian	2004	Prv	BA-Law	hsci	Flat/Share	N	
					French							Bio-ethics				
L	Malaysia	Malaysia	Malaysian	Malay	Arabic	4	M	23	Islam	2006	S		hsci	Flat/Share	N	
M	Bruneian	Brunei	Chinese	Mandarin	Malay	3	M	21	Buddhist	2007	S					
N	Bruneian	Brunei	Malay	Malay		3	M	20	Muslim	2007	S		hsci	Flat/Share	N	
O	Malaysian	Malaysia	Malaysian	Tamil	Malay	3	F	22	Hindu	2007	S		hsci	Flat/Share	N	
			Indian													
P	Malaysian	Malaysia	Malaysian	Malay		2	M	21	Muslim	2008	S		hsci	Flat/Share	N	

Partpt	Ntnality	Country of origin	Ethnicity	1st lang	Other langs	Yr		Age	Religion	Yr 1st in NZ	Spor Pri	Lang course	Pre-med	Living	Family	Marital
Q	Malaysian			Malay		2	M	21	Islam	2008	S		hsci	Flat/Share	N	
R	Malaysian			Malay		2	M	21	Muslim	2008	S		hsci	Flat/Share	N	
S	Bruneian			English	Chinese	2	M	20	Buddist	2008	S		hsci	Flat/Share	N	
					Malay											
T	Omani	Oman	Mid Eastern	Arabic		4	M	23	Muslim	2004	S	OU - Lang	Fn	Flat/Share	N	
U	Omani	Oman	Mid Eastern	Arabic		3	M	22	Muslim	2005	S	OU - Lang	Fn-hsci	Flat/Share	N	
V	Malaysian	Malyasia	Malaysian	Malay		3	M	22	Islam	2007	S		hsci	Flat/Share	N	
W	Malaysian	Malyasia	Malaysian	Malay		3	M	21	Islam	2007	S		hsci	Flat/Share	N	
X	Malaysian	Malyasia	Malaysian	Malay		3	M	22	Islam	2007	S		hsci	Flat/Share	N	
Y	Malaysian	Malyasia	Malaysian	Malay		3	M	23	Islam	2007	S		hsci	Flat/Share	N	

Partpt	Ntnality	Country of origin	Ethnicity	1st lang	Other langs	Yr		Age	Religion	Yr 1st in NZ	Spor Pri	Lang course	Pre-med	Living	Family	Marital
AA	Bruneian	Brunei	Chinese	Mandarin	Bahasa	3	F	21		2007	S		hsci	Flat/Share	N	
BB	Bruneian	Brunei		Malay		3	F	22		2006	S		hsci	Flat/Share	N	
CC	Bruneian	Brunei	Brunei	English	Malay	2	F	21	Christian	2008	S		hsci			
			Chinese		Chinese											
DD	Oman	Oman	Mid Eastern	Arabic		4	M	24	Muslim	2005	S		Fn-hsci		N	
EE	Malaysian	Malaysia	Indian	English	Malay	4	M	25		2003	Pri	Biomed sci	hsci	Hall of Res	N	
					Tamil											
FF	Saudi	Saudi	Mid Easter	Arabic		5	M	25		2003	S	OU - Lang	Fn-hsci	Flat/Share	N	
GG	Bruneian	Malaysia	Brunei/Chin	English	Malay	6	F	25	Christian	2003	S	Physio - 1 yr	hsci	Flat/Share	N	
			Malaysian		Mandarin											
HH	Malaysian	Malaysia	Malaysian	English	Malay	3	F	22	Islam	2007	S	OU - Lang	hsci	Flat	N	
II	Indian	India	Indian	Hindi/Eng		6	M	24	Hindu	2004	Pri		hsci	Flat/Share		
	Sau/Canad	Canada		English		5	F	25	Muslim	2005	S			Flat	N	

Appendix VII

Demographics of International Medical Students interviewed at Wellington campus 2009-10.

Partpt	Ntnality	Country of origin	Ethnicity	1st lang	Other langs	Yr .	M / F	Age	Religion	Yr 1st in NZ	Sp or Pri	Lang course	Pre-med	Living	Family	Marital
MM	Seychelles	Seychelles	Mixed/Sey	Creole/Eng	French	5	F		Catholic	2005	S		hsci	Flat/Share	N	
NN	Malaysian	Malaysia	Malaysian	Malay		6	M	25	Islam	2004	S			Flat/Share	N	
OO	Malaysian	Malaysia	Malay/Indian	English	Malay	4	M	23	Indian	2009	Pri			Flat/Share	N	
PP	Malaysian	Malaysia	Malaysian	Mandarin	Malay	4	M	23	Buddhist	2009	S IMU			Flat/Share	N	
QQ	Malaysian	Malaysia	Malaysian	English		5	F	23	Buddhist	2008	Pri			Flat/Share	N	
RR	Malaysian	Malaysia	Malaysian	Mandarin	Malay	4	F	22	Christian	2005	Pri		hsci	Flat/Share	N	
SS	Malaysian	Malaysia	Malaysian	Chin/Mand	Malay	5	M	24		2008	Pri			Flat/Share	N	
			Chinese													
TT	Malaysian	Malaysia	Malaysian	Malay		5	F	24	Muslim	2005	S		hsci	Flat/Share	N	
UU	Malaysian	Malaysia	Malaysian	Mandarin	Malay	5	F	23	Christian	2005	Pri		hsci	Flat/Share	N	
VV	Malaysian	Malaysia	Malaysian	Malay		5	F	24	Christian	2005	S		hsci	Flat/Share	N	
WW	Malaysian	Malaysia	Malaysian	Malay		5	F	24	Islam	1st	S		hsci	Flat/Share	N	
XX	Malaysian	Malaysia	Malaysian	English	Malay	6	M	24		2007	pri			Flat/Share	N	
YY	Bruniean	Brunei	Bruneian/Chi	Malay		4	F	23	Muslim	2006	S		hsci	Res college	N	
ZZ	Bruniean	Brunei	Bruneian	Malay		4	M	23	Muslim	2005	S		hsci	Flat/Share	N	

Partpt	Ntnality	Country of origin	Ethnicity	1st lang	Other langs	Yr	M / F	Age	Religion	Yr 1st in NZ	Sp or Pri	Lang course	Pre-med	Living	Family	Marital
BBB	Malaysian		Malaysian	Malay		5	F		Islam	2008	S			Flat/Share	N	
CCC	Bruneian	Brunei	Malaysian	Malay		6	F	23	Islam	2004	S		hsci	Flat/Share	N	
DDD	Indonesian	Indonesia	Indo/Chinese	Indonesian		6	F	23	Catholic	2004	Pri		hsci	Flat/Share	N	
EEE	Tongan	Tonga	Tongan	Tongan	Samoan /Fiji	4	M	23	Catholic	2006	S		hsci	Flat/Share	N	
FFF	Malaysian	Malaysia	Malaysian	Malay		6	F	25	Islam	2004	S			Flat/Share	N	
GGG	Malaysian	Malaysia	Malay/Chin	Hokkien	Malay	6	F	24	Christian	2007	S			Flat/Share	N	
HHH	Malaysian	Malaysia	Malaysian	Malay		5	F	25	Islam	2007	S			Flat/Share	N	
III	Seychelles	Seychelles	Mixed/Sey	Creole/Eng	French	5	F		Catholic	2005	S		hsci	Flat/Share	N	
JJJ	Malaysian	Malaysia	Malaysian	Malay		6	M	25	Islam	2004	S			Flat/Share	N	
KKK	Malaysian	Malaysia	Malay/Indian	English	Malay	4	M	23	Indian	2009	Pri			Flat/Share	N	

Key:

Partpt = Participant
Ntnality = Nationality
1st Lang = First language
Other langs = Other languages
Yr = Year of study
Sp = Sponsored student
Pri = Private
Pre-med = Course before 2nd year medicine

hsci = Health Sciences first year

Fn = Foundation Year

Appendix VIII

MBChB curriculum Years 2-6 2009

Year 1			**Year 2**			
Health Sciences First Year						
	Foundation Weeks	Human Interactions	Musculo-skeletal	Cardio-vascular	Respiratory	Gastro-intestinal
	Integrated cases 1-13					
	Healthcare in the Community					
	Illness experience	Living with disability	Culture & Health	Clinical placements	Illness & ageing	Addictions in the community
	Clinical Skills					

				Year 3							
Metabolism & Nutrition	Renal			Endocrine				Nervous system		Reproduction, development & ageing Regional clinical anatomy	
	Integrated cases 14-27										
	Healthcare in the Community										
	New Zealand healthcare	Humanities electives	Health promotion	Illness narratives	Primary Health care	Child development	Inter-professional practice	Domestic violence	Community contact week	Bio-medicine & history	Year 4 Pre-paration
	Clinical Skills										

			Year 4			
I week	8 weeks	1 week	8 weeks	8 weeks	I week	8 weeks
Introductory week	Medicine: Acute medicine Geriatrics Ambulatory care			Surgery	Whole class learning week	Psychological medicine
Vertical Module threads	Bioethics Clinical Pharmacology Clinical Skills Communication Skills Evidence Based Medicine Māori Health Microbiology Pathology Professional Development Radiology					

				Year 5					
1 week	7 weeks	1 week	7 weeks	1 week	7 weeks	1 week	1 week	7 weeks	2 weeks
Introductory week	Musculo-skeletal & Emergency medicine	Whole class learning week	Women & children's health	Whole class learning week	Rural general practice	Whole class learning week	Whole class learning week	Medicine 2: Cardiology Respiratory Ophthalmology	Study and exam weeks
Vertical Module threads	Bioethics Clinical Pharmacology Clinical Skills Communication Skills Evidence Based Medicine Māori Health Microbiology Pathology Professional Development Radiology								

Year 6			
12 weeks	12 weeks	12 weeks	12 weeks
Elective for 3 months anywhere in the world self-organized	Ward management ENT Medicine Surgery	Community management General Practice After hours Emergency medicine ENT & Ophthalmology clinics Public Health project	Specialty management Obstetrics & Gynaecology Paediatrics Psychological Medicine
Professional Development			

Appendix IX

09/001

Academic Services
Manager, Academic Committees, Mr Gary Witte

16 January 2009

Assoc. Prof. S Dovey
Department of General Practice
Dunedin School of Medicine

Dear Assoc. Prof. Dovey,

I am again writing to you concerning your proposal entitled "**International medical students: factors that enhance and inhibit learning**", Ethics Committee reference number **09/001**.

Thank you for sending to me a letter addressing the concerns of the Committee. The Consent Form has been modified to include a tick box, the Information Sheet has been rewritten in simpler language, and it is unlikely that the students will feel compelled to participate because, among other reasons, a Research Assistant will be employed to do the recruitment.

On the basis of this response, I am pleased to confirm that the proposal now has full ethical approval to proceed.

Approval is for up to three years. If this project has not been completed within three years from the date of this letter, re-approval must be requested. If the nature, consent, location, procedures or personnel of your approved application change, please advise me in writing.

Yours sincerely,

Mr Gary Witte
Manager, Academic Committees
Tel: 479 8256
Email: gary.witte@otago.ac.nz

c.c. Assoc. Prof. J J Reid Head Department of General Practice

Appendix X

NGĀI TAHU RESEARCH CONSULTATION COMMITTEE
TE KOMITI RAKAHAU KI KĀI TAHU

11/11/2008 - 35
Thursday, 13 November 2008

Dr Storr
General Practice, DSM
Dunedin

Tēnā koe Dr Storr

Title: International Medical Students: factors that enhance and inhibit learning

The Ngāi Tahu Research Consultation Committee (The Committee) met on Tuesday, 11 November 2008 to discuss your research proposition.

The Committee considers the research to be of importance to Māori health.

The Committee notes the researchers intend to conduct interviews, so as this study involves human participants, the Committee strongly encourages that ethnicity data be collected as part of the research project. The Committee is aware that there are two different data sets and they recommend collecting both, that is the question on self-identified ethnicity and the question on ancestry that are contained in the 2006 census.

The Committee suggests dissemination of the research findings to Māori health organisations and to the developers and teachers of the Medical School Curriculum regarding this study.

The Committee would also value a copy of the research findings.

The recommendations and suggestions above are provided on your proposal submitted through the consultation website process. These recommendations and suggestions do not necessarily relate to ethical issues with the research, including methodology. Other committees may also provide feedback in these areas.

Nāhaku noa, nā

pp NTRCC

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The Ngāi Tahu Research Consultation Committee has membership from:

Te Rūnanga o Ōtākou Incorporated
Kāti Huirapa Rūnaka ki Puketeraki
Te Rūnanga o Moeraki