

Are Our International Students Using the Health System Effectively?

Felicity Fallon¹ and Damien Barbara²

1 Trinity College Foundation Studies Program, Trinity College, Royal Parade, Parkville, Victoria 3052, Australia, www.trinity.unimelb.edu.au, ffallon@trinity.unimelb.edu.au

2 Trinity College Foundation Studies Program, Trinity College, Royal Parade, Parkville, Victoria 3052, Australia, www.trinity.unimelb.edu.au, dbarbara@trinity.unimelb.edu.au

Abstract:

By use of a survey, this study looks at the use of the Australian health system by 368 pre-tertiary international students. Issues raised by the results include the amount of medication they use and the sourcing of that medication, the use of family and friends as sources of medical advice rather health professionals, the inappropriate use of hospitals for medical treatment, and their reasons for not seeking medical treatment when they believed that it was justified. Their levels of satisfaction with medical treatment received and their view of the accessibility of medical treatment are also investigated. The results reveal a complex situation where greater education of international students about the health system and greater flexibility and cultural sensitivity on the part of health professionals are required.

Key Words:

International students, health system, medical treatment, medications, hospitals, Health Belief Model

The Issues

In my role as Director of Student Welfare responsible for about 750 international students at a pre-tertiary level, a considerable part of my time is spent following up on students who are missing classes and listening to their reasons for these absences. These conversations have raised a number of concerns in my mind about whether the students in our program are using the Australian health system well. Students seemed to me to be

- not visiting a doctor when they should. There appeared to be many reasons for this including a lack of trust in Australian doctors and the sourcing of medicine from their home countries.
- Visiting a doctor when it is not necessary. This might be to obtain a medical certificate to cover classes missed because they stayed up all night finishing an assignment and could not wake up in the morning or it might be because they were suffering with a mild ailment such as simple hayfever which could be treated with medication from a pharmacy.
- Reluctant to get scripts given to them by a doctor filled. This seemed to relate to the fact that doctors in their home country provided the medications at or immediately after the consultation and they seemed almost offended at having to make a separate visit to a pharmacy.
- Lacking faith in Australian doctors because they don't always suggest medication or the particular medication that the students expected. They seem to have great faith in Panadol as a treatment for everything.
- Relying on doctors in their home country, including psychiatrists.
- Relying on parents and other family members as sources of medical information and medication.

Background

Reasons for Absences from Classes

Fallon (2002) found that the main reasons students gave for being absent from classes were more major illness requiring a visit to a doctor, minor illness, sleep issues and study, personal accommodation and transport issues with a large number of these absences coming from the two types of illness. While absences due to more major illness were most prevalent in the winter months, those for more minor illness such as headaches fluctuated in a way that mirrored the cultural adjustment process and times when assessment was about to take place. This suggested that many of these more minor illnesses might be stress related. The same was true for absences related to sleeping difficulties. Students from Indonesia and China seemed reluctant to visit Western doctors. The paper concluded with the observation that 'these students must have ready access to doctors and other health professionals with whom they are comfortable'.

Cultural Background

A very high proportion of the students in the program under consideration have Chinese ethnicity. For these Confucian-heritage culture students, the family plays a very important role. The obedience of a son to a father is one of the Three Bonds in the basis of Confucian philosophy (de Bary & Chaffee, 1989). Ho (1996) refers to filial piety as a ‘cornerstone of Confucianism’ and describes five stages of development of filial cognition. In looking at the interdependence that Chinese students experience with their families and the circle of friends they use to replace their family, Back and Barker (2002) introduce the concepts of ‘Big Me’ and ‘Little Me’ where ‘Big Me’ includes the students families or close associates with whom they have many mutual obligations and from whom they derive support. It is therefore to their family and close friends that they turn for support in times of illness. Can this inclination to ‘keep it in the family’ prevent students, at times, from seeking appropriate medical assistance?

The Health Belief Model

The Health Belief Model has been used for several decades as a basis for much research in health related matters such as the promotion of appropriate health behaviours to groups such as young families and low socio-economic background families (Roden, 2004), the use of bicycle helmets (Lajunen & Rasanen, 2004), and the use of accident and emergency services by the general public (Walsh, 1994). Four basic constructs underpin the Health Belief Model. ‘Perceived susceptibility’ refers to a subjective perception of the risk of contracting a condition or disease. ‘Perceived severity’ reflects feelings about the seriousness of acquiring an illness in terms of medical and social consequences. ‘Perceived benefits’ are beliefs regarding the effectiveness of the particular actions available in reducing the threat of illness. ‘Perceived barriers’ refer to the cost-benefit analysis which it is believed people undertake to weigh up a beneficial action and its opposing limitations such as costs, side-effects, time and convenience. (Roden, 2004, p2). Using these constructs, Walsh (1994) found that, although the staff of the Accident and Emergency section of a hospital considered the attendance of some patients there as inappropriate, the reasons for their attendance were consistent with the Health Belief Model and their attendance was appropriate for them. This therefore raised a challenge for the staff to “make the service appropriate for the patient’s needs rather than blame the patient for being there”. (Walsh, 1994, p698). Ray-Mazumder (2001) used the model to examine the relationship between gender and the health beliefs and health utilization patterns of a group of Chinese American undergraduates. This model can then be applied in looking at the usage of the Australian Health System by international students.

The Study

To address these issues and questions, a survey was conducted of all the students studying in the February Main 2005 Foundation Studies program who had at that stage been studying in Australia for 7 months. Of the 443 students in the program 368 completed the survey form, giving an 83% response rate.

The Students

Of the respondents, 42.9% were male and 57.1% were female and 44.4% were under 18 years of age and 55.6% were 18 years of age or older, with a minimum age of 16 and a maximum age of 25. 87.7% of these students identified themselves as being ethnically Chinese, with other significant groups being Indonesian, Indian, Malay and Vietnamese. Although there was no significant difference on a Chi-square test, the Non-Chinese students were an older group with 67.4% being 18 years or over and the Chinese group having 53.4% under 18 years of age. When each student’s country of origin was considered for the Chinese students only, 38.5% came from Malaysia, 31.8% from Singapore, 12% from Indonesia, 11.7% from Hong Kong, and 6% from the People’s Republic of China. There was a highly significant relationship ($p = .000$) between age group and country of origin for these students with Chinese ethnicity. From Table 1, it can be seen that a very high proportion (85.1%) of the Chinese students from Singapore were under 18 years of age, with lower proportions in students from other countries and no students from PRC being under 18 years of age.

Table 1. Age Group and Country of Origin for Chinese Students.

Age Group	Malaysia	Singapore	Indonesia	Hong Kong	PRC
Under 18	35 (30.4%)	80 (85.1%)	16 (44.4%)	11 (31.14%)	0 (0%)
18 and over	80 (69.9%)	14 (14.9%)	20 (55.6%)	24 (68.6%)	17 (100%)

The students were asked if their parents held strong traditional beliefs. 93% of the students responded with 'not generally' or 'sometimes'. Only 7% felt that their parents held strong traditional beliefs most of the time. Of these 7% of all students, a breakdown of the Chinese students was undertaken. Twelve of the students whose parents mostly held traditional values were from Malaysia (10.4% of the Chinese from Malaysia), 7 were from Singapore (7.4%), 1 was from Indonesia (2.8%) and there were no students in this category from the other countries.

The type of accommodation in which these students lived was also considered.

Table 2. Type of Accommodation

Type of Accommodation	Number of students	Percentage
Homestay	13	3.6%
Hostel	75	20.9%
Living with relatives	71	19.8%
Student Apartments	123	34.4%
Private Rental	73	20.4%

The largest group in both age groups lived in student apartments, 34.8% of students under 18 years of age and 33.7% of students 18 years and over. Although it was not quite statistically significant on a Chi-square test, a larger number of students under 18 (29.1%) than students 18 years and over lived in hostels and more older students (25.4%) than younger students lived in private rental situations.

Findings

Visits to Health Professionals

The students were asked to indicate which health professionals they had visited in their 7 months living in Australia. Their responses are shown in Table 3.

Table 3. Visits to Health Professionals

Type of Health Professional	Number of students who have seen them	Percentage of all students (n = 368)	Percentage of those who have sought assistance (n = 210)
Doctor at the University Health Service	165	44.8%	78.6%
Local General Practitioner	21	5.7%	10%
Specialist Doctor	10	2.7%	4.8%
Radiologist (X-ray)	15	4.1%	7.1%
Counsellor/Psychologist/Psychiatrist	15	4.1%	7.1%
Chiropractor	5	1.4%	2.4%
Chemist/Pharmacist	66	17.9%	31.4%
Dietician	2	0.5%	1%
Naturopath	0	0%	0%
Acupuncturist	5	1.4%	2.4%
Dentist	15	4.1%	7.1%
Herbalist	1	0.3%	0.5%
Nurse	21	5.7%	10%
Optician/Optomestrist	13	3.5%	6.2%
Physiotherapist	0	0%	0%
Homeopathist	0	0%	0%

From this table it can be seen that the students had a relatively high use of doctors and nurses, particularly those at the University Health Service. This figure could have been augmented by the fact special sessions

were organised at this clinic to enable the students in the appropriate age range to receive their meningococcal vaccinations and some, but not all of the students, who received the vaccination counted this as a visit to the doctor or nurse. Relatively few of the students said that they had visited practitioners of alternative medicine such as herbalists, acupuncturists and chiropractors.

Uses and Sources of Medication

Tables 4 and 5 show the students' use of medications and their perceptions of possible sources of medication.

Table 4. Uses of Medications

Type of medication	Number of students who have used it	Percentage of all students (n = 368)	Percentage of students who used some medication (n = 296)
Vitamins and Mineral Supplements	210	57.1%	70.9%
Natural and Herbal Medications	72	19.6%	24.3%
Non-prescription medicine from a chemist	122	33.2%	41.2%
Medication prescribed by a doctor	111	30.2%	37.5%
Medication prescribed by a doctor in the student's home country	7	1.9%	2.4%
Chinese Medicine	1	0.3%	0.3%

This table indicates a high use of vitamins and mineral supplements but a lower use of natural and herbal medications than the use of medications obtained from a doctor or a chemist. A number of students were relying on medications prescribed by a doctor in their home country. Only 19.8% of the students claimed to be taking no medication at all and 41.8% were taking medications from more than one of these categories.

Table 5. Possible Sources of Medication

Possible Sources of Medication	Number of students who would this source	Percentage of all students (n = 368)	Percentage of students who suggested a source (n = 353)
Doctor	207	56.3%	58.6%
Pharmacist/Chemist	170	46.2%	48.1%
Hospital	35	9.5%	9.9%
Parent/Relative	76	20.7%	21.5%
Friend	60	16.3%	16.9%
Supermarket	49	13.3%	13.9%
Bring from home country	6	1.7%	1.7%

Quite a number of students chose both doctor and pharmacist but many chose only one of these sources and, for the majority of these, that source was the doctor. This links with the experience of many of them receiving medications directly from their doctor in their home country. The students who suggested getting medication from a hospital only will be discussed in a later section. If the 'Parent/Relative' and 'Bring from home country' categories are combined, 23.2% of the students are possibly sourcing medications outside the Australian system and some of these medications acquired from friends could also come from abroad.

Sources of Medical Advice

The students were asked to indicate where they would seek medical advice for the treatment of a number of medical problems. Their responses are summarised in Table 6.

A large number of students chose more than one of the possible sources of medical advice for each of the ailments. For example, for a stomach complaint, only 53.5% chose one source of advice, 20.9% chose two sources of advice, 15.2% chose three sources and 10.3% chose four or more sources, the greatest number being 7 sources chosen by two people. Some students felt that they could deal with the problems without referring to anyone else for advice and this would seem to be appropriate perhaps in the case of a blood nose and a stomach complaint depending on the severity of the situation. For some of the other complaints, seeking no assistance could lead to frequent absences which in turn could lead to non-compliance with their visa requirement of 80% attendance in classes and a possible cancellation of their visa. Although Trinity College Foundation Studies Program has a very comprehensive student welfare/pastoral care program for the students, including a comprehensive mentoring program which assigns staff members to be mentors to the students, very few of the students saw their teachers and mentors at Trinity College as possible sources of medical advice.

Table 6. Possible Sources of Medical Advice Suggested by Students for Particular Ailments

Ailment	Doctor	Pharmacist	Hospital	Parent	Sibling in Melbourne	Sibling not in Melbourne	Friend in Melbourne	Friend not in Melbourne	Other Relative or Family Friend	Teacher or Mentor (Trinity)*	Use Own Medicine	Would Not Seek Help
Stomach Complaint	176 47.8%	66 17.9%	23 6.3%	118 32.1%	82 22.3%	12 3.3%	124 33.7%	12 3.3%	46 12.5%	4 1.1%	6 1.6%	22 6.0%
Broken Arm	205 55.7%	8 2.2%	257 69.8%	67 18.2%	40 10.9%	6 1.6%	49 13.3%	7 1.9%	23 6.3%	1 0.3%	0 0%	0 0%
Skin Rash	230 62.5%	125 33.9%	61 16.6%	115 31.3%	62 16.8%	7 1.9%	61 16.6%	6 1.6%	22 6.0%	0 0%	0 0%	9 2.4%
Blood Nose	122 33.2%	34 9.2%	40 10.9%	89 24.2%	71 19.3%	4 1.1%	98 26.6%	4 1.1%	23 6.3%	1 0.3%	0 0%	75 20.4%
Insomnia	154 41.8%	51 13.9%	28 7.6%	137 37.2%	62 16.8%	11 3.0%	103 28.0%	26 7.1%	26 7.1%	10 2.7%	0 0%	41 11.1%
Frequent Headaches	230 62.5%	102 27.7%	47 12.8%	143 38.8%	60 16.3%	10 2.7%	82 22.3%	15 4.1%	27 7.3%	1 0.3%	5 1.4%	10 2.7%

* For Insomnia, this includes the Trinity's counsellor, the Student Welfare office and a specifically named teacher of Psychology

They did, however, see parents, relatives and close friends as legitimate and important sources of medical advice. This reliance on family and friends for advice is congruent with the Confucian-heritage background of many of the students. It is also very positive for students to receive support from parents and friends in this way when is coupled with other appropriate medical advice. However, when the students felt that the only advice that they would seek would be from family and friends then this could be a situation that caused concern. Table 7 shows the number of students who said that they would seek medical advice from family and friends only and would not seek advice from health care professionals at all for the particular complaint.

Table 7.

	Parent Only	Other Family Member Only	No Advice from Medical Professionals	
	<i>n</i>	<i>n</i>	<i>n</i>	%
Stomach Complaint	28	64	155	42.1
Broken Arm	3	12	17	4.6
Skin Rash	17	23	63	17.1
Blood Nose	24	73	217	59.0
Insomnia	32	54	186	50.5
Frequent Headaches	29	27	85	23.1

Another source of concern is inappropriate suggestion of the visiting a hospital to seek advice about certain medical problems. Table 7 indicates the relation between the suggestion of a hospital visit for acquiring medication and for medical advice of all the ailments other than a broken arm and the variables of age group, ethnicity, and country of origin.

Table 8. Inappropriate Use of Hospitals and Age Group, Ethnicity, and Country of Origin

	Age			Chinese/Other			Country of Origin		
	<i>p</i>	High Group	Low Group	<i>p</i>	High Group	Low Group	<i>p</i>	High Group	Low Group
Stomach Complaint	.007	18 & over	Under 18	NS	-	-	.001	Malaysia China	Singapore HK
Broken Arm	.007	18 & over	Under 18	NS	-	-	NS	Malaysia	Singapore
Skin Rash	.001	18 & over	Under 18	NS	-	-	.039	Malaysia China	Singapore
Blood Nose	NS	18 & over	Under 18	.005	Other	Chinese	NS	Malaysia China	Singapore
Insomnia	NS	18 & over	Under 18	NS	-	-	NS	-	-
Frequent Headaches	NS	18 & over	Under 18	NS	-	-	NS	-	Singapore

From this table it can be seen that those who made an inappropriate suggestion of a hospital visit were mainly 18 years and over in age, not Chinese, and from Malaysia and China if they were ethnic Chinese. This may arise from the relative roles of hospitals and doctors in Malaysia and China compared to those in Australia. It might have been expected that students under 18 years of age would make more inappropriate decisions than older students but this was not the case. This may result from the situation where a large number of students under 18 years came from Singapore where the relationship of doctors and hospitals seems to be fairly similar to that in Australia.

Insomnia or sleeping difficulties was a reason given quite often for absences from classes by students in Fallon's (2002) study of reasons for absences. It is concerning therefore that 11.1% of the students in this survey would not seek assistance for it at all and 50.5% would seek no medical assistance for it. This ailment had the widest range of responses to it. Ten students actually stated that they thought it was a normal state. A number of students mentioned psychologists, counsellors and teachers while some suggested a priest or pastor or God. One student said that they would consult their personal trainer.

Perceived Accessibility of Health Care

The students were asked to rate their degree of agreement with five statements relating to their perception of the accessibility of health care for them on a 5-point scale. The statistics associated with their responses to these statements are shown in Table 9.

Table 9. Perceived Accessibility of Health Care

Statement	Mean	Stand. Dev.
I know who to contact in Australia to get help for sickness or injury	3.53	1.12
It is easy to get the medicine I need in Australia	3.23	1.03
I am less likely to use a doctor in Australia than at home	3.65	1.20
It is easy to find health care that I need in Australia	3.16	1.00
I am less likely to go to a hospital in Australia than at home	3.63	1.23

From this table it can be seen that student felt fairly strongly that they would be less likely to see a doctor or visit a hospital than at home but were reasonably confident that they knew where to seek medical help. They were a little less positive about the ease of obtaining medicines and medical help.

An analysis of variance was conducted on the responses to these statements for each of the variables of age group, country of origin and whether their parents held traditional values. The only significant difference occurs with age group on the first statement ($p = .05$) but, for all the statements, students under 18 years of age responded in a more positive manner i.e. they were less likely than older students to seek medical help in Australia but were more confident that they could find such help if they did look for it. No trends were evident for the country of origin and conservatism of parents' beliefs variables.

Level of Satisfaction with Visits to Doctors.

Students who had visited a doctor were asked to rate their degree of agreement with four statements about their level of satisfaction with these visits on a 5-point scale. 178 students completed this section. The statistics associated with their responses to these statements are shown in Table 10.

Table 10. Level of Satisfaction with Visits to Doctors

Statement	Mean	Stand. Dev.
I am generally pleased with the care that I have received from doctors in Australia	3.22	1.16
I agree with the explanations that doctors in Australia give me for my sickness	3.19	1.04
Doctors in Australia understand my health concerns	3.19	.98
I agree with the treatment plans that doctors in Australia have prescribed	3.20	.98

From this table, it can be seen that students generally feel just on the positive side for agreement. This means that while a number of students agreed with the statement, a considerable number did not, being unhappy or uncomfortable with the advice, explanations and treatments that they had received. Analyses of variance were calculated for a number of variables on these results. No significant differences were found. The groups that tended to be more positive in their responses were the older students, those whose parents held traditional values, and those of a Non-Chinese background. Among the Chinese students, those from the Peoples' Republic of China responded most positively, then students from Malaysia, for the first three statements while students from Malaysia and then those from Singapore were most positive about treatment plans. Students living in homestays were most positive on the first three statements, followed by students living in hostels and private rental situations. For treatment plans, those living in hostels were most positive followed by those in homestays and private rental situations.

Reasons for not seeking help

The students reasons for not seeking help when they were ill was addressed in two ways. Firstly they were asked for an open response to the question as to why they did not seek medical help when they were absent from classes because of illness or injury. There were 102 responses in this section and they were classified into 5 categories. The frequencies and percentages of responses in these categories are shown in Table 11.

Table 11. Reasons for not seeking medical assistance when absent through illness

Categories	Examples	Mean	Stand. Dev.
Self-medicated	'Just took medicine', 'Took medicine brought from home country'	32	31.4%
Too difficult	'Too sick to go', 'Too far', 'Too expensive', 'Too hard when ill'	17	16.7%
Not serious	'Not a serious illness'	32	31.4%
Unhappy with previous treatment	'Doctor did not give proper treatment', 'Doctor did not give proper medicine (herbal)', 'Doctor expected me to get the medicine myself'	6	5.9%
Problems	'No appointments available at Student Health', 'Did not know which clinic world accept OSHC Worldcare card', 'No after hours appointments', 'Wait too long'	15	14.7%

Only 31.4% of these students had an illness or injury that they considered did not require medical treatment. Some, if not all, of those who self-medicated would have fallen into this category. This leaves at least 37.2% of the students who believed that their illness justified medical treatment but did not seek for it for a variety of reasons. Finding and getting to medical treatment is a problem for a large majority of these students while a few were unhappy with previous treatment that they had received.

Analyses of variance were conducted for a number of variables on these responses. No significant differences were found but some trends are apparent. More older students found it too difficult or had problems seeking help while more students under 18 years of age expressed unhappiness with prior treatment. More Non-Chinese students did not consider the illness serious and self-medicated while more Chinese students found it too difficult and had problems accessing treatment. Only Chinese students complained of being unhappy with previous treatment. For Chinese students, more from PRC and Malaysia considered the illness not serious, more from Indonesia and Singapore self-medicated, more from Hong Kong found it too difficult, more from Singapore and Malaysia claimed problems seeking treatment, and more from Hong Kong claimed that they were unhappy with previous treatment. The type of accommodation did not affect the number considering the illness not serious enough to seek treatment. More students living in homestays and with relatives tended to self-medicate, more students in hostels and private rental situations found it too difficult to seek assistance, more students in hostels and homestays expressed problems seeking help, and more students in student apartments claimed that they were unhappy with previous treatment. The hostels and student apartments are mostly very close to the university health centre while other types of accommodation vary in their proximity to this clinic with some students living a considerable distance away. This makes the claim from students living in hostels that it is too difficult and that they have problems a little surprising.

All of the students were asked to think of a time when they were sick and did not see a doctor and indicate the importance of six reasons on a 5-point scale. 357 students responded and the statistics associated with these responses are shown in Table 12.

Table 12. Importance of Reasons for not seeking Medical Advice

Reason	Mean	Stand. Dev.
I was not sick enough to need treatment	3.82	1.07
I had my own medicine	3.78	1.08
I could not get to the doctor or hospital	2.58	1.21
I needed to go to classes	3.60	1.14
I was busy finishing an assignment or preparing for an examination	3.60	1.20
I was busy with social and other activities	2.32	1.08

From the table it can be seen that not being sick enough to need treatment and having their own medicine are the most important reasons given and needing to go to classes to study were also considered important. Lack of accessibility of medical advice and needing to attend social activities were not.

Analyses of variance were conducted on these results for a number of variables and no significant differences were found. Some trends were observed. Older students placed greater importance on not being sick enough to need attention, having their own medicine, and needing to go to classes and study than did younger students. They placed less importance on not being able to get to medical advice than did younger students. The Chinese students placed greater importance on not being sick enough to require treatment, having their own medicine, and the need to study than did Non-Chinese students. Non-Chinese students placed less importance on not being able to get a medical advice and being busy with social events than did Chinese students. Among the Chinese students, students from Hong Kong placed greater importance on not being sick enough to see a doctor, and not being able to get to a doctor or hospital. Student from the PRC placed greatest importance on having their own medicine and the least importance on not being sick enough to seek help, not being able to get to a doctor or hospital, needing to go to classes and study and needing to attend social events. Students from Indonesia placed the highest importance on needing to go to classes and study and the lowest importance on attending social events. Students from Malaysia placed the lowest importance on having their own medicine. For the accommodation variable, the final reason showed the most variation with students from homestays scoring it very low and those in private rental situations scoring it highest but still not important.

Discussion

A number of issues emerge from these findings.

High Usage of Medications

There seems to be a high usage of medications by these students and a considerable number of these medications are sourced from family and friends or from doctors in their home countries. This behaviour falls within both the 'perceived severity' and the 'perceived benefits' constructs of the Health Belief Model. In terms of these constructs, it can then be seen as appropriate behaviour for these students. As a result of this, two areas of intersection of these students with Australians must be addressed. Medical professionals with whom these students may deal must become aware that these students are using these medications and from where they are sourcing them. The students must be educated about sources of medication that are available to them in Australia. Whether this education should come from the education providers, accommodation providers, the providers of their health care insurance cover, or from some other source is a matter that needs to be discussed.

High Reliance on Family and Friends for Medical Advice

The high reliance of students in this study on family and friends to provide medical advice falls within the perceived benefits construct of the Health Belief Model and is congruent with the values of the Confucian-heritage background of most of the students in the study. The degree to which this is also true for international students with other cultural backgrounds could be the subject of future research as could be a comparison with the habits of Australian young people. This issue again raises the issues of awareness of this by medical professionals who do treat these students and educating these students in the ways of the Australian health system.

Inappropriate Visits to Hospitals

This study showed that a considerable number of students would have visited a hospital to receive treatment or medications when this could have been done more quickly and appropriately by visiting a doctor or other health professional. These students were older and tended to come to be Chinese students from Malaysia and the PRC. This may reflect the relative roles of hospitals and doctor's clinics in their home countries, falling with the Health Belief Model's construct of 'perceived benefits'.

Not Seeking Medical Treatment when it is Required

Both the relatively strong agreement with the statements by these students that they were less likely to see a doctor or visit a hospital in Australia than in their home country and the fact that 37.2% did not seek medical treatment when they had an illness or injury that they felt justified treatment indicate that the fourth construct in the Health Belief Model, 'perceived barriers', plays an important role. There seem to be real issues about these students finding appropriate medical treatment and getting themselves to the source of this treatment. Some student also reported being unhappy with the medical treatment that they had received. Whose role is it to address these issues? Education and accommodation providers and health insurance providers all already provide information to these students on these matters and, at times, assistance is provided in getting these students to medical treatment. Can more be done? Do the health professionals need to look at more flexible and culturally sensitive ways of providing health care to these students?

Variety of Backgrounds of Students

This research reminds us again of the wide variety of backgrounds from which international students come. Like all who deal with them, health professionals need to keep this in mind. The trends shown in this research indicate that the situation is complex and not necessarily as we would expect it to be. Although older students expressed a higher level of satisfaction with their medical treatment in Australia, they still had a higher level of self-medication, a higher level of inappropriate hospital usage, a higher level of problems preventing them seeking treatment and a higher level of not seeking medical treatment because of the pressure of classes and study. Chinese students from Hong Kong quite often said that their illnesses were not serious enough to need treatment but they were also highest in reporting problems that prevented them seeking treatment and in stating that they were unhappy with previous treatment.

Conclusion

The whole area of ensuring that international students in Australia receive appropriate medical treatment which they access easily and with which they are comfortable is a difficult and complex one. Education providers, accommodation providers, health insurance providers, and health professionals all need to work together to improve the students knowledge of the Australian health system and to ensure that flexible and culturally sensitive opportunities for medical treatment are available to them.

References

- Back, A. & Barker, M. (2002). *Counselling Students from Confucian-Background Countries*. Conference paper presented at ISANA2002: Diversity in Practice, Launceston, Tasmania.
- De Bary, W.T. & Chaffey, J.W. (1989). *Neo-Confucian Education: The Formative Stage*. Berkeley: University of California Press.
- Fallon, F. (2002) *Reasons for Absences from Classes by International Students and their Implications for the Pastoral Care of these Students*. Conference paper presented at ISANA2002: Diversity in Practice. Launceston, Tasmania.
- Ho, D.Y.F. (1996). Filial Piety and Its Psychological Consequences. In M. H. Bond (Ed.), *The Handbook of Chinese Psychology*. New York: Oxford University Press.
- Lajunen, T. & Rasanen, M. (2004). Can social psychological models be used to promote bicycle helmet use among teenagers? A comparison of the Health Belief Model, Theory of Planned Behaviour and the Locus of Control. *Journal of Safety Research*, 35(1), 115 – 123.
- Ray-Mazumder, S. (2001). Role of Gender, Insurance Status and Culture in Attitudes and Health behaviour in a US Chinese Student Population. *Ethnicity and Health*, 6(3.4), 197 – 209.
- Roden, J. (2004). Revisiting the Health Belief Model: Nurses applying it to young families and their health promotion needs. *Nursing & Health Sciences*, 6(1), 1 – 10.
- Walsh, M. (1994). The Health Belief Model and use of accident and emergency services by the general public. *Journal of Advanced Nursing*. 22, 694 – 699.