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A Study on the Needs of Medical, Maternal and Child Health Care in Chinese Women Students at the University of Tokyo

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GU, Y.-H., LEE, S. and USHIJIMA, H. *A Study on the Needs of Medical, Maternal and Child Health Care in Chinese Women Students at the University of Tokyo*. Tohoku J. Exp. Med., 2004, **204** (1), 71-78 —— According to the information provided by the University of Tokyo (UT) in 2001, 317 Chinese women students were enrolled in the UT, and 88% of them were graduate students. Although the surveys on the life of international students at the UT had been conducted in 1989 and 1998, the medical and health issues were not included. With the objective of exploring the medical and heath care needs of Chinese women students at the UT a survey was carried out from December 2001 to January 2002. With the cooperation of the International Students Center at the UT a questionnaire in Chinese was sent to each department in which 317 Chinese women students were studying. Out of 104 students responded, eligible subjects were 98. The results of present study revealed some problems, such as the language barrier, preference for a translator in hospitals or health centers, and a medical guidebook with information on vaccinations in Chinese. They also stated their lack of knowledge about the Japanese medical and health system, and their distress for being separated from their children. In conclusion, the most severe problem was language barrier for Chinese women students in obtaining medical and health care for themselves and their children. It was also noted that lack of knowledge of the Japanese medical and health care system was another obvious problem. ———— language barrier; medical and health care information; maternal and child health; Chinese women students

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According to the 2001 census conducted by the Ministry of Justice, there were 1.8 million foreign residents in Japan, with residents from China heading the list as the "birthplace of the fastest growing group." About 381 000 Chinese residents were living in Japan in 2001. In addition, there were 5 million foreigners temporarily visiting Japan for business or as tourists. During the past 15 years, 420 000 babies were born to foreign parents (or couples with one foreign parent). Some previous reports on health care issues for foreign residents in Japan have pointed out that the language barrier, and defaulting on medical payments, were major issues, particularly for foreigners from non-English-speaking backgrounds (Yoshioka 1998; Shima et al. 1999). However, no information on the medical and health care including maternal and child health needs of international students in Japan has yet been reported.

The relationship between health and migration has been studied in English–speaking countries, highlighting that 1) migrants are more vulnerable to illness and distress, and 2) migrants' use of health care services is influenced by many factors, such as cost, accessibility, and language (Kasl and Berkman 1983; Fukui 1987; Chan and Quine 1997). For non-English speaking migrants living in English–speaking countries, the language barrier is a major factor affecting their use of health care services (Fukui 1987; Chan and Quine 1997). There have been methodological difficulties in migrant health research, including limited information on the health status and health service use of migrants from different backgrounds. Therefore, attempts have been made in Australia and the U.S. to elicit information from respondents on their country of birth and language spoken at home (Fukui 1987; Chan and Quine 1997).

To date, approximately 40 000 Chinese students are studying in Japan, with the University of Tokyo (UT) having the largest number. According to a survey conducted at UT in 1998, of 600 Chinese students from mainland China, half were females. Half of all international students were married, and one-third had children (Committee for investigation of the life of international students 2001). These students came to Japan with high hopes for obtaining an excellent education, but overcoming the various barriers they encountered had forced them to stay in Japan longer than initially planned (Committee for investigation of the life of international students 2001).

The aim of this study was to attempt to explore the medical, maternal and child health care needs of Chinese women students studying at UT. Because the Japanese writing system was adapted from the Chinese writing system, and thus it is easier for Chinese to learn to read and write Japanese than it is for foreigners from other countries, we wondered whether these women were experiencing the language barrier to the same degree as other foreigners in medical care. In addition, the women are highly educated, and we wondered if this was impacting their ability to obtain medical care for themselves and their children.

Methods

In 2001, 317 Chinese women students were enrolled in the UT. The survey was carried out from December 2001 to January 2002. A questionnaire in Chinese was sent to each laboratory and class in which 317 Chinese women students were studying by post with the cooperation of the International Students Center at the UT. One hundred and four students responded; the eligible subjects were 98. The response rate was 32.8%. Ethical approval for the study was also granted by the International Students Center at the UT.

The two-part questionnaire consisted of closed-ended questions and open-ended questions. The closed-ended questions were used to obtain general information. The contents were as follows: 1) the demographics of the respondents, including their age and length of stay in Japan. For the mother group, the age of the children and questions about vaccinations were also included; 2) how they obtained information, contacted with, and utilized medical and health care, including maternal and child health (MCH) care. For some

questions, the opportunity to choice multiple answers was given. The open-ended questions, that is, qualitative inquiries, were used to explore, in detail, the students' medical and health care needs. The contents were as follows: 1) What do you think of the services in the Health Service Center (HSC) at the UT, or available at Japanese hospitals and local health centers? What are your expectations? 2) What worries do you have about your children (for mother group)? 3) If you have any additional comments, please write them below.

The questionnaire was designed by all of the authors of this report (Kasl and Berkman 1983; Fukui 1987; Saito et al. 1992; Chan and Quine 1997; Yoshioka 1998; Shima et al. 1999; Students Exchange Division 2001; Committee for investigation of the life of international students 2001; The homepage of the Ministry of Health, Labor and Welfare of Japan http://www.mhlw.go.jp/english). The questionnaire was translated into Chinese by the Chinese author (Yan-Hong Gu), a student in the graduate school of medicine at the UT, who has given birth to a baby in Japan.

The answers to the open-ended questions were recorded using a computer and a software program (Chinese writer V5, KODENSHA Co., Ltd., Osaka). The answers were categorized according to theme by the Chinese author (Yan-Hong Gu) and another Chinese cooperator according previously reported methods (Anme 2001). The answers were also translated into Japanese, and the contents re-checked by Japanese-speaking colleagues.

Results

Findings from the closed-ended questions

(1) Demographics (Tables 1, 2 and 3). All of the participants were young, highly educated women. The age was 30.1±4.89 (mean±S.D.); and the range was 21 to 42 years (Tables 1 and 2). One-third of all participants had passed Level 1 or 2 of the Japanese-Language Proficiency Test (top levels). There was a trend in entrance examination for international students at UT: higher English level was required rather than Japanese. International students could attend various Japanese language courses for them at UT. They were divided into two groups, a mother group (30) and a non-mother group (68). About 72.4% of all children were separated from their mothers and living in China (Table 3).

(2) Table 4 showed how much information on the Japanese health care system and the services available through it were known or utilized by the Chinese women students at the time at which they took the survey. Only two items (the emergency phone number needed to call an ambulance and the medical fee subsidy system for foreign students) were known by over 50% of all participants.

One third of all participants obtained their medical and health care information from their Chinese friends, and 17.6% from a guidebook (called *benricho* in Japanese) delivered by the ward (Japanese cities are divided into wards, or areas of the city in which citizens live).

(3) Access to medical and health care and ease of communication with the staff.

Although 47 out of 98 participants were experiencing some problems with their health at the time at which they took the survey, 30 of them were not seeing a physician. The reasons they gave for not seeing a doctor are as follows: 11 non-mothers and two mothers thought the problems were not severe; nine non-mothers and three mothers were busy; eight non-mothers and five mothers took the medicine they had bought from China; six non-mothers were worried about high medical fees; five non-mothers and two mothers were worried about the language barrier; four non-mothers and two mothers did not know which hospitals provided good care; one non-mother and two mothers bought medicine at drug store. Twenty-four (80%) of them had come to Japan within the past five years.

Since coming to Japan, 64 out of 98 participants had visited a hospital; 48 of the 64 persons had come to Japan within the past five years. Eight out of the 64 had been accompanied by a

TABLE 1. *Demographics of all respondents (n=98)*

Characteristic	Value (%)	
	Non-mother group (*n*=68) (%)	Mother group (*n*=30) (%)
Age (years)		
21-25	20 (29.4)	0 (0.0)
26-29	26 (38.2)	2 (6.7)
30-39	20 (29.4)	23 (76.7)
40-	0 (0.0)	4 (13.3)
Missing	2 (2.9)	1 (3.3)
Length of stay in Japan (years)		
-1	12 (17.6)	4 (13.3)
1-3	32 (47.1)	8 (26.7)
4-5	17 (25.0)	8 (26.7)
6-10	7 (10.3)	7 (23.3)
11-	0 (0.0)	2 (6.7)
Missing	0 (0.0)	1 (3.3)
Area in which respondent lives		
Metropolitan Tokyo	59 (86.8)	21 (70.0)
The outskirts of Tokyo (Chiba, Saitama or Kanagawa Prefectures)	8 (11.8)	9 (30.0)
Missing	1 (1.4)	0 (0.0)
Education in China		
Bachelor's Degree	45 (66.2)	12 (40.0)
Master's degree	16 (23.5)	14 (46.6)
Doctorate or M.D. degree	2 (2.9)	2 (6.7)
The others	5 (7.4)	2 (6.7)
Now studying in graduate school at UT	68 (100.0)	30 (100.0)
Have passed Level 1 or 2 of the Japanese-Language Proficiency Test[*]	23 (33.8)	6 (20.0)
Joined national health insurance		
Yes	63 (92.6)	29 (96.7)
No	4 (5.9)	1 (3.3)
Missing	1 (1.5)	0 (0.0)
Has a spouse	26 (38.2)	30 (100.0)
Is living with the spouse	10 (38.5)	13 (43.3)

[*]The test was jointly administered by the Association of International Education, Japan, and the Japan Foundation.

translator when they went to see a physician. Chinese friends, a spouse, relatives, or a member of the medical staff acted as translator. Six out of the 64 wanted to bring a translator, but there was nobody they could ask.

The ability of the respondents to communicate with medical and health staff in Japanese, English, or by writing Chinese characters (which are also used in the Japanese writing system) was evaluated in Table 5.

TABLE 2. *Age of respondents and all Chinese women students in the UT in 2001*

Age (Years)	Respondents (98)		All Chinese women students (317)*
	Number	% (95% CI)	%
-25	20	20.4 (12.4-28.4)	16.7
26-29	28	28.6 (19.7-37.5)	26.2
30-39	43	43.9 (34.1-53.7)	44.2
40-	4	4.1 (0.2-8.0)	2.2
Missing	3	3.0	1.6
Mean±S.D.		30.1±4.89 (31.1-29.1)	29.2±5.38
Range		21-42	18-46

*Unpublished data provided by International Students Center of the UT.

TABLE 3. *Age of the children*

Age (years)	No. of children separated from their mothers	No. of children living with their mothers
- 3	4	3
4-6	3	1
7-9	6	3
10-14	7	1
15-	1	0
Total	21	8

(4) Issues concerning vaccination.

Five mothers did not know the differences between the vaccination schedules in Japan and China, four mothers did not understand the words for BCG, polio, diphtheria and tuberculin in Japanese, three mothers were worried about side reactions to the vaccines, and one mother complained that she received no counseling on vaccinations.

(5) Expectations about the HSC of UT are as follows: to have a translator (35.3% of non-mothers and 43.3% of mothers); to have a dentist in the UT health center (83.8% of non-mothers and 73.4% of mothers); to have an obstetrician and gynecologist (ObGyn) in the UT health center (76.5% of non-mothers and 73.4% of mothers).

Findings from the open-ended questions

Answers were obtained from 45 of the participants in the non-mother group (66.2%) and 22 in the mother group (73.3%). The themes of the answers were grouped under five broad categories: (A) language barriers, (B) medical and health care information, (C) about hospitals, (D) about the HSC, (E) feeling concerned about their children in the mother group.

(A) One-third of the non-mothers (15/45) and three mothers (3/22) mentioned the following language barriers in medical and health care, especially when they to see a physician, dentist or ObGyn, or go to the local health center for vaccination.

(B) Eight non-mothers and four mothers mentioned that they did not know or were lacking medical and health care information and expected to understand the medical and health system by counseling or instructional booklet in Chinese.

(C) They have no more time to see the doctor especially a dentist (eight non-mothers & five mothers); the medical fee was too expensive. (three

TABLE 4. *Number of respondents who knew information on, or utilized information on medical services and MCH*

	Known		Utilized	
	Non-mothers *n*=68 (%)	Mothers *n*=30 (%)	Non-mothers *n*=68 (%)	Mothers *n*=30 (%)
Phone number (119) for an ambulance	41 (60.3)	17 (56.7)	5 (7.4)	3 (10)
Medical fee subsidy system for foreign students	40 (58.8)	17 (56.7)	-	-
Vaccinations	27 (39.7)	19 (63.3)	0 (0.0)	10 (33.3)
Mother and child health handbook	25 (36.8)	17 (56.7)	2 (2.9)	10 (33.3)
Lump-sum childbirth subsidy from national health insurance	25 (36.8)	15 (50.0)	0 (0.0)	8 (26.7)
Parents' class or mothers' class	13 (19.1)	12 (40.0)	1 (1.5)	8 (26.7)
Exemption from payment of tuition fees for kindergarten for low income families	10 (14.7)	13 (43.3)	0 (0.0)	3 (10.0)
Uterine and breast cancer checkups for women 40 years or older	11 (16.2)	9 (30.0)	2 (2.9)	3 (10.0)
Milk provided for newborn neonates of low income families	11 (16.2)	7 (23.3)	0 (0.0)	2 (6.7)
Health checkups for infants and preschool children	9 (13.2)	13 (43.3)	0 (0.0)	7 (23.3)
Child allowance	9 (13.2)	10 (33.3)	0 (0.0)	6 (20.0)
Health checkup for residents 40 years of age or older	7 (10.3)	6 (20.0)	0 (0.0)	1 (3.3)
Health checkup for pregnant women (two times checkups are free)	4 (5.9)	7 (23.3)	1 (1.5)	7 (23.3)
Home visit guidance for newborn neonates	3 (4.4)	12 (40.0)	0 (0.0)	6 (20.0)
Dental checkup for residents 40 years of age or older	3 (4.4)	6 (20.0)	0 (0.0)	2 (6.7)
Medical aid program for children with specific chronic pediatric diseases	2 (2.9)	7 (23.3)	0 (0.0)	2 (6.7)
Medical aid for pregnant women with toxaemia and puerperal women	0 (0.0)	4 (13.3)	0 (0.0)	2 (6.7)

non-mothers & one mother).

(E) Fifteen of the mothers who were separated from their children answered the question: nine of them were worried that living apart from their children would affect their children's psychological and mental development, two were worried about their children's health, three were worried about their children's education, and one was worried about nutrition. Three of the mothers who were living with their children responded to the item: two were worried about their children's language abilities, and one was worried about their children's health.

(D) The HSC is convenient (15 non-mothers and 5 mothers); there should be more doctors such as dentist (seven non-mothers & three mothers); more tests and examinations should be included in the annual medical examination performed in the HSC (three non-mothers & one mother).

DISCUSSION

The mean age, proportion of each age group and its 95% confidence interval (CI) of 98 eligible participants, and the mean age and proportion of each age group of whole Chinese women students

TABLE 5. *The ability of the respondents to communicate with medical and health staff in Japanese, English, or by writing Chinese characters was evaluated by 5 scales: Cannot communicate, Cannot communicate adequately, Can communicate somewhat, Can communicate adequately, and Can communicate proficiently, estimated by respondents themselves*

Non-mother group *n*=57 / Mother group *n*=27	Cannot communicate	Cannot communicate adequately	Can communicate somewhat	Can communicate adequately	Can communicate proficiently
Can understand questionnaire containing medical items administered by medical staff.	2/1	11/5	20/7	11/7	11/7
Can express symptoms.	3/0	8/2	28/12	8/7	8/6
Can understand explanations given by doctors, nurses, or pharmacists.	5/0	5/2	22/10	14/8	9/7
Can ask the medical staff questions.	3/0	10/2	15/9	11/5	16/11
Knows the process how to see a doctor in Japan. For examples, which is the first thing to do, payment or receiving a medical examination.	4/2	7/4	24/11	11/5	1/5

Available data only.

(317) in the UT in 2001 were calculated and compared between them (Table 2). There were no significant differences in mean age and proportion of each age group ($p>0.05$). Therefore, it was considered that 98 eligible participants in the present study may represent the whole Chinese women students.

This study was the first in Japan to attempt to explore the medical, maternal and child health care needs of Chinese women students using their mother tongue. The subjects in this study had the same background, and, in addition, the main researcher was a Chinese speaker and had the same experience as that of the participants. For these reasons, more accurate data was obtained.

We used closed-ended questions to obtain general information first, then used qualitative inquiry to obtain detailed information on these women's needs. Therefore, we emphasized descriptive rather than statistical analysis, and analyzed the answers obtained to the open-ended questions using qualitative analysis. From both methods, we observed the same two main problems in both the group of mothers and in the non-mothers: a language barrier and lack of knowledge on the Japanese medical and health system. In addition, the mothers suffered additional stress from being separated from their children.

The HSC on the UT camps was convenient. The participants in this study had high expectations of the HSC.

Although we got limited data from a National university in present study, but the data revealed the tip of the iceberg. For further study on foreigner medical problems the present study provided some basic data and a good sample of methodology.

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