

〔原著論文〕

Mental Health of Japanese Mothers Living in Beijing with Young Children

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キーワード：日本人母親、異文化ストレス、メンタルヘルス

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要旨

【緒言】本研究は、乳幼児を持つ海外在住日本人母親を対象とした研究プロジェクトの一環であり、他誌（2007 Vol.12, No.3）で発表したニューヨーク在住日本人母親を対象とした調査に続くものである。本研究の目的は、日本人人口が急増した北京に在住する乳幼児を抱えた母親（以下北京群）を対象に、メンタルヘルス状態と異文化ストレス及び育児ストレスとの関係を明らかにすることである。本研究の意義は、帰国して受診・治療することが多い北京在住日本人母親のメンタルヘルスに関する情報を、関連する国内医療従事者に提供することである。

【方法】北京群と比較対照群（以下国内群）各 200 人に質問紙と GHQ30 を配布し郵送にて回収した。SPSS13.0J を使い、有意水準を 5 % に定め統計分析を行った。倫理的配慮は書面にて自由意志による参加、プラバシーの保護等を説明した。

【結果・考察】224部回収された(回収率56%)。北京群は国内群より専業主婦が有意に多かった。しかし、他の結婚年数、子どもの数などの属性はほぼ同様であった。北京群・国内群とも半数にGHQの異常が認められ、3人に一人は専門家の受診が必要なハイリスク群であった。北京群のハイリスク群は国内のハイリスク群より「地域の便利さ・快適さ」「環境（大気汚染等）」などで有意にストレスを感じていた。また、北京群の中でハイリスク群は正常群に比べ「コミュニケーション能力」が弱く「孤立」していると感じており、日本人や中国人との「人間関係」、子どもの「教育」「友達」「発達と健康」に有意にストレスを感じていた。また、ハイリスク群の72%は「海外の子育てはストレス」、51.2%は「子どもが海外の生活でストレスを感じている」と答えており、この2つの項目はメンタルヘルスと有意な相関がみられた。

北京群の約 90%の母親は「夫はストレス下にある」と感じており、母子のメンタルヘルスへの相互作用も考慮し、子どもの成長発達への影響を明らかにすることが今後の課題である。

Introduction

This study was parallel to a similar study which looked at Japanese mothers living in New York¹⁾, and is part of a larger project looking at the experiences of mothers living overseas. In view of important

differences in the cultural settings and the experiences of the mothers in Beijing and the mothers in New York, the two studies are reported separately.

The research methods were similar for both studies, and for each study data from the overseas mothers

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were compared with data from a control group from City A in Japan. Some details are repeated briefly here in the 'Methods' section for convenience.

This study focuses particularly on the mothers living in Beijing, but comparisons will be made with mothers in City A where it is appropriate and useful to do so.

Background

From the viewpoint of transcultural psychiatry, Japanese mothers abroad are seen to be at a high risk for mental health, for they face 'chronic adversity' going through pregnancy, childbirth and child rearing in a foreign country²⁾. They may be more likely to suffer from mental health problems because of the double burden of transcultural stress from living in a foreign country and the stress of pregnancy, childbirth and child rearing.

This study focuses on the mental health of Japanese mothers and stress factors which may be derived from child rearing in Beijing. The number of Japanese who live in China has been increasing, reaching 125,417 in 2006, with an increase of 43.5% in the Japanese population of Beijing compared with the previous year. In 2006, there were 21,231 Japanese who stayed in Beijing for more than 3 months, mainly for business purposes³⁾.

In a separate study⁴⁾, interviews with Japanese mothers in Beijing revealed that they prefer to come back to Japan to receive medical services. The journey is just three hours by plane, and the mothers have more confidence in medical services in Japan than in Beijing. This preference and the growing Japanese population in China suggest that it is becoming more likely that Japanese medical service providers will encounter visiting Japanese mothers and their children who are living in China.

With the rapid increase in international migration and the numbers of people living away from their home country, interest in transcultural stress and the mental health of migrants has grown^{5), 6), 7)}. One study of 2,284 Japanese businessmen and their wives abroad reported that 39% showed symptoms of neurosis⁸⁾ and reported factors such as dissatisfaction with work and daily life abroad, lack of support, stress from relationships with local people and family problems. Two psychiatric studies reported that Japanese mothers abroad were prone to suffer from postnatal depression because

of child rearing stress and transcultural stress, and concluded that Japanese mothers abroad were a high-risk group for maternal and child health service providers^{9) 10)}.

Poor mental health of the mother has been reported to have a profound adverse effect on a child's development and health. In some cases mothers demonstrated aggression towards their children¹¹⁾. One study of Japanese mothers abroad revealed that their poor mental health affected their children's mental health, and was significantly related to their children's anxiety¹²⁾. Another study demonstrated that non-English-speaking foreign-born mothers in the US were clinically depressed and their children appeared to be at high risk for delays in development¹³⁾. Studies of psychosomatic issues relating to mothers abroad are important not only for the women themselves, but also for their children's health and development. This paper aims to add to an understanding of these issues.

Methods

1. Research Design

This was a survey, using anonymous questionnaires for transcultural and child rearing stress factors and the General Health Questionnaire (GHQ 30).

2. Data Collection and Participants

The author visited Beijing and recruited two Japanese in Beijing to help distribute questionnaires. Both were female and had lived long enough in the country to know the Japanese communities. Several Japanese nursery schools were approached and permission to distribute the questionnaires was granted by the management of the institutions. The questionnaires were distributed randomly to mothers who agreed to cooperate. The conditions for participation were as follows: the mothers were born and educated in Japan, they had at least one child under age 6 and ideally under age one, and they had been living in Beijing as residents, that is, staying more than 3 months but not permanent residents. As a counter group, 200 questionnaires were distributed to mothers from a similar socio-economic background through several nursery schools in a city in Japan (henceforth, City A). A condition for selection was that it should be a provincial city which did not have many foreigners, so that transcultural stress should not

be an important issue. The other conditions were the same as for Beijing, that is, the mothers were born and educated in Japan and had at least one child under age 6.

3. Measures

Questionnaires were used to identify transcultural stress factors (27 items). For each item residents were asked to rate their own stress, using a 4-point Likert scale to assess the level of stress (1: no stress, 4: most stressful). According to the Cronbach alpha index the level of reliability was 0.82 for 27 stress factors. GHQ 30 (30 items) was used to assess mental health, with a 6/7 cut-off point to distinguish normal from abnormal subjects, and a 9/10 cut-off point to identify high-risk subjects who may be in need of professional help. The duration of the study was from April 2005 to December 2006.

4. Analysis

The data were collected by post and were subjected to statistical analyses, mainly the chi-square test, correlation and Mann-Whitney test according to the questions. A p-value of <.05 was considered statistically significant. SPSS 13.0J software was used for statistical analyses.

5. Ethical consideration

The proposal for this research was assessed and approved by the Ethics Committee of Aomori University of Health and Welfare. The following issues were clearly stated in writing: the questionnaires were anonymous, so privacy was protected; co-operation was voluntary; the results would only be used for academic purposes.

Results

200 questionnaires were distributed to mothers in Beijing and 200 in City A. 149 questionnaires were collected from Beijing (74.5% rate of collection) and 75 questionnaires from City A (37.5% rate of collection). All questionnaires were collected by post. Overall, 224 questionnaires were collected (56% rate of collection) and used for statistical analyses.

1. Attributes

There was no significant age difference between the mothers in Beijing and City A. Respondents had

been married for an average of 8.01 years (SD 3.53) in Beijing, and 8.31 years (SD 3.01) in City A. 56 mothers in Beijing (37.6%, n=149) and 30 mothers in City A (41%, n=73) had one child. The average numbers of children were 1.69 (SD .60) for mothers in Beijing, and 1.66 (SD .61) for mothers in City A. There was a significantly greater proportion of working mothers in City A, that is, 31 mothers (42.5%, n=73) compared with 24 mothers in Beijing (16.2%, n=148) (χ^2 (1, N=221) =18.02, p=.000). 135 mothers in Beijing (90.6%, n=149) and 64 mothers in City A (90.1%, n=71) felt that their husbands were stressed. The mothers were asked whether they were satisfied with life in general and 16 (11%, n=145) mothers in Beijing, and 9 (12.5%, n=72) mothers in City A answered that they were not satisfied with life. They were asked whether they were satisfied with their husband's contribution to child rearing, and 35 (24.1%, n=145) mothers in Beijing and 17 (23.3%, n=72) mothers in City A answered that they were not satisfied. 55 mothers (39.3%) in Beijing answered that they did not want to give birth in Beijing if they have a chance in future.

2. Adaptation to daily life in Beijing

The average length of stay in Beijing was 3.0 years (SD 3.05) and the average number of years of expected future stay was 3.4 years (SD .81). 94 mothers in Beijing (63.1%, n=149) had no experience of living abroad in the past. For language, 77 mothers (51.7%, n=149) answered that their ability in listening and speaking was 'poor' and 80 mothers (54.1%, n=148) answered that their ability in reading and writing was 'poor'. They were also asked about their ability to communicate with local people and 72 mothers (48.6%, n=148) answered 'poor'. 15 mothers (10.1%, n=148) answered that they could not go out alone. 50 mothers (33.8%, n=148) answered that they felt isolated. 60 mothers (41.5%, n=145) answered that they felt they were not getting enough support from Japan. 73 mothers in Beijing (50.7%, n=144) felt that their children were stressed by living abroad, and 83 mothers (58.0%, n=143) felt that child rearing abroad was more stressful than child rearing in Japan.

3. Stress factors

The mothers were asked about a range of potential stress factors. The stress factors which most affected

the mothers in Beijing were as follows: 'local people's manners' (n=133, 89.9%), 'environment' (n=127, 85.2%), 'amenities and comfort in the area' (n=124, 83.2%), 'language' (n=106, 71.1%), and 'child rearing' (n=92, 63.9%) (Fig1).

The stress factors which most affected the mothers in City A were as follows: 'child rearing' (n=54, 74%), 'finance' (n=49, 67.1%), 'environment' (n=44, 60.3%), 'medical services in the area' (n=42, 58.3%), and 'security in the host country' (n=40, 56.3%) (Fig 2).

There were significant differences in stress factors between mothers in Beijing and City A. The mothers in Beijing found more stress than the mothers in City A with 'being away from family' (χ^2 (1, N=220) =11.260, $p=.001$), 'amenities and comfort in the area' (χ^2 (1, N=220) =36.151, $p=.000$) and 'environment' (χ^2 (1, N=222) =17.251, $p=.000$). On the other hand, the mothers in City A found more stress than the mothers in Beijing with 'no time to relax' (χ^2 (1, N=211) =8.120, $p=.004$), 'dealing with school staff' (χ^2 (1, N=211) =7.851, $p=.005$) and 'finance' (χ^2 (1, N=221) =55.383, $p=.000$).

4. GHQ

The average GHQ scores in each city were 7.8 (SD 5.9) in Beijing and 9.3 (SD 6.9) in City A, but the difference was not significant. To identify high-risk mothers who might be in need of professional help, the respondents were divided into three categories, a normal group (less than 6 points), an abnormal group (between 7 and 9 points), and a high-risk group (10 points and over) (Table 1). There were 68 mothers (50.0%) in Beijing and 31 mothers (44.9%) in City A who had normal scores. There were 24 mothers (17.6%) in Beijing and 12 mothers (17.4%) who had abnormal scores. There were 44 (32.4%) mothers in Beijing and 26 (37.7%) in City A who scored more than 10 points. There was no significant difference in GHQ results between the 2 cities.

The 30 GHQ questions were divided into 6

表1 Distribution of GHQ scores in Beijing and City A

	Normal Group	Abnormal Group	High-Risk Group	
	0-6 points	7-9 points	10 and over	N
Beijing	68 (50.0)	24 (17.6)	44 (32.4)	136
City A	31 (44.9)	12 (17.4)	26 (37.1)	69
Total	99 (48.3)	36 (17.6)	70 (34.1)	205

n.s.

components, general illness, somatic symptoms, sleep disturbance, social dysfunction, anxiety and dysphoria, and suicidal depression (Table 2). Using the cut-off points suggested in the GHQ user's guide¹⁴⁾, the mothers were divided into low and high scoring groups. The numbers of mothers with high scores in Beijing and City A are shown as percentages in Fig 3 and a chi-square test yielded a significant difference in somatic symptoms (χ^2 (1, N=216) =8.063, $p=.005$).

5. High-risk GHQ scores and stress factors

Compared with the mothers with normal scores in Beijing, the mothers who had high-risk scores answered that their Chinese reading and writing abilities were 'poor' ($p=.009$), that they were 'feeling isolated' ($p=.008$), and that they were stressed with the following factors: 'relationship with local Japanese' ($p=.004$), 'relationship with local people' ($p<.001$), 'no time to relax' ($p=.025$), 'child rearing' ($p<.001$), 'child's friends' ($p<.001$), 'child's education' ($p=.01$), 'child's health and development' ($p<.001$) and 'lack of information from Japan' ($p<.001$).

Compared with the mothers who had high-risk scores in City A, the mothers in Beijing with high-risk scores were more stressed with the following factors: 'amenities and comfort in the area' (χ^2 (1, N=69) =9.417, $p=.002$), 'environment' (χ^2 (1, N=70) =4.272, $p=.039$), 'child's health and development' (χ^2 (1, N=68) =4.831, $p=.028$), 'child's education' (F , $p<.001$), 'being away from family' (χ^2 (1, N=68) =9.530, $p=.002$) and 'relationship with local Japanese' (χ^2 (1, N=68) =4.867, $p=.027$). On the other hand, the mothers who had high-risk scores in City A were more stressed with having 'no time to relax' (χ^2 (1, N=70) =5.054, $p=.025$) and with 'finance' (χ^2 (1, N=70) =14.726, $p<.001$) (Fig 4).

表2 Six Components of GHQ

6 components	Cut-off point	Beijing		City A		N
		n	%	n	%	
general illness	3	48	33.6	29	40.3	215
somatic symptoms	3	29	20.0	27	38.0	216
sleep disturbance	3	51	35.2	27	38.0	216
social dysfunction	3	10	7.2	9	12.7	209
anxiety & dysphoria	4	29	20.0	20	27.8	217
suicidal depression	2	9	40.9	10	62.5	38

Note: Range of scores per component: Min 0 Max 5

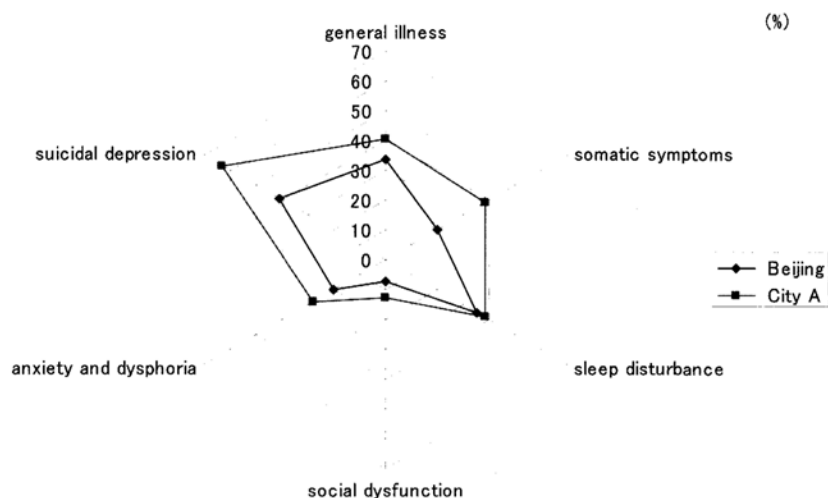


Figure 1 Six Components of GHG: Percentages of High-Risk Mothers Affected
 Note : Somatic symptoms ($\chi^2(1, N=216)=8.066, p=.005$)

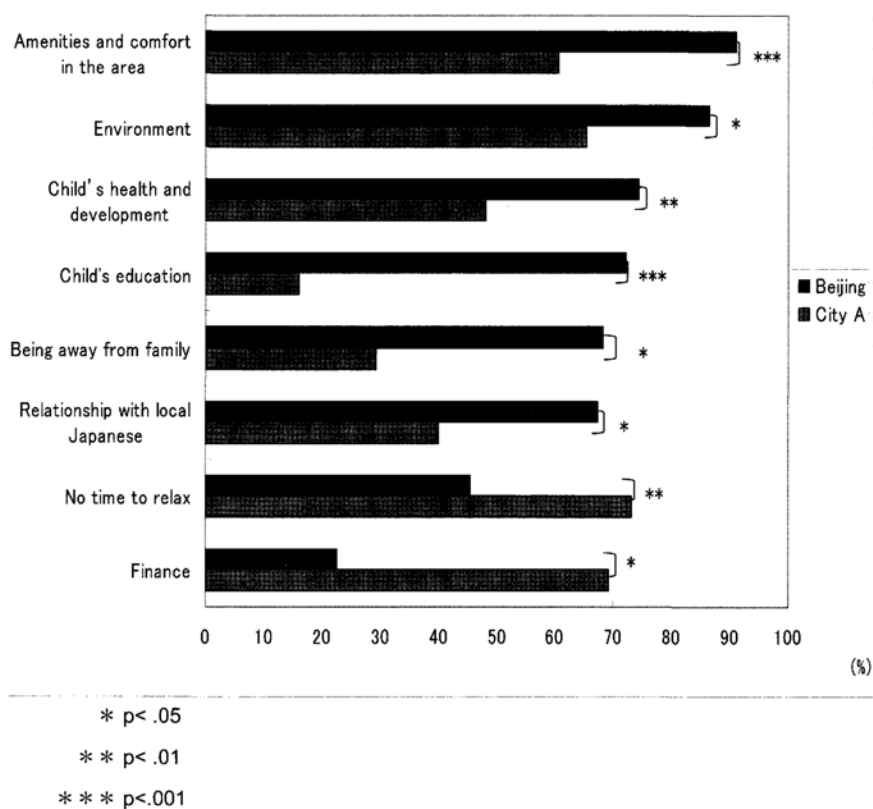


Figure 2 Stress Factors : Differences between mothers with high-risk GHQ scores in Beijing and City A

6. High-risk mothers and child rearing abroad

There were 83 mothers (58%) in Beijing who answered that child rearing abroad was stressful, and 73 mothers (50.7%) who felt their children were

stressed by living abroad. 31 (72.1%, $n=43$) mothers who had high-risk GHQ scores answered that child rearing abroad was stressful. 22 (51.2%, $n=43$) mothers who had high-risk GHQ scores felt their

children were stressed by living abroad. The mothers who answered that they were not getting enough support from husbands showed a significant difference in 'general illness' ($p=.049$) compared with the mothers who answered that they were getting enough support.

Stress from child rearing abroad showed significant correlations with 'anxiety and dysphoria' ($r=-.170$, $p=.045$, $n=140$), 'suicidal depression' ($r=-.225$, $p=.007$, $n=140$), and 'children stressed by living abroad' ($r=.314$, $p<.001$, $n=142$).

There were significantly more younger mothers (under age 35) who answered that child rearing abroad was stressful ($\chi^2(1, N=43) = 4.560$ $p=.033$). Those who found child rearing abroad stressful were also stressed by the following factors: 'isolation' ($p<.001$), 'dissatisfaction with life' ($p<.001$), 'relationship with local Japanese' ($p=.022$), 'nobody to consult' ($p=.001$), 'no time to relax' ($p=.001$), 'difficult to get Japanese food' ($p=.026$), 'amenities and comfort in the area' ($p=.026$), 'child rearing' ($p<.001$) and 'children stressed by living abroad' ($p<.001$).

Discussion

1. Japanese mothers in Beijing

There were significantly more housewives in Beijing than in City A, but otherwise there were no differences in the major attributes of age, the number of years of marriage, and the number of children.

For adaptation to life in Beijing, more than half of the mothers found language and communication difficulties which may make it difficult to go out alone and may lead to isolation from the local community. Under these circumstances, their husbands may be expected to play an important role in supporting and participating in child rearing, but more than 90 per cent of the mothers felt that their husbands were stressed and they were less likely to be able to ask their husbands for help. However, only 24 per cent of the mothers answered that they were not satisfied with their husbands' contribution to child rearing.

One reason may be that it was common practice among the Japanese mothers in Beijing to have Chinese baby sitters or Chinese house keepers.¹⁵⁾ Compared with the counter group in Japan, there were significantly more housewives and they were less stressed with 'finance' and 'no time to relax'. 'Finance' is an important stress factor in relation to

mental health. The Japanese mothers in Beijing were also more likely to have time for themselves, which is important for good mental health¹⁶⁾.

2. Poor Mental Health

According to the GHQ Handbook¹⁷⁾, the average GHQ score of Japanese housewives in Japan was 3.90 for women in their 30s. However, the average scores of the respondents in Beijing and City A were higher. 50% of the mothers in Beijing showed signs of poor mental health.

Some experts suggest that the mental health of women should be investigated from transcultural and holistic perspectives^{18) 19)}. The limited literature suggests that migration status is an independent risk factor for women, associated especially with poor health status, psychological distress and psychosomatic complaints²⁰⁾. For medical service providers, it is very important to understand that more than half of mothers abroad may need close monitoring to identify those at risk and to understand the influencing factors, including the socio-cultural background.

3. Stress factors related to poor mental health

Based on GHQ scores, the current study found little difference in the mental health of mothers in Beijing and mothers in Japan. However, there were significant differences in the factors which contributed to stress and mental health for those overseas and those in Japan.

1) Environment

The mothers in Beijing with young children tended to be very nervous about health and hygiene. They were keen not only to protect their children from infectious diseases but also to find reliable medical services. They found most stress with 'local people's manners', 'environment' and 'amenities and comfort in the area'. The local people's manners such as the habit of spitting in the street were quite disturbing for the Japanese mothers²¹⁾. Air pollution, dust and litter on the streets were also reported as stress factors. For amenities and comfort in the area, lack of parks or department stores where the Japanese mothers could let their children play freely and safely was reported as a stress factor.

These stress factors specific to the host country

cannot be changed by the foreign residents. The Japanese mothers have to adapt, ignore the problems, or put up with the difficult environment. In these circumstances, the longer the mothers stay, the greater the risk for mental health, because they face unavoidable and unchangeable stress factors in daily life. Environment and length of stay may have a bearing on mental health, and medical service providers need to take these factors into consideration.

2) Language and Isolation

More than half of the Japanese mothers in Beijing reported that their language and communication abilities were poor. The mothers who had stayed in Beijing for less than one year found more stress than the mothers who had stayed more than one year. Language is an essential factor for good communication abilities, and the mothers in Beijing seemed to have an extra burden arising from anti-Japanese feelings in China. Language and strained relations made it difficult for them to communicate with local Chinese. It was reported²²⁾ that many Japanese in Beijing were not allowed under company policy to own a car, so the Japanese mothers had to take taxis to go shopping or to visit friends. Not all taxis in Beijing were clean and air-conditioned. When taxi drivers asked the Japanese mothers about their nationality, they often answered that they were Korean to avoid any unpleasantness. The political climate and national attitude towards Japanese prevented the mothers from going out and mixing with local people, and consequently led them to seclusion.

Some mothers can cope well under these circumstances, but not all. There was a significant correlation between those who complained of isolation and high-risk GHQ scores. Lack of support has been reported as one of the most important factors which affected mental health²³⁾, and 41.5% of the mothers in Beijing felt that they were not getting enough support from Japan. It is important to consider what kind of support might be appropriate.

3) Closed Japanese community

The mothers with high-risk GHQ scores found significantly more stress with the 'relationship with local Japanese'. The Japanese in Beijing tend to live in apartments with Japanese supermarkets, Japanese

clinics, Japanese nursery schools, tennis courts and playgrounds inside the complex. No one can go into the complexes without a heavy security check at the entrance. As a result, small Japanese communities have been formed which some mothers might find closed and stressful.

A Japanese doctor in Beijing explained that if a mother became ill, especially with mental depression, she would go back to Japan without telling anybody, because she would fear that rumors would spread quickly²⁴⁾. Some mothers may still think that mental illness carries a stigma²⁵⁾, bringing shame to the family and the husband's company. Medical service providers need to be aware that some mothers, suffering from stress in the closed community, may try to hide any sign of the symptoms of mental illness or delay seeking professional help.

4) Keeping up with children in Japan

There was a significant correlation between high-risk GHQ scores and concerns over children's health and development and education. All mothers need confirmation that their children are fine in terms of health and development, yet they are isolated and have nobody around to tell them that their children are fine. Therefore, they worry about their children's health and development.

The mothers with high-risk GHQ scores found significantly more stress with lack of information from Japan. They were worrying whether their children could adapt to Japanese school if they went back to Japan. They wanted more information about what was happening in Japan, and wanted to make sure their children would not fall behind the system. Being away from Japan, they worried whether their children's development, manners and academic level were at the standard of children at home in Japan.

4. Child rearing abroad

More than half of the mothers in Beijing felt that their children were stressed, and 74% of the mothers who had high-risk GHQ scores felt that child rearing abroad was more stressful than in Japan.

High-risk mothers who were stressed with child rearing abroad and who felt that their children were stressed were vulnerable to feelings of isolation and having nobody to consult, and uneasy about their

relationship with local Japanese. In small Japanese communities, it would be helpful to encourage the development of self-help peer groups.

5. Limitations and future study

This paper aimed to provide information for medical services providers about mothers with young children abroad. The study focused on transcultural stress and child rearing stress, but there are other factors related to mothers' mental health which need to be considered in greater detail. 50.7% of mothers felt that their children were stressed in Beijing and 90% felt that their husbands were stressed. There is a complex relationship between the mental health of mother, husband and child²⁶⁾. Study of how the mother's mental health affects the child's health and development will be especially important.

Conclusions

This study set out to examine the mental health of Japanese mothers living in Beijing, and to consider the transcultural stress factors which may affect them as they raise their children in a different cultural setting.

1. There was a higher proportion of housewives in Beijing than in the counter group in Japan, and they were less concerned about their finances and about having no time to relax.
2. More than half of the mothers surveyed showed signs of poor mental health and one third of them may be in need of professional help. They need close monitoring to identify those at risk, and this may be supported by an understanding of potential risk factors.
3. The local environment cannot easily be changed and where this gives rise to stress, a prolonged stay may increase the risk to mental health.
4. More than half of the mothers in Beijing felt isolated and there is a need for better support systems, particularly in relation to children's health, development and education.
5. Child rearing in Beijing is stressful for Japanese mothers, who may be concerned that their children are also stressed from living abroad.

Further studies are needed, particularly into how the child's health and development relate to the mental health of the mother in a different cultural setting.

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