

# 琉球大学学術リポジトリ

## [原著] A Survey of Foreign Mother's Utilization of the Japanese Maternal and Child Health Handbook

メタデータ	言語: 出版者: 琉球医学会 公開日: 2010-02-23 キーワード (Ja): キーワード (En): foreign mother with child, Latin America 作成者: Hokama, Tomiko, Flores, Nely Ordonez メールアドレス: 所属:
URL	<a href="http://hdl.handle.net/20.500.12000/0002015604">http://hdl.handle.net/20.500.12000/0002015604</a>

## A Survey of Foreign Mother's Utilization of the Japanese Maternal and Child Health Handbook

Tomiko Hokama and Nely Ordonez Flores

<sup>1)</sup>*Department of Maternal & Child and Global Health, School of Health Sciences  
Faculty of Medicine, University of the Ryukyus, Japan*

(Received on April 10, 2006, accepted on May 8, 2006)

### ABSTRACT

A survey of foreign mother's utilization of the Japanese Maternal and Child Health (MCH) Handbook was carried out in two cities and one town in Okinawa, Japan. The subjects were 35 foreign mothers of infants who participated in health check-up at municipal health facilities or private hospitals. Most of the mothers got the MCH Handbook towards the end of the 4th month of pregnancy. The number of mothers who received educational guidance for the MCH Handbook by health professionals was different among mother's nationality, the highest being the group of mothers from Latin America. The mothers from Latin America had read and recorded more items in the handbook than mothers from Asia/Africa and USA/Europe. Regardless of the nationality, half mothers of 3 groups answered the book was not useful. A large percentage of mothers of 3 groups desire municipality to provide MCH Handbook in their own language. It is necessary to provide a multi-language version of the MCH Handbook that will be useful for all foreign mothers who are residing in Japan. *Ryukyu Med. J., 25(1,2) 23~28, 2006*

Key words: Maternal and Child Health Handbook, foreign mother with child, Latin America

### INTRODUCTION

The MCH Handbook<sup>1)</sup> has been used universally for mother and child's health in Japan since 1942 which was originally known as "Pregnant Mother's Handbook". It was revised as "Mother and Child Handbook" in 1948 and then named as "Maternal and Child Health Handbook" in 1966. The current MCH Handbook is a pocket sized book and is used as a source of health education and a record of the health of the mother and the child. Mothers can keep records of their health, children's growth & development and vaccinations. The book is also a reference guide for obstetricians, pediatricians, midwives, public health nurses and other health care professionals. For example, perinatal record and health, growth and vaccination records are critical information for pediatric practice. However it is difficult to use the book for foreign mothers with low Japanese literacy. The number of foreign mothers who visit

practical clinics has increased in our daily clinic along with increase in the number of registered foreign residents and international marriages throughout Japan. However, there have been few studies on the foreign mother's usage of the MCH Handbook so far, in our knowledge.

In the case of Okinawa Prefecture, number of the registered foreign residents was 7620 in 1999<sup>2)</sup>. According to the questionnaire to the municipal public health nurses, the MCH Handbook was issued to foreign mothers in 29 out of 46 municipalities in 2000<sup>3)</sup>. The number of MCH Handbook issued to foreign mothers was estimated about 80 in that year. The public health nurses answered that the number of foreign mothers has increased recently in their communities and communication with them was the main problem in giving instruction to the foreign mothers. Most foreign mothers seem to have difficulty in using the Japanese MCH handbook because of language problem. There were 3

Table 1 Demographic characteristics of foreign mothers

	Latin America	Asia/Africa	USA/Europe	p
Number	16	11	8	
Age (years)	32.7± 0.9	29.5± 1.3	30.1± 2.0	N.S.
Residency (years)	6.4± 0.6	2.7± 0.8	11.5± 3.2	< 0.02
Number of children	2.3± 0.3	1.4± 0.2	1.5± 0.3	< 0.02
Level of education*				< 0.01
junior high school	10(62.5)	0(0.0)	0(0.0)	
high school	6(37.5)	5(45.5)	2(25.0)	
higher than college	0(0.0)	6(54.5)	6(75.0)	
Japanese competence*				< 0.01
good	15(93.8)	6(54.5)	8(100)	
not good	1(6.3)	5(45.5)	0(0.0)	
Mother's employment status*				N.S.
house wife	14(88.2)	7(63.6)	5(62.5)	
English teacher/others	2(12.6)	4(36.4)	3(37.5)	
Occasion for residency*				N.S.
study	0(0.0)	4(36.4)	1(12.5)	
employment	9(56.3)	4(36.4)	4(50.0)	
marrige to Japanese	7(43.8)	3(27.3)	3(37.5)	

mean± s.e., \*: Number (%)

groups of foreign mothers by national origin in the survey of Okinawa prefecture: Latin America, Asia/Africa and USA/Europe. It is speculated that these foreign mothers have limited utilization of the Japanese MCH Handbook in actual circumstance. In order to identify foreign mother's actual usage and their perceptions about the MCH Handbook among the 3 groups, we carried out a survey of foreign mother's usage and assessment of the MCH Handbook.

### SUBJECT and METHOD

The subjects were 35 foreign mothers with infants from various countries (16 mothers from Latin America, 11 mothers from Asian or African countries, 8 mothers from USA or European countries) who were living in Okinawan prefecture. Foreign mother in this study was defined as a mother who was born in a foreign country and has foreign nationality other than being married to a Japanese husband.

The survey was carried out by using a ques-

tionnaire on the usage and assessment of the MCH Handbook for infant's health check-up of two private hospitals and one municipal facility from July 1997 to March 1999. The questionnaire consisted of demography, Japanese language ability and questions about the usage of MCH Handbook (time of issuance, receiving educational guidance, reading/recording, items read by mothers, items recorded by mothers) and assessment of the MCH Handbook. The questionnaire was made in English, Spanish and Portuguese language.

Descriptive statistics and statistical analysis for collected data were carried out by using the Statistical Package for Social Science (SPSS), software program. Chi-squares test was used to identify the association between the foreign mother's nationality group and demographic characters, usage, and assessment of MCH Handbook. Variance of analysis was used to compare the mean of mother's age and Kruskal Wallis test was used to compare the mean of residency period, number of children, time of MCH Handbook issuance and number of items read /recorded among 3 groups.

Table 2 Foreign mother's usage of MCH Handbook

	Latin America	Asia/Africa	USA/Europe	p
Number	16	11	8	
Time of handbook issuance (months)	2.9± 0.2	3.8± 0.8	4.2± 1.0	N.S.
Read MCH Handbook*				< 0.02
Yes	12(75.0)	5(45.5)	1(12.5)	
No	4(25.0)	6(54.5)	7(87.5)	
Record MCH Hand book*				N.S.
Yes	13(81.3)	7(63.6)	4(50.0)	
No	3(18.7)	4(36.4)	4(50.0)	
Number of items read	4.1± 1.0	2.2± 1.1	1.0± 1.0	< 0.05
Number of items recorded	4.3± 0.7	2.4± 0.8	1.1± 0.6	< 0.05
Guidance by health professionals*				< 0.01
Yes	10(62.5)	1(9.1)	1(12.5)	
No	6(37.5)	10(90.9)	7(87.5)	

mean± s.e. , \*: Number (%)

## Item of the contents for reading

1. Sound pregnancy and delivery
2. Nutrition during pregnancy
3. Care of the new born baby
4. Guidelines of child care
5. Prevention of accidents
6. Nutrition during infancy
7. Vaccinations
8. Timing and names of erupting teeth
9. Major subsidies by the government
10. Law of working mothers
11. Contact toxic center during emergencies
12. The children's charter

## Item of the contents for mother's record

1. Guardian of child
2. Health record during pregnancy
3. Record of past pregnancy
4. Occupation and home environment
5. Individual health questions
6. Weight chart during pregnancy  
and after delivery
7. Development of the baby
8. Health record of weight and height
9. Growth chart of baby
10. Record of childhood illness

## RESULTS

## 1. Demographic data and characteristics of the subject

Demographic data and characteristics of the subject were shown in Table 1. The means of the foreign mother's age of the 3 groups were not significantly different, but the mean number of children was significantly different among the groups, the highest being in the Latin America group. Distribution rate of education levels and Japanese colloquial competence was also different among the groups; low-level education and high Japanese competence was higher in mothers from Latin America. The distribution rate of the occasions for residing in

Japan such as study or employment of the husband and marriage with Japanese was not different among the 3 groups.

## 2. Usage of MCH Handbook

## 1) Time when MCH Handbook was issued

Mean months of pregnancy when MCH Handbook were issued from municipal government office ranged from 3 to 4 months as shown in Table 2. Most mothers got MCH Handbook towards the end of the 4th month of pregnancy.

## 2) Guidance for MCH Handbook

Although 10 (63%) mothers from Latin America group answered that they got guidance using the MCH Handbook from doctors, midwives and/or public health nurses, but most mothers of Asia/Af-

Table 3 Mother's assessment for the usefulness of the MCH Handbook

	Latin America	Asia/Africa	USA/Europe	Total
Number	16	11	8	35
Very / enough	3(18.8)	6(54.5)	3(37.5)	12 (34.3)
A little	5(31.3)	0(0.0)	1(12.5)	6 (17.1)
None	8(50.0)	5(45.5)	4(50.0)	17 (48.6)
				Number(%)

Table 4 Mother's desire for the MCH Handbook

	Latin America	Asia/Africa	USA/Europe	Number (%)
Number	16	11	8	35
Handbook in own language	14(87.5)	8(72.7)	7(87.5)	29(82.9)
Guidance for handbook content	6(16.0)	2(18.2)	0(0.0)	8(22.9)
Others*	5(31.3)	2(18.2)	2(25.0)	9(25.7)

\* :issuing MCH Handbook at clinic or health center

rica and USA/European groups did not receive any guidance.

### 3) Reading and recording in the MCH Handbook

Reading and recording rate of MCH Handbook among 3 groups was also shown in Table 2. The average number of items (content of item from #1 to #12 in Table 2) of the MCH Handbook content that mothers read and average number of items (content of item from #1 to #10 in Table 2) of mother's record that was filled as a record by the mothers were compared among the 3 groups. The average number of recorded items was the highest in Latin America group.

### 3. Assessment for MCH Handbook

Twelve mothers answered that the MCH Handbook was very useful or useful enough as a reference. However, 6 mothers responded that it was "a little" useful and 17 mothers answered that it was not a useful reference. Half mothers regardless of the nationality group answered the book was not a useful reference.

### 4. Need for change of MCH Handbook content

A large percentage of the mothers regardless of the nationality group requested for the availability of the MCH Handbook in their own native language. Eight mothers (23%) answered that both periodical group and individual educational training for the MCH Handbook was necessary.

## DISCUSSION

Japan's MCH Handbook is of great value to promote MCH, as because it includes information regarding pregnancy, childbirth and child care as well as record of medical and health check-up. According to the report of survey of 4 prefectures in 1999, only 0.9% of guardians with children aged 1.5 years had lost their MCH Handbook<sup>4)</sup>. Most of the Japanese mothers took care of their MCH Handbook well. It is regarded that the universal use of MCH Handbook was a major contributing factor to the successful decrease in infant mortality rate in Japan<sup>5)</sup>. Nowadays, the Handbook is adapted in several Asian countries in their own languages in order to improve MCH.

On the other hand, the number of foreign mothers with infants is increasing in Japan as an increase in number of foreign resident registration. According to national demographic statistics, the infant mortality rate in foreign infants was relatively higher compared to Japanese infants<sup>6)</sup>. Ministry of welfare decided on a special program for MCH that included services for supporting foreign mothers and children in 1996. The number of foreign mothers who receive the Japanese MCH Handbook from municipal governments is increasing. In Okinawa prefecture, more than half of the municipal governments issued the Japanese MCH Handbook to foreign mothers in 2000<sup>3)</sup>. The nationalities of the foreign mothers in our study were from Latin

American countries (Peru, Brazil, Argentine and Colombia), Asian/Africa countries (China, Taiwan, Bangladesh, Korea, Malaysia, Philippines and Ghana), and the USA/ European countries. Most of the foreign mothers from Latin America came to Okinawa because of their husband's employment. Some of them were second or third generation Japanese overseas immigrants. The characteristics of these mothers were: larger number of children, being a housewife, low-level of education and higher Japanese competence relative to the other two groups.

With regard to the use of MCH Handbook, the mean time that the MCH Handbook was issued was earlier for mothers from the Latin America group, however the difference was not significant in this survey. Eighty-one percent of mothers got the MCH Handbook by the end of their 4th months of pregnancy. This suggested that foreign mothers in this survey were relatively well guided by medical/health institutions. According to Hakuno *et al.*<sup>7)</sup>, foreign mothers with good colloquial Japanese who lived in Japan longer than three years had a higher adaptation and acceptance of the Japanese health services. The Japanese language ability and residing period in Japan seems to be the main factors for adaptation and acceptance of Japanese MCH services. The number of mothers who received guidance concerning the MCH Handbook by health professionals was higher in mothers from Latin America group. The reading rate and the average number of reading and recording items in the handbook among three groups were also highest in the Latin America group. This is probably because foreign mothers from Latin America have a good competence in Japanese.

The descriptive and analytical statistics showed that mother's perception for the MCH Handbook was not different among mothers of the 3 groups. About half mothers from each group assessed the MCH Handbook would not be a useful reference. This seems reasonable because most mothers cannot read and write Japanese well. Although we did not ask about Japanese literacy in the questionnaire, we could observe through interviews and questionnaires that most foreign mothers were not able to read and write Japanese well. The assessment will be improved by adequate device of the handbook according to their desires, depending upon their feasibility.

In answering the question regarding to desired improvement of MCH Handbook, 29 (83%) mothers preferred "MCH Handbook in own language". Eight (23%) mothers selected improving "guidance for MCH Handbook content". The results showed that foreign mothers need to have a MCH Handbook in their own language so that they can read and write it in and also wanted to have guidance for their handbook content. Mothers' and Children's Organization has published MCH Handbook in English, Spanish, Chinese and other foreign languages<sup>8)</sup>. Fifty-one percent of 686 municipalities in all Japan provided the MCH Handbook in foreign languages in 2002<sup>9)</sup>. Having a MCH Handbook in their own language will be very helpful, as foreign mothers will be able to read the MCH Handbook well by themselves. Furthermore, it is necessary to ensure guidance for the MCH Handbook to raise its effectiveness as a tool of MCH service. Leaflets such as "Guide to MCH and Medical Care in Japan<sup>10)</sup>" for foreign mothers are useful tool for communication with foreign mothers. Allocating a translator to municipal health sector that was started in several regions of Japan will be helpful to both of the foreign mothers and service provider<sup>11)</sup>. The results of our study suggested that comprehensive MCH approach to the mothers in municipality is necessary to increase usefulness of MCH Handbook for foreign mothers.

## CONCLUSION

Japanese MCH Handbook has been provided to foreign mothers who are registered in Japan. Although foreign mother's actual circumstance and usage of the MCH Handbook was different among their nationality group, half of the foreign mothers regardless of their nationality group assessed the MCH Handbook not as a useful reference for MCH. A large percentage of foreign mothers desired to have a MCH Handbook in their own language. It is necessary to introduce a multi-language version of the MCH Handbook to increase the usefulness of the Handbook for all foreign mothers residing in Japan.

## ACKNOWLEDGMENTS

We wish to acknowledge staff of Okinawa City, Adventist Medical Center and Itokazu Hospital who supported us and all foreign mothers who partici-

pated in this survey. A part of this work was included in the thesis (Master of Health Sciences) of Nely Ordonez Flores.

### REFERENCE

- 1 ) Nagasaka N.: Maternal and Child Health Handbook, Maternal and Child Health in Japan 2004: (Kaneda I. ed), pp49-50, Mother's and Children's Health Organization, Tokyo, 2005.
- 2 ) Culture and Environment Department of Okinawa Prefecture: Tokeinenkan in 1999: (Culture and Environment Department ed), pp41-42, Okinawa Prefecture, 2001(in Jpn).
- 3 ) Takeyama K, Kanatani T, Kinjyo M, Takeda M, Fujiwara H and Hokama T: Health service for foreign mother and child who are residing in municipalities of Okinawa Prefecture, The 66th Conference Abstract of Society of Japanese Health and Human Ecology, pp15-16, Okinawa, 2001(in Jpn).
- 4 ) Fujimoto S, Nakamura Y, Ikeda M, Takeda Y and Higurashi M: Utilization of Maternal and Child Health Handbook in Japan, Nippon Koshu Eisei Zasshi, 48:486-494, 2001(in Jpn).
- 5 ) Leppert PC: An analysis of the reasons for Japan's low infant mortality rate, Journal of Nurse-Midwifery, 38:353-357, 1991 .
- 6 ) Lee S: Foreign mother and child's health, p24, Igakushoin, Tokyo, 1998(in Jpn).
- 7 ) Hakuno N, Nakamura Y and Higurashi M: The environment of child rearing and acceptance of Japanese health service, Child Health Research, 564-566. 1990 (in Jpn).
- 8 ) Ei A: Maternal and Child Health Handbook: (Mother's and Children's Health Organization ed), Mother's and Children's Health and Welfare Association, Tokyo, 2000.
- 9 ) Hotta M, Ushijima K, Kobayashi N, Nakamura Y, Shigeta M and Lee S: A survey of the support for foreign mothers in municipality of Japan: Report of grant from Welfare and Science, pp17-23, Tokyo, 2002(in Jpn).
- 10) Mother's and Children's Health Welfare Association: Guide to Maternal and Child Health and Medical Care in Japan, p.3, Tokyo, 1999.
- 11) Esaki M and Kobayashi A: Maternal and child health service in Komaki City Health Center allocated foreign translator, Jyosannpuzassi, 54: 32-36, 2000(in Jpn).