

Associations between social support and access to healthcare among Filipino women living in Japan

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ABSTRACT

This study investigated associations between social support and access to healthcare among Filipino women living in Aichi Prefecture, Japan. A cross-sectional design was used. Self-administered questionnaires were distributed to Filipino women and collected 342 valid responses. Each participant was asked about her access to healthcare for her own health and for her youngest child's health, and social support, as well as her socio-demographic characteristics. Of these respondents, 114 women (33%) did not have a usual source of care for themselves. Participants in our study had higher Medical Outcome Study Social Support Survey scores than people living in other Southeast Asian countries. However, distribution of the score showed that there were outliers with low scores which were very different from the others. Women with the highest emotional/informational and tangible support score showed better access to healthcare (adjusted odds ratio=0.22, 95% confidence interval 0.10–0.50, and adjusted odds ratio=0.38, 95% confidence interval 0.17–0.85 respectively). Women with a Japanese husband also showed lower odds of no usual source of care (adjusted odds ratio=0.44, 95% confidence interval 0.20–0.95). On the other hand, there was no factors significantly associated with access to healthcare for their youngest child including social support. Emotional/informational and tangible support were crucial factors associated with access to healthcare among Filipino women in Aichi Prefecture.

Keywords: access to healthcare, Filipino, Japan, migrant, social support

Abbreviations:

AORs: adjusted odds ratios

95% CI: 95% confidential interval

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INTRODUCTION

Migrants are considered one of the most vulnerable groups in the international community^{1,2} and are believed to encounter barriers to maintaining health in their host countries.³

In Japan, the number of foreign residents has been increasing rapidly in recent decades. As has been suggested in relation to foreign residents in other countries,^{1,2} those living in Japan should be regarded as vulnerable. According to the new residency management system introduced

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in 2012, foreign residents who stay in Japan for more than three months are entitled to local government services, including national health insurance. Most foreign residents in Japan are covered by one of the various types of Japanese public health insurance⁴ such as national health insurance (kokuho), health insurance association (kyokai kenpo), society-managed employment-based health insurance association (kumiai kenpo), etc; however, unmet healthcare needs are still observed.⁵ It has been suggested that the support currently available to foreign residents in Japan, such as provision of interpreters and information about healthcare services in other languages, is insufficient.⁶

Previous studies have shown that the more social support people have, the better health outcomes they gain.^{7,8} A previous study in 12 churches in the Greater Tokyo area revealed positive associations between social networks/support and access to healthcare among foreign residents.⁸ Gender is another important issue in relation to foreign residents' health. It has been suggested that women are more likely to have limited access to a variety of resources and opportunities to maintain their own health.^{9,10} Although one study noted the influence of gender on access to healthcare,¹¹ the associations between social support and access to healthcare among foreign women living in Japan have not yet been studied well. Further work is needed to identify the factors that influence access to healthcare among this population. Therefore, it was decided to target adult foreign women to investigate their access to healthcare.

In the current study, Filipino women living in Aichi Prefecture were particularly focused on as this prefecture has the second highest number (after Tokyo) of foreign residents of the 47 Japanese Prefectures. It also has the largest Filipino population in Japan.

The aims of this study were to investigate associations between access to healthcare and social support as well as participant socio-demographic characteristics among Filipino women living in Aichi Prefecture. Participants' own access to healthcare was then compared with access to pediatric care for their youngest child.

MATERIALS AND METHODS

Study design and participants

A cross-sectional study design was used based on self-administered questionnaires. Participants were recruited from catholic churches and at one Filipino festival in Aichi Prefecture from March to May, 2018. A time-location sampling method was chosen because random sampling in migrant research is difficult in current Japanese circumstances.^{5,12,13} Of the 17 churches that hold a mass in English or Filipino, according to the diocese directory, 14 agreed to participate in the survey. At each survey location, women from the Philippines, who were 20 years old or over on the survey day, were invited to participate in the study. It was explained at each location that each person could only answer the questionnaire once to avoid duplicate answers.

Data collection instruments

The structured questionnaire was developed in English first and then translated to Filipino by a Filipino translator. It was then back translated by one of the authors who was a native Filipino speaker. The questionnaire comprised three parts: socio-demographic characteristics, access to healthcare indicators and social support scale.

Socio-demographic characteristics included age, marital status, nationality of husband (Japanese or not), education level,¹⁴ years of living in Japan, proficiency level in reading and communicating in Japanese, number of children, status of residence,¹⁵ insurance coverage and type of health insurance. If the participant had a child, she was asked about the birthplace of the youngest

child (in Japan or not), youngest child's age, youngest child's birth year and month. Education levels were defined as: "elementary or no grade completed" if the participant had not completed their education up to junior high school level, "high school" if the participant had not completed their education up to college, and "college" if the participant had completed college, university or higher. Applying the Common European Framework of Reference for Languages (CEFR) self-assessment grid categories,¹⁶ proficiency levels for reading in Japanese and for communicating in Japanese were categorized as "poor", "standard" and "fluent".

The Medical Outcomes Study Social Support Survey (MOS-SSS) questionnaire¹⁷ was used to assess the availability of social support, as perceived by participants. It consists of four separate social support subscales; emotional/informational, tangible, affectionate, and positive social interaction, and an overall functional social support index with 19 questions. Of these four types of social support, two types of social support were used for the current study: emotional/informational support and tangible support. In the light of previous studies,^{7,8,18} it was considered that emotional/informational support and tangible support were more likely to affect migrants' health. Each item was scored on the five-level Likert scale; with "none of the time" scored as 1, and "all of the time" as 5. A high score indicates greater social support, ranging from 0–100. Each score was calculated as below: $(\text{observed score} - \text{minimum possible score}) / (\text{maximum possible score} - \text{minimum possible score}) \times 100$.¹⁹

Questions designed to measure four indicators were put to participants: (1) if the participant has a regular healthcare provider for herself (no usual source of care for the participant),²⁰ (2) if the participant has a regular healthcare provider for her youngest child (no usual source of care for her youngest child),²⁰ (3) if the participant had an occasion in the previous 12 months that she needed healthcare, but did not receive it (unmet healthcare need for the participant),²¹ and (4) if the participant had an occasion in the previous 12 months when she felt her youngest child needed healthcare, but did not receive it (unmet healthcare need for participant's youngest child).²¹

Analysis

Socio-demographic characteristics of the participants, their access to healthcare, and two types of social support scores were summarized. The scores for each type of social support were categorized into quartiles; low, medium low, medium high, and high. Multiple logistic regression analysis was performed to examine the associations between access to healthcare and emotional/informational support, as well as tangible support, adjusted by participant socio-demographic characteristics (age category, husband's nationality, years of living in Japan, and proficiency level for communicating in Japanese), which are possible confounders based on previous studies and our observations.^{8,22,23} Adjusted odds ratios (AORs) with 95% confidential intervals (CIs) were calculated. Statistical significance was set at $P < 0.05$. All statistical analyses were performed with EZR version 2.4-0 which is a modified version of R (The R Foundation for Statistical Computing, Vienna, Austria) commander, designed to add statistical functions frequently used in biostatistics.²⁴

Ethical considerations

This study was reviewed and approved by the Research Ethics Committee of Nagoya City University Graduate School of Nursing (ID number: 17027-6). Participation in the study was completely voluntary and anonymous. Written information was attached to the questionnaire in English and Filipino, and consent was considered to have been obtained when the questionnaire was returned. Each completed questionnaire was kept in an envelope after it had been returned to maintain the confidentiality of the answers.

RESULTS

A total of 360 questionnaires were collected, and 342 which had valid data were used for the analyses. Of these, 304 (88.9%) were collected after church services and 38 (11.1%) were collected during the festival. Eighteen respondents were excluded: seven could not be recognized as coming from the Philippines, three were under 20 years old, one was a tourist and two were male. Five did not answer three out of four outcome questions.

Socio-demographic characteristics

Participant socio-demographic characteristics are summarized in Table 1. Of the total sample, 265 (77.4%) were over 30 years old. More than two thirds (67.8%) of the women were married (232), and 113 (33.0%) were married to Japanese men: 247 (72.2%) women had children and 182 (53.2 %) had lived in Japan for more than 10 years. One hundred and twenty five (36.5%) had a poor proficiency level in communicating in Japanese.

Table 1 Participant socio-demographic characteristics (n=342)

	n	%
Age category		
20–29 years old	69	20.2
30–39 years old	99	28.9
40–49 years old	89	26.0
50+ years old	77	22.5
Missing	8	2.3
Marital status		
Married	232	67.8
Unmarried	107	31.3
Missing	3	0.9
Husband's nationality		
Non-Japanese	119	34.8
Japanese	113	33.0
Unmarried	107	31.3
Missing	3	0.9
Educational level		
Elementary or no grade completed	8	2.30
High school	92	26.9
College	235	68.7
Would rather not say	6	1.8
Missing	1	0.3
Survey place		
Church	304	88.9
Festival	38	11.1
Years of living in Japan		
Less than 1 year	37	10.8
1–4 years	45	13.2

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5–9 years	45	13.2
10–19 years	102	29.8
20+ years	80	23.4
Missing	33	9.7
Proficiency level in reading in Japanese		
Poor	109	31.9
Standard	178	52.0
Fluent	37	10.8
Would rather not say	14	4.1
Missing	4	1.2
Proficiency level in communicating in Japanese		
Poor	125	36.5
Standard	138	40.4
Fluent	64	18.7
Would rather not say	4	1.2
Missing	11	3.2
Number of children		
0	85	24.9
1	92	26.9
2	81	23.7
3–4	64	18.7
5+	5	1.5
Unknown number of children	5	1.5
Missing	10	2.9
Youngest child's birthplace		
Outside of Japan	95	27.8
Japanese	134	39.2
Missing	28	8.2
No child	85	24.9
Youngest child's age		
No children 15 years old or under	81	23.7
15 years old or under	145	42.4
No children	85	24.9
Missing	30	8.8
Invalid	1	0.3
Residential status in Japan		
Student (ryugakusei)	8	2.3
International service (English or Philippine language teacher)	5	1.5
Technical intern training (kenshusei)	35	10.2
Designated activities (nurse and certified care worker under EPA, tokutei katsudo)	6	1.8
Permanent (eijyusha, teijyusha)	171	50.0
Spouse or child of Japanese nationals (nihonjin no haigusha)	81	23.7

Other	11	3.2
Would rather not say	6	1.8
Missing	12	3.5
Invalid	7	2.1
Health Insurance		
Not covered	17	5.0
Covered	316	92.4
Missing	9	2.6
Health Insurance type		
Not covered	17	5.0
National health insurance (kokuho)	105	30.7
Health insurance of Japan health insurance association (kyokai kenpo)	114	33.3
Society-managed employment-based health insurance (kumiai kenpo)	26	7.6
Other	10	2.9
Don't know	24	7.0
Would rather not say	7	2.0
Missing	29	8.5
Invalid	10	2.9

Access to healthcare

Table 2 shows the descriptive analyses of access to healthcare. One hundred and fourteen women (33.3%) did not have a usual source of care for themselves and 31 mothers out of 145 (21.4%) did not have a usual source of care for their youngest child. Unmet healthcare need for themselves was suggested by 67 (19.6%) women, and for their youngest child by 27 (18.6%) of 145 women.

Table 2 Descriptive analyses of perceived access to healthcare

	n	%
Do you have a healthcare provider who you can ask for advice on your own health? (n=342)		
Does not have	114	33.3
Has	203	59.4
Missing	25	7.3
Do you have a healthcare provider who you can ask for advice on your child health? (n=145)		
Does not have	31	21.4
Has	103	71.0
Missing	11	7.6
Was there a time in the previous 12 months when you felt you needed healthcare, but did not receive it? (n=342)		

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Yes	67	19.6
No	250	73.1
Missing	25	7.3
Was there a time in the previous 12 months when you felt your youngest child needed healthcare, but did not receive it? (n=145)		
Yes	27	18.6
No	103	71.0
Missing	15	10.3

Social support

Distribution of the two types of social support scores is described in Figure 1. The median score for the MOS-SSS emotional/informational support subscale was 71.9 (inter quartile range (IQR): 53.1–90.6). Median scores for the low, medium low, medium high, and high quartiles were 43.8, 65.6, 81.3, and 100.0, respectively. The median score for the tangible support subscale was 68.8 (IQR: 43.8–87.5). The median scores for the low, medium low, medium high, and high quartiles were 31.3, 56.3, 75.0, and 100.0, respectively (Table 3).

Table 3 Social support scores

	N	Minimum	25 percentile	Median	75 percentile	Maximum
Emotional/informational support						
Total participants	315	21.9	53.1	71.9	90.6	100.0
Low	84	21.9	37.5	43.8	50.0	53.1
Medium low	80	53.6	59.4	65.6	68.8	71.9
Medium high	75	75.0	75.0	81.3	87.5	90.6
High	76	92.9	93.8	100.0	100.0	100.0
Tangible support						
Total participants	314	0.0	43.8	68.8	87.5	100.0
Low	82	0.0	25.0	31.3	37.5	43.8
Medium low	92	50.0	50.0	56.3	62.5	68.8
Medium high	70	75.0	75.0	75.0	87.5	87.5
High	70	91.7	100.0	100.0	100.0	100.0

Factors associated with access to healthcare

Table 4 shows adjusted odds ratios (AORs) of no usual source of care and unmet healthcare needs for participants and participant's youngest child for two types of social support adjusted by socio-demographic characteristics. Women with a higher score for emotional/informational support showed lower odds of no usual source of care for themselves and of unmet healthcare needs for themselves. Compared to the lowest quartile of the emotional/informational support scores, the AORs of no usual source of care for themselves for the medium low, medium high, and high quartiles were 0.78 (95% CI: 0.37–1.62), 0.27 (95% CI: 0.12–0.60), and 0.22 (95%

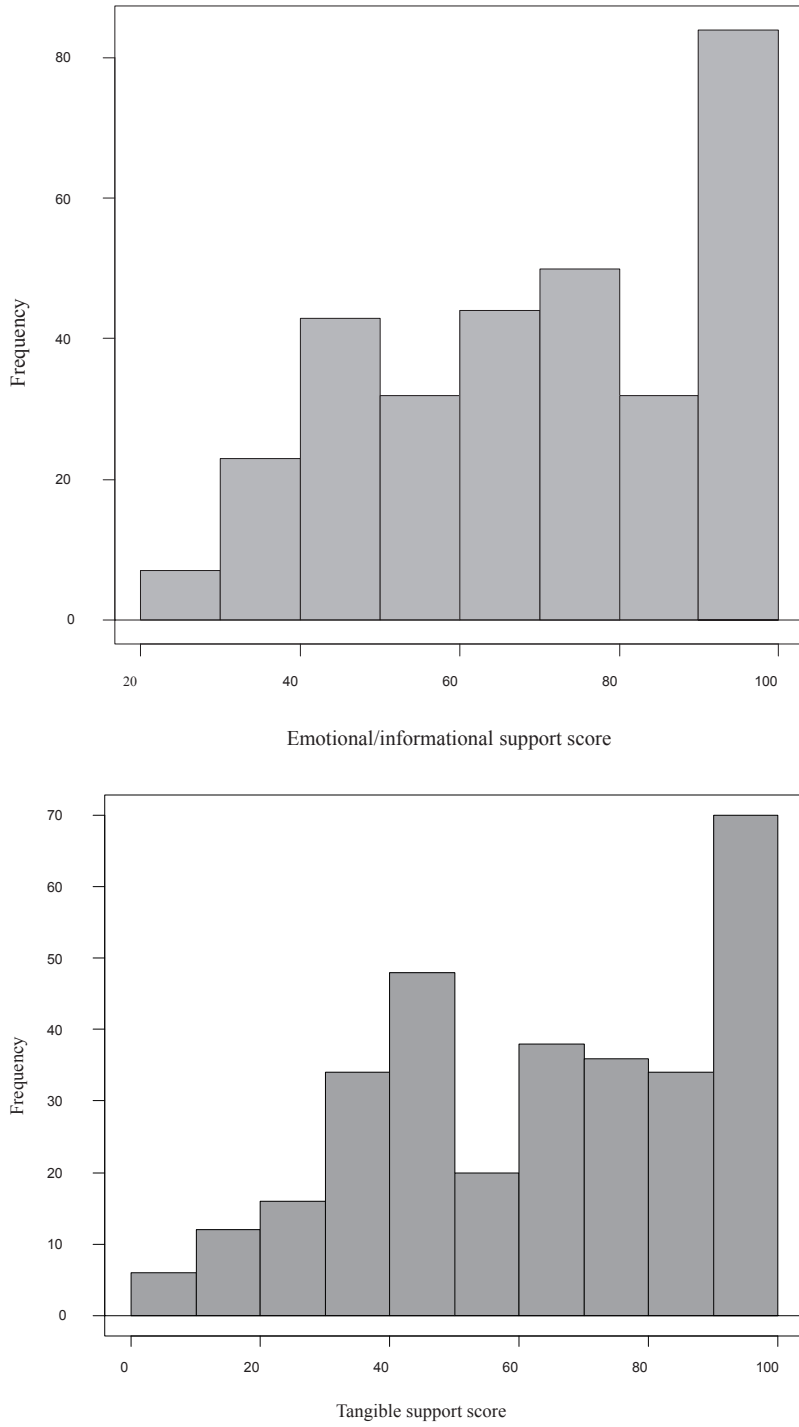


Fig. 1 Distribution of two types of social support scores

Table 4 Factors associated with access to healthcare for participants and their children

	No usual source of care for participants			No usual source of care for participants' youngest child			Unmet healthcare needs for participants			Unmet healthcare needs for participant's youngest child		
	AOR	95% CI	p-value	AOR	95% CI	p-value	AOR	95% CI	p-value	AOR	95% CI	p-value
	n=275			n=122			n=273			n=118		
Emotional/Informational support												
Low	1			1			1			1		
Medium low	0.78	0.37–1.62	0.50	0.79	0.21–2.93	0.73	0.64	0.28–1.46	0.28	0.75	0.20–2.82	0.67
Medium high	0.27	0.12–0.60	<0.01	0.58	0.16–2.11	0.41	0.42	0.18–1.00	0.05	0.29	0.06–1.34	0.11
High	0.22	0.10–0.50	<0.01	0.56	0.13–2.33	0.43	0.34	0.14–0.83	0.02	0.75	0.18–3.14	0.70
Age category												
20–29 years old	1			1			1			1		
30–39 years old	0.73	0.33–1.59	0.43	0.86	0.22–3.45	0.83	0.67	0.26–1.77	0.42	0.61	0.13–2.76	0.52
40–49 years old	0.62	0.22–1.71	0.35	1.18	0.26–5.94	0.84	0.61	0.19–1.92	0.40	1.13	0.19–6.84	0.89
50+ years old	0.84	0.27–2.64	0.76	0.28	0.02–3.92	0.35	0.90	0.27–3.02	0.87	1.37	0.16–12.0	0.78
Husband's nationality												
Non-Japanese	1			1			1			1		
Japanese	0.44	0.20–0.95	0.04	0.34	0.10–1.26	0.11	0.69	0.30–1.57	0.37	1.10	0.30–4.03	0.88
Unmarried	1.17	0.59–2.35	0.65	1.11	0.32–3.80	0.87	0.72	0.31–1.65	0.43	1.17	0.28–4.93	0.83
Survey place												
Church	1			1			1			1		
Festival	1.32	0.52–3.32	0.56	0.48	0.05–4.60	0.52	1.60	0.59–4.35	0.36	1.80	0.35–9.31	0.48
Years of living in Japan												
Less than 1 year	1			1			1			1		
1–4 years	0.48	0.17–1.33	0.16	0.80	0.12–5.38	0.82	1.15	0.28–4.63	0.85	0.54	0.06–5.27	0.60
5–9 years	0.58	0.19–1.76	0.34	0.22	0.03–2.00	0.18	1.48	0.36–6.16	0.59	0.50	0.07–3.85	0.51
10–19 years	0.56	0.19–1.65	0.29	0.41	0.07–2.49	0.33	1.79	0.45–7.10	0.45	0.52	0.08–3.49	0.50
20+ years	0.42	0.10–1.72	0.23	0.19	0.01–3.33	0.25	3.37	0.68–16.8	0.14	0.75	0.07–7.84	0.81
Missing	0.44	0.11–1.76	0.25	1.53	0.15–16.0	0.72	3.87	0.81–18.4	0.09	0.30	0.02–5.44	0.42
Proficiency level in communicating in Japanese												
Poor	1			1			1			1		
Standard	0.56	0.30–1.05	0.07	2.21	0.75–6.50	0.15	1.27	0.62–2.59	0.52	2.38	0.70–8.11	0.17
Fluent	0.60	0.25–1.45	0.25	1.24	0.27–5.65	0.78	1.00	0.38–2.63	1.00	1.60	0.33–7.75	0.56

Table 4 Factors associated with access to healthcare for participants and their youngest child (continued)

	No usual source of care for participants			No usual source of care for participants' youngest child			Unmet healthcare needs for participants			Unmet healthcare needs for participants' youngest child		
	AOR	95% CI	p-value	AOR	95% CI	p-value	AOR	95% CI	p-value	AOR	95% CI	p-value
	n=275		n=122	n=272		n=118						
Tangible support												
Low	1			1			1			1		
Medium low	0.98	0.47-2.03	0.95	1.27	0.34-4.78	0.72	0.93	0.40-2.16	0.86	0.76	0.19-2.96	0.69
Medium high	0.60	0.27-1.32	0.21	0.80	0.20-3.24	0.75	0.65	0.27-1.59	0.35	0.50	0.12-2.14	0.35
High	0.38	0.17-0.85	0.02	0.32	0.06-1.72	0.19	0.53	0.22-1.29	0.16	0.73	0.16-3.25	0.68
Age category												
20-29 years old	1			1			1			1		
30-39 years old	0.65	0.30-1.41	0.28	0.65	0.15-2.84	0.57	0.63	0.24-1.69	0.36	0.64	0.13-3.06	0.58
40-49 years old	0.69	0.25-1.88	0.47	0.95	0.18-5.14	0.95	0.63	0.20-2.01	0.44	1.24	0.20-7.64	0.81
50+ years old	0.95	0.31-2.91	0.93	0.29	0.02-3.96	0.35	0.93	0.28-3.11	0.91	1.38	0.16-11.7	0.77
Husband's nationality												
Non-Japanese	1			1			1			1		
Japanese	0.54	0.25-1.16	0.11	0.26	0.07-1.00	0.05	0.76	0.34-1.73	0.52	1.23	0.34-4.42	0.76
Unmarried	1.30	0.66-2.56	0.46	0.93	0.25-3.46	0.92	0.77	0.34-1.75	0.53	0.97	0.22-4.26	0.97
Survey place												
Church	1			1			1			1		
Festival	1.34	0.54-3.33	0.52	0.45	0.05-4.47	0.50	1.61	0.60-4.33	0.35	1.64	0.32-8.36	0.55
Years of living in Japan												
Less than 1 year	1			1			1			1		
1-4 years	0.50	0.18-1.38	0.18	0.91	0.13-6.32	0.93	1.13	0.28-4.62	0.87	0.53	0.06-5.01	0.58
5-9 years	0.66	0.22-1.94	0.45	0.23	0.03-2.09	0.19	1.44	0.34-6.05	0.62	0.45	0.06-3.47	0.44
10-19 years	0.64	0.22-1.87	0.42	0.49	0.08-3.16	0.45	2.00	0.50-8.09	0.33	0.49	0.07-3.48	0.48
20+ years	0.43	0.11-1.74	0.24	0.21	0.01-4.01	0.30	3.22	0.63-16.6	0.16	0.60	0.05-6.51	0.67
Missing	0.45	0.12-1.64	0.23	1.93	0.20-18.3	0.57	3.80	0.83-17.5	0.09	0.24	0.02-3.84	0.31
Proficiency level in communicating in Japanese												
Poor	1			1			1			1		
Standard	0.53	0.29-0.97	0.04	2.38	0.82-6.97	0.11	1.19	0.59-2.41	0.62	2.22	0.65-7.54	0.20
Fluent	0.46	0.19-1.10	0.08	1.36	0.28-6.68	0.70	0.95	0.36-2.49	0.92	1.64	0.34-7.82	0.54

AOR: adjusted odds ratio

CI: confidential interval

Adjusted by age category, husband's nationality, survey place, years of living in Japan, and proficiency level in communicating in Japanese.

CI: 0.10–0.50), respectively. Women with a Japanese husband showed lower odds of no usual source of care for themselves when emotional/informational support was added to the model (AOR=0.44, 95% CI: 0.20–0.95). However, there were no significant associations between emotional/informational support and having a usual source of care for their youngest child. Women in the highest quartile of the emotional/informational and tangible support score showed the lowest AOR of no usual source of care for themselves. Table 4 also demonstrates that proficiency level in communicating in Japanese was associated with having a usual source of care for themselves only when variables for tangible support and participants' socio-demographic characteristics were put in the same model. Compared to the lowest quartile of emotional/informational support, AORs of unmet healthcare needs for themselves for high quartiles were 0.34 (95% CI: 0.14–0.83). In contrast, no significant association between emotional/informational support and unmet healthcare needs for their youngest child was found. There were no factors, including tangible support, associated with unmet healthcare needs for themselves or their youngest child.

DISCUSSION

This was the first prefecture-wide survey to recruit a sufficient number of Filipino participants. This was achieved by using carefully planned time-location sampling in the prefecture which has the largest Filipino population in Japan. It is known that compared with foreign residents from other countries and regions, more Filipino people live in Japan for long periods on a civil-status visa. Although a number of previous studies have targeted Latin American immigrants on civil-status visas, only a few previous studies have targeted Filipino people. Among the population on a civil-status visa, social support, both emotional/informational and tangible, was associated with access to healthcare among Filipino women in Aichi Prefecture in the study. Husband's nationality and level of proficiency in Japanese communication were found as associated factors.

It was found that 59.4% of Filipino women had usual sources of care for themselves, and that this was lower than the general population of Japan (69.4%).²⁵ On the other hand, access to health services was better for Filipino women than for Nepalese adults.²³ One possible reason for this was that many Filipino women had access to help from others such as a Japanese husband and/or other Filipino people who were already familiar with the Japanese system. Long-term Filipino residents were able to use their own experience to help new arrivals to adapt. Church gathering is known to provide social capital²⁶ for new Filipino women by enabling them to meet compatriots who have long resided in Japan. According to Japanese governmental statistics, almost 90% of Filipino people in Aichi had civil-status visas,²⁷ such as Eijyusha (permanent residents), Teijyusha (long-term residents), or Nihon jin no haigusha nado (spouse or child of a Japanese national). These visas are issued to people who intend to live in Japan for a long time. In contrast, only 17.9 % of the participants in the Nepalese study, which were compared to our participants, had civil-status visas.²³ There were only 27 Nepali people lived in Aichi prefecture in 1990, but 2274 Filipino live there in the same year.²⁸ Nepalese residents were relatively new to the country, and were less likely to have support from existing residents. In our study, approximately 53% of our participants had lived in Japan more than 10 years. As suggested in an earlier study of Filipino communities,¹⁸ it was assumed that Filipino people had created support networks in their own community in Japan.

Our findings supported previous research that recognized language as a barrier for foreign people to access to healthcare in Japan.^{12,18,23,29} For example, migrants who have low Japanese language skills were less likely to actively search for cancer-related health information.³⁰ Another previous study among international students revealed that very few knew where to have an HIV

test in Japan.¹³ Our target populations may have been resident in Japan for longer than the previous study population, but it still seemed difficult for foreign residents to obtain healthcare information before they received healthcare services. Further, a communication gap exists even after they reach the healthcare facility. They were often unable to express their feelings well or understand explanations given by the healthcare provider because they did not have a common language. Although the most common second language for healthcare providers in Japan is English, this was not the case for the majority of foreign residents.^{29,31} Language barriers may discourage foreign residents from seeking a healthcare service or consultation.^{12,23}

Participants who perceived higher emotional/informational and tangible support showed lower odds of no usual source of care for themselves. In addition, participants who perceived higher emotional/informational support similarly showed lower AORs of unmet healthcare need. This finding was consistent with a previous study in the Kanto area which suggested Filipino women and men with informational and tangible support networks were more likely to have access to healthcare.^{8,18} Participants in our study had higher MOS-SSS scores than people living in other Southeast Asian countries, such as in Vietnam, Singapore, Malaysia, Laos, and Thailand.³²⁻³⁷ However, distribution of the score showed that there were outliers with low scores which were very different from the others. Degree of perceived social support varies according to participants' socio-demographic characteristics, and perceived social support is an important factor associated with healthcare access among both Japanese and foreign residents.³⁸⁻⁴⁰ Previous studies have shown church gathering, Japanese language classes, and ethnic events are possible facilitators for enriching social support and social networks.^{18,41,42} By including those who may otherwise be isolated and unable to understand the health system, these activities may in turn lead to improved access to healthcare among foreign residents.

It has been reported that women with a higher level of support from their husbands/male partners were more likely to have access to healthcare in other countries.^{43,44} Previous studies in Japan reported that foreign mothers were heavily dependent on their Japanese husbands in relation to pregnancy, childbirth and child rearing in Japan.^{45,46} One previous study even described that foreign mothers could not stay in Japan without a supportive Japanese husband in terms of learning Japanese language from him and asking him to read letters from the ward office.⁴⁶ Family members are a known source of social support for migrants.²² Foreign mothers in Japan felt stressed due to inadequate Japanese language skills and an inability to understand the Japanese healthcare system which was different from that of their home countries.^{45,47} Japanese husbands might provide support for Filipino women to overcome those issues.⁴⁷ Bearing in mind this previous study and our findings, it is suggested that Japanese husbands might not be just interpreters or providers of emotional/informational support for Filipino women, but also support their wives in understanding the Japanese healthcare system.

There were some limitations to this study. Firstly, time-location sampling was used. However, it is known that random sampling by using mailing addresses for migration research is difficult to apply in Japan because obtaining addresses is problematic.⁵ Hence, migrants are regarded as a hard-to-reach population in Japan. Considering this difficulty, community-based, convenience or time-location methods are widely used for migration research.^{8,12,18} As far as we know, only one previous study⁵ used random sampling. However, the study was conducted in only one city and targeted only Latino Japanese. For the above reasons, time-location sampling was employed and referred to previous studies which chose Catholic churches as study locations where Filipino people living in Japan could be approached.^{8,18} Our participants may not have represented Filipino women in general. However, it was attempted to minimize bias by systematic collection of data in different areas with diverse local characteristics across the whole prefecture. Further, distribution of status of residential area and education level among our respondents was almost same as the

official statistics,²⁷ suggesting that our participants may, in fact, be representative of the general Filipino population in Aichi. Secondly, because a cross sectional design was used, causal associations cannot be determined. Thirdly, the MOS-SSS questionnaire which we used for this study has not been validated in Japanese or in Filipino to target Filipino people. Fourthly, the study relied on a self-administered questionnaire survey and this might have been affected by recall bias. However, participants were asked only about their youngest children and recent episodes in order to minimize the influence of recall bias. Finally, the indicator having a usual source of care might not be the best suited to assessing access to healthcare among Filipino people due to differences in healthcare systems between Japan and the Philippines. Despite these limitations, this study was valuable because it is the first study with a sufficient number of Filipino participants living throughout Aichi Prefecture using globally-recognized standard indicators. It is also important as there have been so few studies among Filipino residents compared to the number of previous studies among Latin residents who had lived in Japan for a similarly long time.

In conclusion, our findings suggested Filipino women showed poorer access to healthcare than the general population in Japan although many of the participants had lived in Japan for many years. Social support, in particular emotional/informational support, was a crucial factor associated with access to healthcare among Filipino women in Aichi Prefecture. Further, access to healthcare was also associated with having a Japanese husband; having a Japanese husband might be a part of emotional/informational support. Although the social support score among our participants was, on average, quite high compared to other Southeast Asian people in other countries, some Filipino residents seemed to perceive themselves as not socially supported. Further study with representative samples from a larger population will be the next challenge. A qualitative study, which is currently planned, will help us to investigate the how and why factors, including socio-demographic characteristics and social support, which influence access to healthcare. This will give us a more specific understanding of what kind of support Filipino residents living in Japan need, and how to assist them appropriately. This, in turn, would help to improve access to healthcare among Filipino women living in Aichi Prefecture.

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CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

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