

# Home-visit services for the families with newborns during the COVID-19 pandemic

Yukari Isaka<sup>1\*</sup>, Ai Hori<sup>2</sup>, Takahiro Tabuchi<sup>3</sup>, Sumiyo Okawa<sup>3,4</sup>, Masao Ichikawa<sup>2</sup>

<sup>1</sup> Doctoral Program in Human Care Science, Graduate School of Comprehensive Human Sciences, University of Tsukuba, Ibaraki, Japan;

<sup>2</sup> Department of Global Public Health, Faculty of Medicine, University of Tsukuba, Ibaraki, Japan;

<sup>3</sup> Cancer Control Center, Osaka International Cancer Institute, Osaka, Japan;

<sup>4</sup> Institute for Global Health Policy Research, Bureau of International Health Cooperation, National Center for Global Health and Medicine, Tokyo, Japan.

**Abstract:** Home-visit services are provided to families with newborns as means of parenting support. These services potentially are playing major roles during the coronavirus disease 2019 (COVID-19) pandemic, where people have been socially isolated. However, the pandemic has deterred the use of this service to some extent. From the Japan "COVID-19 and Society" Internet Survey, we identified that 15% of the survey respondents who delivered between January 2020 and October 2020 refused home visit services. The proportion of the services used during the pandemic (85%) was lower than those used before the pandemic (95%). Home-visit services provide a unique opportunity for public health nurses to assess the risk of postpartum depression and child maltreatment in the family; thus, families with newborns should be instructed to receive home-visit services as well as child immunization and health checkups, despite the continuation of the pandemic.

**Keywords:** SARS-CoV-2, maternal-child health service, social welfare

During the coronavirus disease 2019 (COVID-19) pandemic, care for children's mental health is of growing importance because their well-being has been affected by the continued restriction of daily activities and the loss of social connectivity due to a state of emergency and temporary school closures as of July 2021 (1). The same can be said for mothers with newborns. It is noted that they are at risk of postpartum depression, and the risk may have enhanced during the pandemic.

In Japan, given the high incidence of postpartum depression (10-15%) (2) affecting maternal well-being and increasing the risk of child maltreatment, home-visit services have been provided to families with newborns by a legislated welfare program called "Konnichiwa Akachan Jigyo". The program aims at providing information on parenting support through home-visits by public health nurses or midwives within four months of birth (3).

Home-visit services, which can play a greater role when people are more socially isolated than usual, are continuing during the pandemic. However, the pandemic might have deterred families from receiving services for fear of COVID-19 infection. Thus, we examined whether home-visit services have decreased during the pandemic, using the Japan "COVID-19 and Society" Internet Survey (JACSIS) data targeting pregnant and postpartum

women (4).

The survey participants included 1,000 pregnant and parturient women. The participants were recruited from an online panel of approximately 2.2 million individuals managed by Rakuten Insight from October 15, 2020 to October 25, 2020, and were asked to fill out online questionnaires that included questions regarding whether they received home-visit services. Home visit services are usually availed within 4 months of delivery but the appointment for such services is made shortly after delivery. Thus, we assumed that the decision to receive home-visit services was affected by the pandemic situation around the delivery time. The study protocol was approved by the Research Ethics Committee of the Osaka International Cancer Institute on June 19, 2020 (approval number 20084).

Of the 479 women who delivered between January 2020 and October 2020, 409 (85%) received the service (*i.e.*, 15% of women refused home visit services). Table 1 shows the proportion of service recipients by month of delivery. Although caution should be exercised with the small denominator, the proportion was lower (*i.e.*, 77-78% from March to May), just before and during the first state of emergency compared to other months.

Before the pandemic, families with newborns were more likely to receive home-visit services: 95% of

**Table 1. Number and proportion of 479 families with newborns receiving home-visit services by month of delivery in 2020<sup>a</sup>**

Month	Home-visit services	
	Number <sup>b</sup>	Percentage (%)
January	31/33	94
February	29/34	85
March	17/22	77
April	75/97	77
May	79/101	78
June	35/36	97
July	37/42	88
August	32/34	94
September	19/22	86
October	55/58	95
Total	409/479	85

<sup>a</sup>Japan's first state of emergency lasted from April 7 to May 25, 2020.

<sup>b</sup>Number of families with newborns receiving home-visit services/total number of families with newborns.

927,816 families availing home-visit services received it between April 2017 and March 2018 (5). Therefore, the pandemic might have interrupted service use. To respond to fear of COVID-19 infection in service use, the Ministry of Health, Labour and Welfare advised local governments to provide telephone or online consultation if home-visit is not accepted (6). The survey did not investigate to what extent telephone or online consultation has been used by families with newborns, and it is uncertain that such consultation is useful for public health nurses to identify families at risk of postpartum depression and child maltreatment. It should be worth examining the usefulness of telephone and online consultation for emergency preparedness. Moreover, since our study investigated service use in the online panel up to October 2020, further investigation is warranted with a representative sample over a prolonged period as the pandemic continues.

Home-visit services provide a unique opportunity for public health nurses or midwives to contact families with newborns at home, helping them assess the risk of postpartum depression and child maltreatment in the family. Families with newborns should be instructed to receive home-visit services as well as child immunization and health checkups despite the prevailing pandemic.

*Funding:* This study was funded by the Japan Society

for the Promotion of Science (JSPS) KAKENHI Grants (grant numbers 18H03062 and 21H04856), Research Support Program to Apply the Wisdom of the University to tackle COVID-19 Related Emergency Problems, University of Tsukuba. The findings and conclusions of this article are the sole responsibility of the authors and do not represent the official views of the research funders.

*Conflict of interest:* The authors have no conflicts of interest to disclose.

## References

1. Usami M, Sasaki S, Sunakawa H, *et al.* Care for children's mental health during the COVID-19 pandemic in Japan. *Glob Health Med.* 2021; 3:119-121.
2. Tokumitsu K, Sugawara N, Maruo K, Suzuki T, Shimoda K, Yasui-Furukori N. Prevalence of perinatal depression among Japanese women: a meta-analysis. *Ann Gen Psychiatry.* 2020; 19:41.
3. Ministry of Health, Labour, and Welfare. Outline of home-visit services for the families with newborns. <https://www.mhlw.go.jp/bunya/kodomo/kosodate12/01.html> (accessed June 28, 2021). (in Japanese)
4. Miyawaki A, Tabuchi T, Tomata Y, Tsugawa Y. Association between participation in the government subsidy programme for domestic travel and symptoms indicative of COVID-19 infection in Japan: cross-sectional study. *BMJ Open.* 2021; 11:e049069.
5. Ministry of Health, Labour, and Welfare. Survey on home-visit services for the families with newborns. <https://www.mhlw.go.jp/content/11900000/000680041.pdf> (accessed June 28, 2021). (in Japanese)
6. Ministry of Health, Labour, and Welfare. Response to the maternal and child health services on COVID-19. <https://www.mhlw.go.jp/content/11920000/000636735.pdf> (accessed July 14, 2021). (in Japanese)

----

Received July 1, 2021; Revised July 19, 2021; Accepted July 27, 2021.

*\*Address correspondence to:*

Yukari Isaka, Doctoral Program in Human Care Science, Graduate School of Comprehensive Human Sciences, University of Tsukuba, 1-1-1 Tennodai, Tsukuba, Ibaraki 305-8577, Japan.

E-mail: s1530359@u.tsukuba.ac.jp