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Mosque as a COVID-19 vaccination site in collaboration with a private clinic: A short report from Osaka, Japan

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ABSTRACT

Ethnic minorities are vulnerable to disasters, including the COVID-19 pandemic. Vaccination strategies that do not leave ethnic minorities behind are urgently required. This is a report on the use of Osaka Islamic Center, a mosque, as a group vaccination site for an ethnic minority group in Osaka, Japan, from August to September 2021. We aimed to discuss (1) the process of turning the mosque to a vaccination site, (2) the linguistic and religious considerations made, and (3) the reasons people got vaccinated at the mosque. We interviewed stakeholders and vaccine recipients in December 2021. The survey shows that the mosque administrators voluntarily collaborated with a private clinic to become a vaccination site after learning of another mosque that had undertaken a similar venture. On the day of the vaccination, the mosque administrators’ experiences with a large vaccination site informed the smooth operation of the site. They made linguistic considerations (i.e., having volunteers fill out medical questionnaires and administrators aid in language interpretation) and religious considerations (i.e., dividing the space and time of vaccination according to gender) for foreign Muslims. In particular, linguistic considerations were favorably accepted by vaccine recipients and were considered a factor that encouraged them to get vaccinated. The mosque also linked unvaccinated people to the clinic even after finishing vaccination at the mosque, suggesting that it may have played a role in ensuring they were not left behind. This case is expected to stimulate activities performed in mosques and by ethnic minority groups in future disasters.

1. Introduction

Ethnic minorities are relatively vulnerable to disasters owing to language and religious differences [3,7], and exhibited a similar trend with respect to the coronavirus disease 2019 (COVID-19) pandemic [8]. Vaccination is an important mitigation measure for the pandemic; however, ethnic minority groups may have lower vaccination rates owing to language and religious barriers [1,6]. Vaccination strategies that do not leave ethnic minorities behind are urgently required [15]. To receive vaccination in Japan, people must have vaccination vouchers, which are distributed by local governments, and make an appointment for vaccination through the local government’s reservation website. However, information on vaccination vouchers and booking websites is primarily written in Japanese, thus hindering access for people with limited Japanese language skills and those who are unfamiliar with the Japanese medical system [18,21]. Furthermore, even when accessible, few vaccination sites are multilingual, or culturally and religiously accommodating, which is considered a considerable psychological burden.

This report presents a case study of mass vaccination at Osaka Islamic Center, a mosque in Nishiyodogawa Ward, Osaka City, Osaka Prefecture, conducted from August to September 2021 in an effort to reduce the aforementioned hurdles. As far as we know, as of July 2022, there are only two cases in Japan where mosques, being a hub for an ethnic minority group [16,22,24,25], became vaccination sites: Ebina Mosque [13,14,19,20] and Osaka Islamic Center. This case is the only example of a mosque collaborating with a private clinic to serve as a vaccination site. Based on our field survey on December 10, 2021 (interviews with the wife of the mosque representative, the head of the

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clinch that carried out the vaccination, and the vaccine recipients), this report discusses (1) the process that led to the use of the mosque as a vaccination site, (2) the linguistic and religious considerations made at the vaccination site, and (3) the reasons people got vaccinated at the mosque as well as the influence of linguistic and religious considerations on their decisions to receive vaccination at the mosque.

2. Survey targets and methods

2.1. Osaka Islamic Center in Osaka, Japan

Osaka Islamic Center is located in Nishiyodogawa Ward, Osaka City, Osaka Prefecture, Japan (Fig. 1). As of 2017, there were approximately 100 mosques in Japan [22]. Osaka Islamic Center is a general incorporated association. Osaka Islamic Center is a two-story house that was opened in 2017, and mainly comprises a women’s worship space and lecture room on the first floor and a men’s worship space on the second floor. The mosque is managed and operated by a representative from Sri Lanka (hereafter referred to as the “mosque representative”), the representative’s Japanese wife, and the representative’s brother, who is an imam (i.e., a religious leader) from Sri Lanka (hereafter the mosque representative, his wife, and the imam are collectively referred to as the “mosque administrators”).

Osaka Islamic Center is a place of activity for Muslims living in neighboring areas. The nationalities of users are diverse; they mainly come from Sri Lanka, but also from Pakistan, Indonesia, and Bangladesh. Even during the COVID-19 pandemic, two to five Muslims, mainly male believers, gather for regular prayers five times a day on weekdays, and 20 to 30 gather for mass prayers on Fridays. Before the pandemic, they held Malaysia events and Islamic study group meetings according to gender. Even during the pandemic, the study meetings were held physically, but sometimes conducted online (via Zoom).

2.2. Doctor’s Fitness Clinic

The Doctor’s Fitness Clinic (hereafter referred to as the “clinic”) was responsible for providing vaccinations at Osaka Islamic Center. This private clinic is located in Higashiyodogawa Ward, Osaka City, Osaka Prefecture, and reviews lifestyle habits such as lack of exercise, unbalanced diet, and chronic lack of sleep. Furthermore, it supports health promotion through medically based health counseling and fitness. Approximately five to ten % of the clinic’s patients are foreigners, and the clinic’s website is presented in multiple languages. Patients are mainly contacted through a messenger application and email, and two thirds of patients use online medical services.

The clinic established a vaccination site that is a few minutes’ walk away starting from July 2021. At the vaccination site, appointments were required for vaccinations, and 5000 doses had been administered by December 2021. According to the head of the clinic (hereafter referred to as the “doctor”), a relatively large percentage of those seeking vaccination at the clinic were foreigners, indicating that the clinic staff had become accustomed to dealing with foreigners over time.

2.3. Interviews

To determine (1) the process that led to the use of the mosque as a vaccination site, and (2) the linguistic and religious considerations at the vaccination site, we visited the mosque and clinic on Friday, December 10, 2021, and administered semi-structured interviews to the Japanese wife of the mosque representative and the doctor. In each interview, we asked about activities in the mosque before its use as a vaccination site and the language and religious considerations made at the site. Japanese was used as the interview language. Consent was obtained from Osaka Islamic Center and the clinic before the interviews.

In addition, to determine (3) the recipients’ reasons for getting vaccinated at the mosque and the effects of the mosque’s linguistic and religious considerations on their decisions, we conducted face-to-face semi-structured interviews targeting believers who attended Friday prayer on the day of our visit and who were vaccinated at the mosque. We interview four males (two from Bangladesh, one from Sri Lanka, and one from Pakistan) and one female (from Sri Lanka). We asked them why they chose to be vaccinated at the mosque (i.e., “What made you decide to be vaccinated at the mosque?”) and their opinions on linguistic and religious considerations (e.g., “Did you understand the vaccination

\[1\] Unlike other countries, Japan does not have a central institution that controls the mosques in the country. Although the Osaka Islamic Center is named “Islamic Center,” it is different from the Islamic Center Japan, a religious corporation under the jurisdiction of the Governor of Tokyo.

Fig. 1. (a) Location ©OpenStreetMap contributors; (b) the exterior of Osaka Islamic Center in Osaka Prefecture, Japan.
vouchers distributed by the local government?” and “Were you concerned that the vaccines were halal?” Halal refers to legal according to Islamic law.). In addition to the above questions, female recipient was asked about her opinion on gender (e.g., “Did you prefer separate vaccination spaces for male and female?”). The language used in the interviews was either Japanese or English, depending on the respondent’s preference. Verbal consent to cooperate in the survey was obtained on site before the interviews.

3. Results

3.1. Use of the mosque as a vaccination site

Figure 2 shows the timeline until the start of vaccination at Osaka Islamic Center, as revealed by interviews with the wife of the mosque representative and the doctor. As of July 2021, the Nishiyodogawa Ward Office in Osaka City (i.e., local government/authority of Nishiyodogawa Ward) had two group vaccination sites (i.e., one hospital and one convention center). At the time, mosque administrators were concerned about believers who were unable to secure appointments for vaccinations because of language barriers and who could not return to their home countries without completing the vaccinations. In late July 2021, the mosque administrators saw on TV that Ebina Mosque in Kanagawa Prefecture was used as a public vaccination site for foreigners. Then, they began planning to make Osaka Islamic Center a vaccination site for foreigners. Initially, mosque administrators approached the local government, but were denied the use of the mosque as a vaccination site because it was too small to achieve the required number of vaccinees to work with the local government. Later, the wife of the mosque representative heard from a mosque user who had been vaccinated at the clinic that the clinic offered on-site group vaccination, and on July 27, she asked the doctor at the clinic whether they could offer group vaccination at the mosque.

Consequently, the clinic decided to conduct mass vaccinations at the mosque. Initially, the cost of dispatching a clinic was expected to be the equivalent of that of vaccinating more than 50 people (approximately 80,000–100,000 JPY). However, mosque administrators were puzzled by the collection of fees from mosque users because other vaccination sites offered free vaccinations. As the doctor knew of the confusing situation of the mosque administrators, he waived the cost of the dispatch.

3.2. Vaccination process and linguistic and religious considerations

Vaccination applicants were divided into two groups. The first group received the first vaccination on Sunday, August 8, 2021, and the second vaccination on Sunday, August 29, 2021. The second group received the first vaccination on Sunday, August 15, 2021, and the second vaccination on Sunday, September 5, 2021. The vaccination target was mainly foreign Muslims using the mosque. However, the vaccination details were also announced through the mosque administrators to Japanese people who have relationships with the mosque (i.e., Japanese spouses of foreign Muslims and Japanese people living in the mosque’s neighborhood). The mosque administrators accepted appointments for vaccination through social networking services (SNS) and verbally, and the number of reserved persons was reported to the clinic. The first group (conducted on August 8, 2021) consisted of approximately 50 people, and the second group (conducted on August 15, 2021) consisted of approximately 110 people.

Pfizer vaccine was administered. Only the doctor attended the August 8 vaccination, whereas the doctor, a nurse, and a dietician attended the August 15 vaccination. The mosque administrators carried out the reception on the days of vaccination and the flow line arrangement at the mosque. According to the wife of the mosque representative, she and the mosque representative had previously been vaccinated at a large vaccination center and could manage the vaccination process based on their experiences.

The mosque administrators and other attendants provided multilingual services in Japanese, English, Tamil, and other languages because people from different nations wanted to receive vaccination at the mosque. Specifically, the interpretation of preliminary precautions and medical interviews was provided in multiple languages. The receptionist checked vaccination vouchers and medical questionnaires (Fig. 3); however, certain people did not fill out the forms because they were written in Japanese. Therefore, foreigners fluent in Japanese and Japanese people who could communicate in English helped fill out the forms. Both comprised volunteers who gathered on the day of the vaccination.

Gender was a religious consideration during vaccination at the mosque. For example, measures were taken to avoid female vaccine recipients sharing the same space with male recipients. The reception was separated for males and females. Males used the waiting area on the second floor as their worship space, and females the waiting area on the first floor as their worship space. The vaccination site was a lecture room on the first floor for both males and females, but the vaccination times for males and females were staggered to ensure that males and females did not encounter each other.

The mosque also benefited the unvaccinated believers even after the end of vaccination at the mosque. Certain believers who could not be vaccinated at the mosque contacted the clinic through the mosque administrators or the believers themselves, and received later at the clinic.

3.3. Responses of vaccine recipients

Interviews with the vaccine recipients revealed problems specific to foreigners before vaccination: language barriers. We asked them whether they understood the vaccine vouchers distributed by the local government. Some recipients said they did not understand them because they were written in Japanese, whereas others only understood the vouchers upon using translation software or having a Japanese or Japanese-speaking acquaintance interpret the content. These responses
suggest that language may have hindered the making of vaccine appointments.

The recipients were motivated to receive vaccinations at the mosque because they felt that the above language barriers were reduced at the mosque. We asked the vaccine recipients why they chose to be vaccinated at the mosque. Some of them said that vaccination at the mosque was more seamless than that at other sites, and being in the presence of fellow foreigners eased communication (e.g., queries). Certain recipients who could not write Japanese said they chose vaccination at the mosque because they could ask someone to fill out the documents for them. These responses show that foreigners unfamiliar with the Japanese language could receive linguistic support at the mosque, reducing language barriers with respect to vaccination.

Other apparent motivations for vaccination at the mosque included the ease of making appointments at the mosque and the sense of security of being vaccinated at a place they were familiar with. Certain recipients said that the reservation process at the local municipality was complicated; others said they were unable to secure an appointment at the local municipality, and others were unaware of alternative locations for vaccination. However, some said that they felt safe because the mosque was close to their home and they were familiar with it; others said that the mosque was more easily accessible to foreigners than other places, and they felt safe. These responses suggest that despite the difficulty in obtaining appointments with local government, the vaccination recipients could easily make reservations through SNS and verbally at the mosque. In addition, the sense of security owing to being able to receive the vaccination at a place they used daily also likely encouraged their decision to receive vaccination.

With respect to religious issues, no major barriers related to Halal or gender issues were identified. A few people were concerned about whether the vaccine was Halal and contacted the mosque administrators in advance to ensure it was. In contrast, some wanted to get vaccinated sooner rather than later, whether the vaccination was Halal or not. Therefore, we could not confirm that Halal was a barrier to vaccination. We asked the female recipient whether she preferred separate vaccination spaces for males and females. She said that she did not care about gender because vaccination was a medical practice.

4. Discussion and conclusion

Ethnic minority groups tend to be vulnerable to disasters, including pandemics, owing to language and religious differences. This necessitates the reduction of language and religious barriers and measures to ensure that they are not left behind in the COVID-19 vaccination. In this report, as an effort to utilize the resources and networks of an ethnic minority group, we performed a case study at Osaka Islamic Center, which foreign Muslims mainly use, was used as a vaccination site.

(1) Regarding the process that led the mosque to be used as a vaccination site (Fig. 2), Osaka Islamic Center voluntarily planned to use its building as a vaccination site after learning of the use of Ebina Mosque as a vaccination site. Then, the mosque worked with a private clinic to administer vaccinations.

(2) The linguistic and religious considerations taken at the vaccination site were revealed in subsection 3.2. On the day of vaccination, the site was smoothly operated based on the mosque administrators’ experiences with a large vaccination site. Linguistic considerations included the fact that volunteers filled out medical questionnaires and mosque administrators and other volunteers provided interpretation for advance precautions and medical interviews. Gender-related measures were undertaken as religious considerations. Particularly, the mosque administrators avoided female vaccine recipients sharing the same space and time with male recipients.

(3) The reason that they got vaccinated at the mosque and the effects of the mosque’s linguistic and religious considerations on their decisions were presented in subsection 3.3. The recipients favorably accepted the multilingual support and reservation process easily completed through familiar mosque administrators, and vaccination at a familiar place, which enhanced their sense of security. These factors possibly encouraged vaccination at the mosque.

Similar to the case of Ebina Mosque [13,14,19,20], linguistic and
religious considerations were observed at Osaka Islamic Center, such as multilingual interpretation at the site and separation of space according to gender. In addition, the recipients felt comfortable about the vaccinations implemented at a familiar mosque with multilingual support. By enhancing their sense of security and trust towards vaccination, this effort is considered to have increased their willingness to receive vaccinations at Osaka Islamic Center. The trust building by religious institutions is evident in other studies [4,5]. In summary, vaccination among an ethnic minority appears to have been promoted in a similar process as that observed in Ebina Mosque: (1) increased motivation to receive vaccinated, and (2) closing the intention-behavioral gap [13,14].

The major difference between the case of Osaka Islamic Center and that of Ebina Mosque is that Osaka Islamic Center served as a bridge between a medical institution and people who wanted to be vaccinated even after the end of vaccination at the mosque. As indicated in subsection 3.2, those that did not receive vaccination at the mosque made appointments later, either through the mosque administrators or by themselves, to be vaccinated at the clinic. It can be inferred that the above bridging was easier because Osaka Islamic Center collaborated with a private clinic, whereas Ebina Mosque became a vaccination site at the urging of the local government. Osaka Islamic Center ensured that ethnic minorities were not left behind even after the end of vaccination at the mosque.

The role played by mosques in including an ethnic minority in vaccination gives us additional insight into the activities of mosques in Muslim-minority societies during disasters. Although the foreign Muslim population in Japan is small (157,000 out of a total population of 130 million as of 2018 [26]), there were approximately 100 mosques in the country as of 2017 [22], and they were managed primarily by foreign Muslims. During the COVID-19 pandemic and natural hazard events (e.g., earthquakes), some of these mosques have appropriately approached and supported Japanese [2,17] and foreign residents with specific needs [12,28-30]. To prepare for natural-hazard-related disasters, a growing number of local governments in Japan have formed disaster relief agreements with religious institutions and organizations of major religions, such as Buddhism and Shintoism, particularly after the Tohoku earthquake and tsunami of 2011 [9]. In contrast, to our knowledge, there are almost no agreements with organizations of minority religions. As globalization progresses, it is necessary to identify disaster prevention and mitigation strategies that transcend language and religious differences and include ethnic minority groups by winning their trust. Our findings will help the public and private sectors in comprehending the potential of minority religious organizations and groups (i.e., mosques and other ethnic groups) and seek collaboration with them in future [11,12,27].

This case study also reported the activities of a woman (the wife of the mosque representative). At Ebina Mosque, the mosque administrators and other volunteers, who organized the vaccination, were exclusively male. In contrast, the human and social capital of the wife of the mosque representative played a central role in realizing and managing vaccination at Osaka Islamic Center. In studies on Islamic organizations in Japan, attention is accorded to male activities and the first generation (newcomers) whereas women’s activities are often overlooked [25]. In this context, this report is a valuable record of a woman’s activities in an Islamic organization in Japan.

Finally, this report is expected to empower mosques and other ethnic minority groups. As previously mentioned, Osaka Islamic Center voluntarily planned to become a vaccination site after learning of a precedent (i.e., Ebina Mosque) that had become a vaccination site. In other words, this is a case where mosque attendants considered performing new activities at the mosque after learning its potential from the precedent case. Hopefully, this report will stimulate future activities by mosques and other ethnic minority groups during a wide range of disasters, including natural and biological hazard-related disasters.

CRediT authorship contribution statement

Tamura Mari: Conceptualization, Methodology, Investigation, Data curation, Writing – original draft. Hitomu Kotsa: Conceptualization, Methodology, Investigation, Data curation, Writing – review & editing, Supervision, Project administration, Funding acquisition. Yusuuke Katsura: Conceptualization, Methodology, Investigation, Data curation, Writing – review & editing. Hirofumi Okai: Conceptualization, Methodology, Investigation, Data curation, Writing – review & editing, Funding acquisition.

Declaration of Competing Interest

The authors declare the following financial interests/personal relationships which may be considered as potential competing interests: Yusuuke Katsura is the son-in-law of the representative of Osaka Islamic Center; however, he usually does not get involved with managing Osaka Islamic Center. Other authors declare that they have no known competing interests.

Data availability

Data will be made available on request.

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