

University and public health center collaboration on the verge of the COVID-19 crisis: A case of university support via a community telephone hotline in Japan

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Public health centers, public health nurses, and a university during the COVID-19 pandemic

The COVID-19 pandemic has spread worldwide and has also affected Japan. The total number of COVID-19 cases was approximately 448,000, and the number of deaths was approximately 8,600 as of March 16, 2021 (Ministry of Health, Labour & Welfare, 2021). To combat the rapid increase in COVID-19 cases, the national government declared a state of emergency twice, from April to May, 2020 and January to March, 2021. Without a strict lockdown, voluntarily staying at home to decrease social contact has worked to reduce the total number of COVID-19 cases.

In Japan, in the Infectious Disease Control Law, COVID-19 is defined as a designated infectious disease for which public health centers (PHCs; Ministry of Health, Labour & Welfare, 2019) are responsible for infection control. Public health nurses (PHNs) play an essential role in dealing with COVID-19, including disease prevention, hospitalization of positive cases, active epidemiological surveys, monitoring of at-risk persons, and supporting people in the community (Yoshioka-Maeda, 2021). With the rapid increase in COVID-19 cases in the early stage of this pandemic, PHNs faced enormous difficulties in providing sufficient services covering these areas (World Health Organization, 2020).

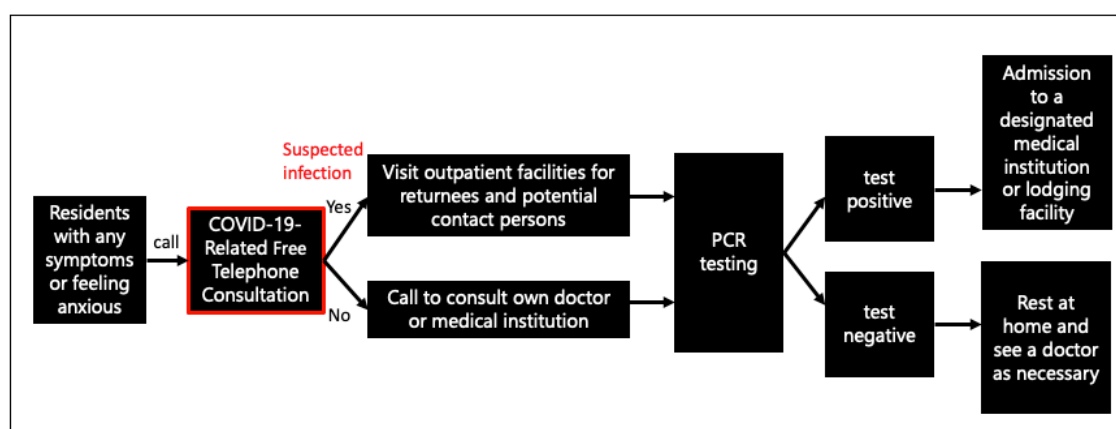
We are a group of nursing faculty members at a public university in Tokyo. During this unprecedented public health challenge, we developed a collaborative relationship between a public health center and a university. This report shares our experiences. Upon a desperate request for assistance from public health nurses, we immediately arranged a support team consisting of university faculty members and licensed graduate students. From March, 2020 to the present, 26 students and faculty members have provided support a total of 88 times, mainly to maintain an effective community telephone hotline for those affected by COVID-19.

Supporting COVID-19-related free telephone consultation by faculty members and graduate students

City A in Tokyo has a population of approximately 220,000 as of 2020. City A and our university, located within it, had a prior a general agreement as collaborative partners. Before the COVID-19

pandemic, we collaborated on conducting research and educating graduate students poised to obtain national PHN certifications. Therefore, we had established a good relationship.

The Prevention and Control Division of the PHC is a headquarters for controlling COVID-19 infections in City A. Four PHNs have been assigned to it. In February, 2020, the national and Tokyo Metropolitan governments established a free telephone consultation hotline service regarding COVID-19-related concerns, ranging from possible infections that would require polymerase chain reaction (PCR) testing, to general infection control practices in restaurants. The hotline was to be answered by PHNs from 9:00 to 17:00 on weekdays. Figure 1 shows a flowchart of the telephone consultation system.



Note: PCR = polymerase chain reaction.

Figure: Flowchart of COVID-19-Related Free Telephone Consultation

Any resident who experiences symptoms of COVID-19 or feels anxious can access this telephone consultation. With the increase of positive cases in Japan, public concern increased and the excessive number of calls grew almost impossible for PHNs to answer in a timely manner. This situation caused one of the public health nurses to ask university faculty members for help. Soon after receiving an informal request, we, the faculty members of public health nursing, approached licensed faculty members and graduate students to recruit possible supporters. In March, 2020, we started supporting the COVID-19 hotline. Our support was voluntary, based on our university’s agreement with City A. Consultations that required advanced judgment were reported to full-time PHNs for assessment. The full-time PHCs in A city was ultimately responsible for volunteering. Gradually, our role shifted, to entering and analyzing data regarding COVID-19 cases.

In mid-April, just after the declaration of the state of emergency, we received nearly 100 calls per day. Many calls were from local residents, and doctors and nurses at clinics regarding how to deal with patients. The most common questions concerned symptoms such as fever. When we received such questions, we assessed the possibility and severity of infection based on the criteria proposed by the Ministry of Health, Labour and Welfare (degree of fever, number of days, presence of respiratory symptoms, and presence of close contact with positive patients), and evaluated the need for PCR

testing for suspected cases. For questions relating to issues other than symptoms (e.g., consultations from companies and schools regarding infection control measures, questions regarding COVID-19 measures in City A, etc.), we not only referred the callers to existing manuals, but also responded to each case by making inquiries to the relevant department or looking up information on the website. During some calls, callers complained angrily, while others cried because of the fear of infection. Some people called several times a day due to a vague sense of anxiety. People had been in close contact with a positive case, some expected to become seriously ill from their history or symptoms, and some required immediate attention.

We also compiled and analyzed data on the telephone consultation hotline and provided real-time feedback to the PHNs. Based on the feedback, PHNs shared the most frequently asked questions from residents among their staff and immediately added them to the telephone consultation manual.



Photo1: Telephone consultation by our members



Photo2: Meeting at the PHC with PHNs

Conclusion

The fight against COVID-19 is expected to be a long one; hence, developing sustainable and readily available support systems for PHCs is needed. Currently, there are 289 nursing-related universities in Japan, including ours. (Ministry of Education, Culture, Sports, Science and Technology, 2020). Nursing-related universities may become sources of human resources of each region during sudden severe human PHC resource shortages in pandemics such as COVID-19. We are convinced that nursing-related universities can proactively contribute to support PHCs in such crises.

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