

The COVID-19 pandemic triggered a change in continuing education in nursing: From face-to-face to online education

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Abstract: Prior to and up to 2019, the Training Center for Nursing Development, National College of Nursing, Japan (NCNJ) had provided education for nurses working at policy-based medical facilities in a face-to-face format. Since 2020 however, all on-campus courses have been cancelled due to the coronavirus disease (COVID-19) pandemic. The nursing directors of all participating facilities were subsequently surveyed; based on their responses, online education was implemented on a trial basis. As a result, all training since 2021 has been provided as online education. Online education has many advantages, such as there is no risk of contracting COVID-19 or other infectious diseases, no need for commuting or accommodations, courses can be attended remotely, and time can be used effectively. That said, there are some disadvantages. Potential improvements should be identified in the future.

Keywords: continuing education, policy-based medical facility, face-to-face education, online education

Function of the Training Center for Nursing Development and conditions prior to coronavirus disease (COVID-19)

The Training Center for Nursing Development of the National College of Nursing, Japan (NCNJ) seeks to improve the quality of practical clinical nursing, clinical nursing research, nursing management, and nursing education for the nursing staff working in the specialized field of policy-based healthcare at the National Medical Research Center for Advanced and Specialized Medical Care (NC), the National Hansen's Disease Sanatorium (NHDS), and the National Hospital Organization (NHO). It also seeks to foster personnel who can play leadership roles in nursing in the field of policy-based medical care.

Education by the NCNJ is provided as short- or long-term courses. Short-term courses last 1-3 days, and long-term courses last 8 weeks.

In 2019, the year before the COVID-19 pandemic, 11 short-term courses and 1 long-term course were conducted. Approximately 600 nurses from all over Japan, from Hokkaido in the north to Okinawa in the south, participated. Courses were conducted face-to-face at the NCNJ's campus in the City of Kiyose, Tokyo.

Impact of the COVID-19 pandemic and trial online education

When planning its courses for 2020, the Training Center

for Nursing Development naturally expected to conduct training as usual. However, all planned training was cancelled due to COVID-19. With all future prospects uncertain, the Training Center had to plan and implement alternative training courses.

First, the nursing directors of all 162 participating facilities were surveyed. The questionnaire asked about training needs during the COVID-19 pandemic and the extent to which online courses were ready. Approximately 70% of the facilities responded to the survey.

Responses revealed that training many other facilities, and not just at the NCNJ, had been cancelled due to the spread of COVID-19, educational opportunities for nurses decreased significantly, and nurses ardently wanted to receive online education, with more than 70% responding that they would like to participate.

That said, the Nursing Department did not have much experience with online education, and some nurses were concerned about insufficient preparation of the equipment and how to operate it.

Seeking to address the requests identified by the survey as much as possible, the Training Center began developing a new training plan and application guidelines from scratch. Online education would be implemented on a trial basis, equipment would be prepared and maintained, a website site would be arranged, and other preparations proceeded.

Eventually, the trial was to consist of 5 short-

term courses via online education. Online education included simultaneous interactive education, on-demand training where videos were distributed and participants could watch them as many times as they wanted within the time period designated, and training where the participants were directed to watch the content in advance. There were 242 participants in total. The participants commented that they were equally satisfied with the program, even when compared to face-to-face education thus far.

Aspects of online education (specific methods, what was wanted, and participants' reactions)

Based on experience with the trial, the decision was made to conduct both short- and long-term courses via online education starting in 2021. This in turn gave rise to many new issues, as discussed in previous studies (1,2).

Notably, more than 80% of the participants answered "The place was quiet and allowed us to focus" and "Communication was not a problem". In contrast, some participants answered "There were some network instability issues, which were a problem", "The network was unstable at times", "A glitch occurred during group training", and "There were occasional dropouts in audio".

First, the participants' varied circumstances had to be considered, such as preparations so that all participants could sit in front of a computer and so that the courses could be conducted without problems. For example, an explanatory document on how to connect to online education had to be prepared, a method of performing a connection test for participants had to be devised and the schedule had to be adjusted before the course began, the course had to be implemented as scheduled, individual support had to be provided to participants who had trouble connecting their microphone or camera, an explanatory document on the protection of copyright and portrait rights had to be prepared and distributed, and consent had to be obtained. In addition, the Training Department personnel who conducted the training had to acquire relevant knowledge and skills, such as operating a computer, broadcasting, understanding copyright laws, and preparing for stable distribution.

Ultimately, 12 short-term courses and 1 long-term course were conducted without incident. A total of 449 nurses participated.

Advantages and disadvantages of online education and plans for the future

After the online education, participants, nursing departments of the medical facility where they worked, and faculty members of the NCNJ who served as training instructors were surveyed. A total of 165 respondents (104 participants, 34 nursing departments, and 27 faculty members of the NCNJ who served as training instructors) provided the feedback below. The following is a list of

the most representative findings in order.

Advantages of the online education were: *i)* There is no risk of COVID-19 or other infectious diseases; *ii)* Commuting and accommodations are not needed, courses can be attended remotely, and time can be used effectively (nurses who provide nursing care while raising children can participate); *iii)* Expenses for commuting or accommodations are not incurred; *iv)* The environment is such that everything is done by the participant him/herself; there is a greater level of autonomy; *v)* In group training, tasks can proceed by sharing data; *vi)* For the Nursing Department, the participants' reactions can be judged immediately after they take the course; and *vii)* Instructors also can participate from anywhere, such as a training site.

That said, there were disadvantages and requests: *i)* Participants and instructors have difficulty interacting and *ii)* There were course interruptions due to broadcasting problems, operational errors, and unskilled computer operation.

Notwithstanding these findings, face-to-face education has more than enough advantages, and direct communication is the best. This is a major disadvantage for online education. Opportunities to actively and deliberately interact need to be created, and especially in long-term training, as noted in other studies (3-5).

However, the advantages of online education differ from those of face-to-face education. Although online education began as a response to the COVID-19 pandemic, this method should continue to be utilized in the future.

In conclusion, due to the COVID-19 pandemic, education changed from conventional face-to-face training to online education. This fiscal year will mark the end of three full years of online education, including the trial. Whether education is face-to-face or online, the Training Center for Nursing Development, NCNJ should continue to consider further improvements in training.

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