World Academy of Science, Engineering and Technology
International Journal of Health and Medical Engineering
Vol:15, No:05, 2021

The Effect of Environmental Assessment Learning in Evacuation Centers on the COVID-19 Situation

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Abstract : In basic nursing, the conditions necessary for maintaining human health -temperature, humidity, illumination, distance from others, noise, moisture, meals, and excretion- were explained. Nursing students often think of these conditions in the context of a hospital room. In order to make students think of these conditions in terms of an environment necessary for maintaining health and preventing illness for residents, in the third year of community health nursing, students learned how to assess and improve the environment -particularly via the case of shelters in the event of a disaster. The importance of environmental management has increased in 2020 as a preventive measure against COVID-19 infection. We verified the effect of the lessons, which was decided to be conducted through distance learning. Sixty third-year nursing college students consented to participate in this study. Environmental standard knowledge for conducting environmental assessment was examined before and after class, and the percentage of correct answers was compared. The χ^2 test was used for the test, with a 5% significance level employed. Measures were evaluated via a report submitted by the students after class. Student descriptions were analyzed both qualitatively and descriptively with respect to expected health problems and suggestions for improvement. Students have already learned about the environment in terms of basic nursing in their second year. The correct answers for external environmental values concerning interpersonal distance, illumination, noise, and room temperature ($p < 0.001$) increased significantly after taking the class. Humidity was registered 83.3% before class and 93.3% after class ($p = 0.077$). Regarding the body, the percentage of students who answered correctly was 70% or more, both before and after the class. The students' reports included overcrowding, high humidity/high temperature, and the number of toilets as health hazards. Health disorders to be prevented were heat stroke, infectious diseases, and economy class syndrome; improvement methods were recommended for hyperventilation, stretching, hydration, and waiting at home. After the public health nursing class, the students were able to not only propose environmental management of a hospital room but also had an understanding of the environment in terms of the lives of individuals, environmental assessment, and solutions to health problems. The response rate for basic items learned in the second year was already high before and after class, and interpersonal distance and ventilation were described by students. Students were able to use what they learned in basic nursing about the standards of the human mind and body. In the external environment, the memory of specific numerical values was ambiguous. The environment of the hospital room is controlled, and interest in numerical values may decrease. Nursing staff needs to maintain and improve human health as well as hospital rooms. With COVID-19, it was thought that students would continue to not only consider this point in reference to hospital rooms but also in regard to places where people gather. Even in distance learning, students were able to learn the important issues and lessons.

Keywords : environmental assessment, evacuation center, nursing education, nursing students
Conference Title : ICPHN 2021 : International Conference on Public Health and Nursing
Conference Location : Tokyo, Japan
Conference Dates : May 27-28, 2021