

CARING OF COVID-19 CLIENTS BY NURSES AND MIDWIVES IN LESOTHO: FEEDBACK OF A PRE- AND POST- WORKSHOP QUESTIONNAIRE

Mpho Shelile*, Maselobe Lebona*, Malehlohonolo Damane*, Amelia Mashea*, Isabel Nyangu*

*Department of Nursing, Faculty of Health Sciences, National University of Lesotho

ABSTRACT:

Coronavirus disease 2019 (COVID-19) emerged in 2019 and has altered, in varying ways, the practices of health care providers, hospitals, clinics, and patients. *Aim:* This survey aimed to evaluate the skills of nurses and midwives regarding prevention, control, care, and management of Covid-19 in the ten districts of Lesotho. *Materials and Methods:* A cross-sectional survey of workshop pre-and post-test questionnaires that were completed by 173 nurses and midwives was conducted. The questionnaire elicited information on COVID-19 general knowledge, the nursing process during patient care, and legal and ethical aspects of patient care. *Results:* The response rate for the pre-and post-test was 100% and 98%, respectively. All the nurses and midwives who returned the post-test questionnaire had good knowledge of COVID-19, infection prevention practice, application of the nursing process, and the ethical principles that apply in the care of COVID-19 patients. *Conclusion:* We conclude that workshop training provided to nurses assist in improving their knowledge for the management of patients, especially during crisis management such as the COVID-19 pandemic.

KEYWORDS: COVID-19, Feedback, Pre-test, Post-test, Lesotho

BACKGROUND

Lesotho confirmed the first case of COVID-19 on the 13th of May 2020. Just like the rest of the world, communities were filled with fear of the unknown as those infected presented with the signs and symptoms that had been described in other countries worldwide and many lost their lives. Whilst the main focus was to prevent the spread of the pandemic in the general population, it was crucial to prevent infection amongst health care professionals, and their mental and psychological well-being was also paramount. Several authors (Ayanian, 2020; Patti et al., 2018) have reported that as the patients' loads increased due to the pandemic, and fellow workers became infected, there was an increase in burnout amongst care professionals and this could adversely reduce their mental health. Furthermore, health care professionals had to isolate themselves from their families during this pandemic (Lai et al., 2020) to prevent infecting them. Due to limited information and high exposure to the Covid-19 disease, many health care professionals became infected (Adams and Walls, 2020).

The majority of health care facilities in Lesotho are managed by nurse midwives and nurse clinicians (Nyangu and Nkosi, 2019). We, therefore, found it important to support nurses with the knowledge to assist them to implement emergency standards of care to respond and ration the resources which were likely to be exceeded by the increasing demand during the COVID-19 pandemic. Equipping nurses with the most recent research findings and accurate information was also paramount to enhance direct caregiving to populations that were at risk of contracting this disease.

Application of the principles of infection control and the protection of health care workers was a priority (American Nurses Association, *n.d*). To ensure more systematic care provision by nurses, the nursing process had to be used as a guide in the initial assessment, sample collection, care of mild-moderate symptoms, care of critically ill patients, and care of a dead body (Sharma et al., 2020). Intense moral questions of right or wrong inspire professional decision-making and the nursing care of patients (Zydzianaite et al., 2010; Corley et al., 2005). Professional and ethical challenges to nurses and all other health care professionals while caring for patients with this disease (Virani et al., 2020) also had to be addressed. This would improve their experience, critical thinking, ability to evaluate ethical principles, and make the best ethical decision (Bah and Sey-Sawo, 2018; Ulrich et al., 2010).

PROBLEM STATEMENT

Anecdotal evidence suggests that there was never adequate time to prepare nurses for management of the Covid-19 pandemic. Owing to a scarcity of medical doctors, health care facilities in Lesotho are mostly staffed by nurses and midwives. Nurses and midwives were also faced with fears of being infected and could not orientate themselves to the management of the pandemic at the same time. Coupled with lockdown measures, it was also difficult to communicate with nurses found in the mountainous regions of the country. Therefore, we embarked on training workshops targeting nurses and midwives with the hope of improving their skills towards caring for Covid-19 patients in Lesotho.

Aim:

This survey aimed to assess the skills of nurses and midwives regarding prevention, control, care, and management of Covid-19 before and after a training workshop in the ten districts of Lesotho.

Objectives:

The objectives were to:

- Determine the skills of nurses and midwives regarding COVID-19 knowledge, nursing process, and legal and ethical aspects of patient care before the workshop training.
- Assess how the workshop improved the skills of nurses and midwives regarding COVID-19 knowledge, nursing process, and legal and ethical aspects of patient care after the workshop.

MATERIALS AND METHODS

A cross-sectional survey was conducted to assess nurses' skills on the care of clients with COVID-19. The World Health Organization (WHO) guidelines and myth busters (WHO, 2020) on COVID-19 were used to develop a questionnaire that collected information on COVID-19 general knowledge, nursing process, and legal and ethical aspects of patient care. The questionnaire was completed before and after the workshop. The target population was 20 nurses and midwives from each of the 10 districts to make a total of 200. Respondents were selected conveniently based on their participation in the training workshops. However, the response rate was 87% as only 173 nurses managed complete the questionnaire before and after the workshop. Data were collected during 10 one day workshops that were conducted across the 10 districts of Lesotho from the 31st

August 2020 to the 22 September 2020. Data were entered and analyzed for frequencies and percentages by using Statistical Package for Social Sciences (SPSSv25) and presented using graphs and tables.

ETHICAL CONSIDERATIONS

Due to the urgency in capacitating nurses dealing with the pandemic, permission to conduct the training workshops and the survey was granted by the Ministry of Health in Lesotho through the office of the Nursing Directorate. Informed consent was sought from the participants before they completed the questionnaires. Participation in the training workshops and completion of the questionnaires was entirely voluntary. Participants were informed that their participation was important to enable capacity building on COVID-19 amongst nurses and midwives in Lesotho. There was no coercion or excessive rewards from taking part. Pre- and post-workshop questionnaires were completed privately and submitted to the workshop facilitators upon completion. All COVID-19 prevention protocol was observed by wearing of masks, physical distancing, use of hand sanitizers, and hand washing using soap and water. The venues used were spacious to allow for physical distancing.

RESULTS

The response rate for the pre-workshop questionnaire was 100% (n=173) and 98% (n=170) for the post-workshop questionnaire. Respondents who completed the questionnaires were managers for hospital nursing services, nurse/midwives, or departmental coordinators. Majority (78%; n=135) of the respondents were female, 15% (n=26) were male, whilst 7% did not provide their gender. The gender distribution of nurses from each district is shown in Figure 1.

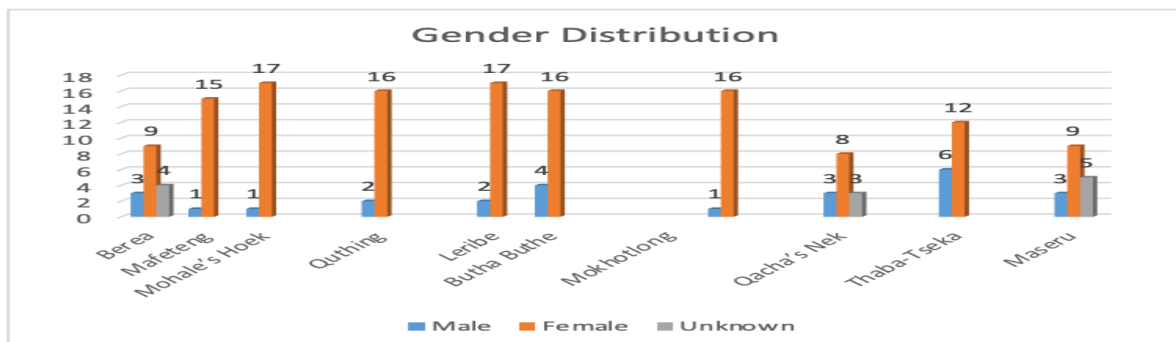


Figure 1: Gender Distribution

Knowledge of Covid-19 amongst nurses:

Figure 2 shows the different information that nurses had before and after the training. Nearly all participants (81.8%) marked “yes” on COVID-19 being a virus infection question during the pre-test and all (100%) marked “yes” in the post-test. The majority of nurses were aware that there currently is no effective cure for COVID-19, but early symptomatic

and supportive treatment can help most patients recover from the infection. They were also aware that isolation and treatment of people who were infected with the COVID-19 virus are effective ways to reduce the spread of the virus even before the intervention. The overall knowledge of nurses improved significantly after the training.

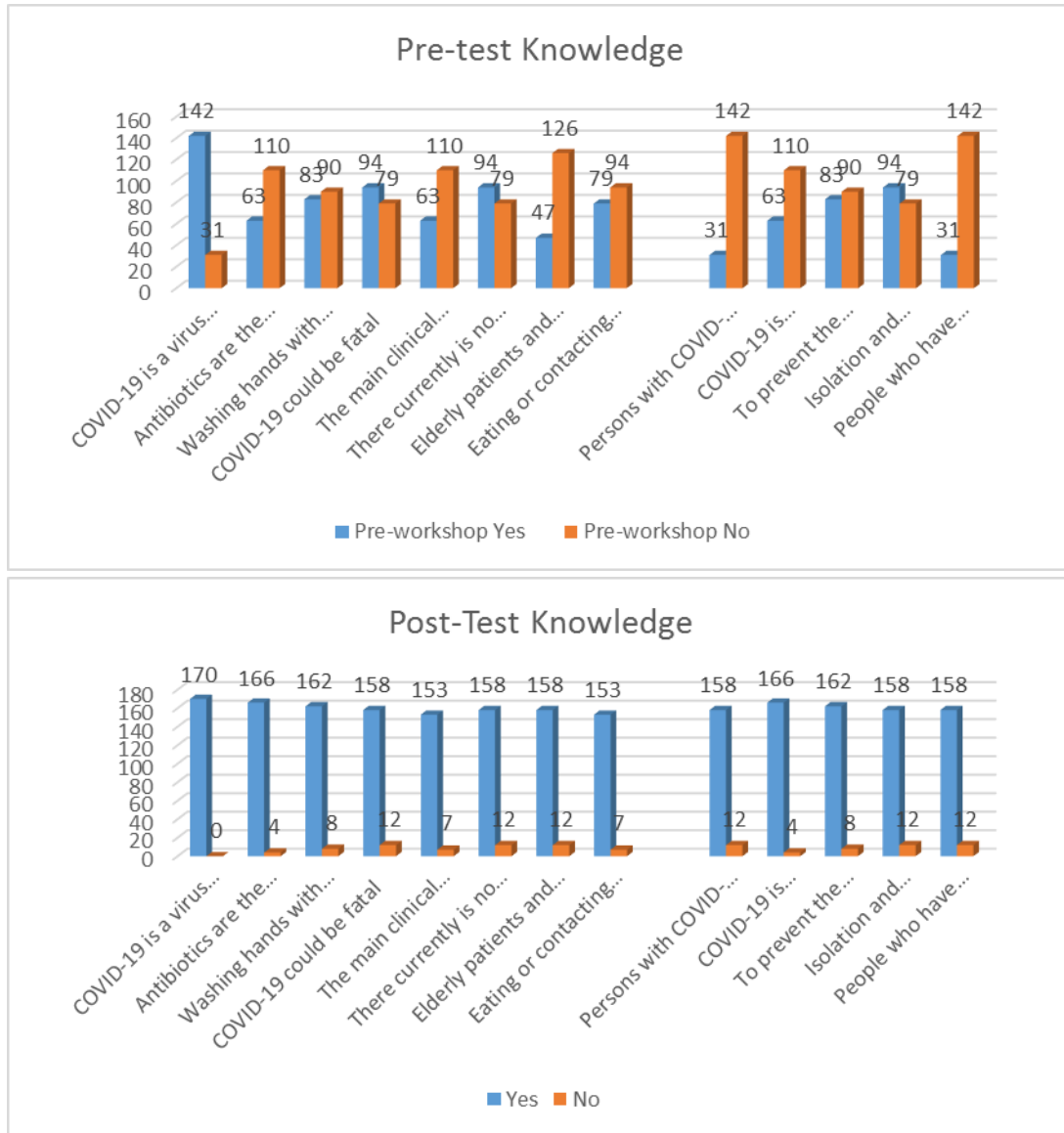


Figure 2: Knowledge on Covid-19

Application of the nursing process of care:

Figure 3 shows the participants’ responses on the application of the nursing process of care in the care of COVID-19 clients. In the pre-test, 90 (52.3%) of the participants could not define the nursing process while only 8 (4.9%) of the participants could not define it after the

training. The pre-test further revealed that 110 (63.6%) of the participants believed that the nursing process did not apply in the care of COVID-19 clients while 4 (2.4%) had the same view after the training. After the training, it was evident that nurses understood how the nursing process of care could be applied in the care of COVID-19 clients.

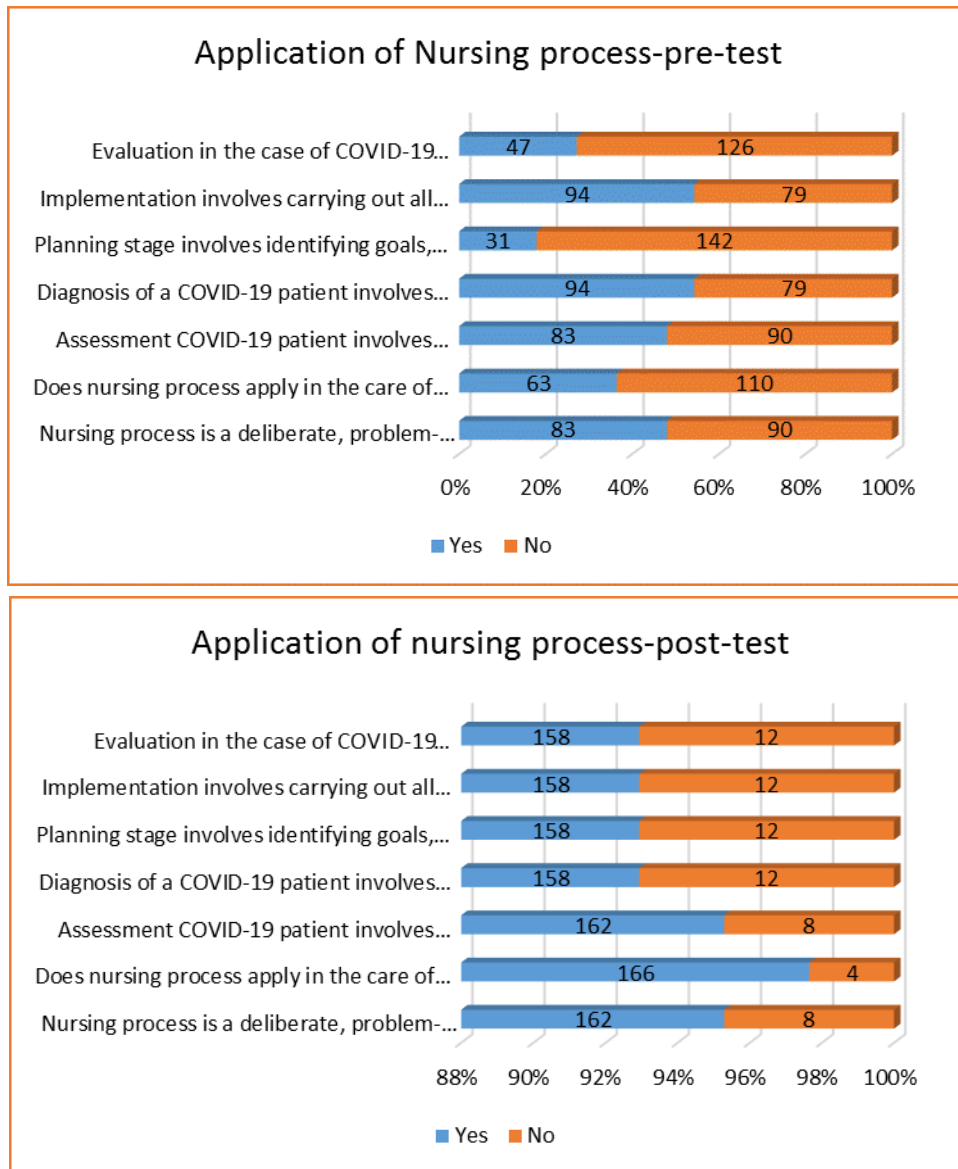


Figure 3: Application of nursing process

Application of Ethics:

Figure 4 shows responses on the application of ethics when caring for clients with COVID-19. Regarding the applicability of ethics when caring for a COVID-19 patient, 31 (18.2%) of the nurses marked the option “yes” before the

workshop, and 158 (92.7%) of them marked “yes” after the workshop. After the workshops, understanding of the applicability of ethical principles during the care of COVID-19 patients was found to have improved after workshops finished.

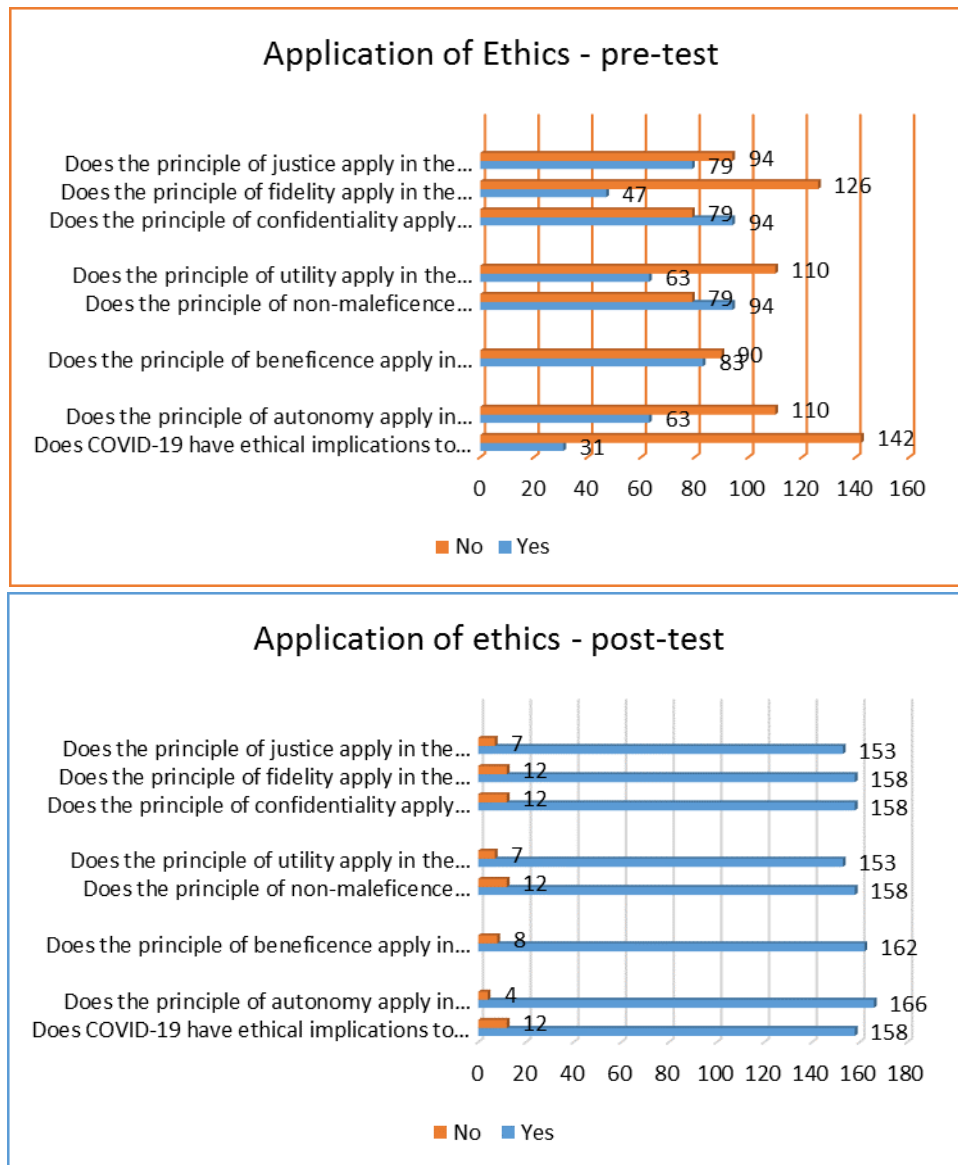


Figure 4: Application of Ethics

DISCUSSION

Health workers, especially nurses who are the front liners, have close contact with infected patients and have a significant role in infection prevention and control (Kharmah et al., 2015). Assessing the level of nurses' knowledge about COVID-19 is an effective step in preventing and controlling the disease. The current evaluation of 170 nurses after the training showed that there was a significant improvement in knowledge on COVID-19 with all the questions in the post-test questionnaire. Abu, Khalidi, Baig, and Khan (2015) in their post-workshop study, found that the workshop on refining knowledge, attitude, and practice of evidence-based medicine (EBM) among pharmacy students for professional challenges had a positive impact on the students. The current study also supports that training workshops can bring about the desired change. Abu et al. (2015) and Dimple et al. (2019) reiterated constructive feedback on improvement after the workshop to assess the reaction/perception at Kirkpatrick level one. Furthermore, Ramalingam et al, (2014), reported the overall increase in

knowledge, attitudes, and skills domain after the workshop in both the faculty and postgraduates.

Similarly, in this survey, there were more positive responses after the training on the application of the ethics and the nursing process in the care of COVID-19 patients. This is in line with Ajuwon and Kass (2008) who reported a significant increase in knowledge, attitudes, and skills towards research ethics among faculty following a training workshop. Similar observations were made by Barchi et al. (2013), who showed the effectiveness of short training programs such as in-person seminars in building research capacity. Bah and Sey-Sawo (2018) concluded that there is inadequate teaching and implementation of the code of ethics and values in the nursing profession and this can reduce the quality of nursing care and result in increased risk for legal litigation of nurses, therefore there is a need for continuous professional development in ethics and professionalism.

LIMITATIONS OF STUDY

Due to limited funding, this survey was only conducted once, and hence there was no follow-up training to further enhance the information provided on COVID-19.

CONCLUSION

Training workshops provided to nurses can assist in improving their knowledge for the management of patients, especially during crisis management such as the COVID-19 pandemic. Information provided can be streamlined to assist the care professionals to improve health care service delivery to patients.

ACKNOWLEDGEMENTS

We wholeheartedly want to thank Burdett Trust for Nursing and Tropical Health Education Trust for supporting the training. We thank you.

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