International Journal of Medicine and Health Profession Research

PEER-ASSISTED TEACHING STRATEGIES (PATS) ON COVID - 19 AMONG NURSING STUDENTS

Premalatha Paulsamy[*1], Krishnaraju Venkatesan[2], Kumar Venkatesan[3]

[1*]College of Nursing for Girls, King Khalid University, Khamis Mushayit, Asir Province, Saudi Arabia.

[2]Department of Pharmacology, College of Pharmacy, King Khalid Universiy, Abha, Asir Province, Saudi Arabia.

[3]Department of Pharmaceutical Chemistry, College of Pharmacy, King Khalid Universiy, Abha, Asir Province, Saudi Arabia.

ABSTRACT

To combat the rapid spread of the current COVID-19 outbreak around the world, unprecedented steps have been taken. People's awareness and perceptions about COVID-19 have an effect on their adherence to control steps. When it comes to health care professionals, due to the augmented demand of them, even the novice students also needed to tackle and take care of the COVID-19 patients. This study investigated the effect of the peer-assisted teaching strategies (PATS) on COVID-19 among nursing students' knowledge, attitude and practice. A pre-experimental pre and posttest without control group design was undertaken and the first year students were given education about COVID-19 by their seniors (4th year) who are already on duty and taking care of active COVID-19 patients. The knowledge and practice score of the first year students showed significant improvement in the post-test in all the aspects such as standard precautions, common medications and care of patients with Covid-19. Also, vast majority of them had Positive attitude towards Covid-19 epidemic. There was significant correlation with knowledge, attitude and practice on Covid-19 among the nursing students which is significant at p<0.01 level. The study concludes that adequate training should be given to all the nursing students so that we can prevent undue infection to them as well as we can effectively battle this epidemic.

KEYWORDS

Peer assisted teaching strategies, COVID-19, Nursing students, Knowledge, Attitude and Practice.

Author for Correspondence:

Premalatha Paulsamy,
College of Nursing for Girls,
King Khalid University, Khamis Mushayit,
Asir Province, Riyadh, Saudi Arabia.
Email: pponnuthai@kku.edu.sa

INTRODUCTION

The novel coronavirus disease (COVID-19) pandemic, remains a global challenge and despite intense efforts of governments worldwide, the control of its spread becomes very unsuccessful. In response to this serious situation, WHO called for collaborative efforts of all countries to prevent the

rapid spread of COVID-19 and treat the affected patients[1]. As there is steady surge in number of cases and also the increasing number of health care professionals getting affected, all necessary steps must be taken to prevent the infection from spreading to health care professionals, first by educating them about the risk factors for infection and then by taking appropriate measures to mitigate these risks to themselves and to the patients. Hence, this study was aimed to investigate the effect of the peer-assisted teaching strategies (PATS) on COVID-19 among nursing students' knowledge, attitude and practice.

MATERIAL AND METHODS

A pre-experimental pre and posttest without control group design was undertaken and the 48 first year students of a selected college of nursing were given education about COVID-19 by their seniors (Final year) who are already on duty and taking care of active COVID-19 patients. A self-developed teaching material and a knowledge, attitude and practice (KAP) questionnaire was developed by the investigator. The teaching material included knowledge and practice sessions on COVID-19 such as standard Precautions, Common Medications and care of Patients with COVID-19. Initially, the final year students were taught with the same protocol and were evaluated with the questionnaire for their competence. After the satisfactory performance, 20 students with highest score were selected and names as mentors. These mentors given education and training to the novice students in 1:2 ratio and it had two sessions in one week. The pre and post training knowledge, attitude and practice score was assessed. The knowledge and practice questionnaire consisted of 14, 20 questions respectively and attitude had 6 statements. The institutional Ethics Committee approved our study protocol and procedures and informed consent was obtained before the formal study.

RESULTS AND DISCUSSION

The results showed that the PATS has increased the first year students knowledge on all the aspects such as standard precautions (2.68 ± 1.25 to 5.43± 0.72),

common medications (0.72 ± 0.82 to 1088± 0.63) and care of patients with COVID-19 (1.38 ± 0.34 to 3.92 ± 0.91) as mean and standard deviation respectively (Tab1e No.1) which were also significant. There are also similar findings from a research on Iranian medical students, they have an average of 96 percent correct answers, with 79.60 percent, 13.8 percent and 6.7 percent of them having high, moderate and low levels of awareness, respectively[2]. In Jordan, medical and non-medical students received an overall score of 0.81 0.15 (SD), with 90% of participants having a clear understanding of COVID-19 symptoms and more than 80% being familiar with the virus[3].

The Practice score of the first year students also showed significant improvement in the post-test scores in all the aspects such as standard precautions (3.168 ± 1.13 to 8.3± 0.57), common medications (2.68 ± 1.82 to 4.88± 0.87) and care of patients with COVID-19 (1.08 ± 0.84 to 3.29 ± 1.13) as mean and standard deviation respectively (Tab1e No.2) which were highly significant at p< 0.001. The study findings of Zhang *et al*, (2020)[3] concludes that a total of 89.7% of the surveyed healthcare workers followed correct practices regarding COVID-19, consistent which is with present study results.

Regarding the attitude, vast majority of participants were also positive about the COVID-19 epidemic: 80.8% thought the virus would eventually be successfully contained and 77.1 percent believed the world could win the fight against the virus. The study findings of Alzoubi H *et al*, (2020), also reveals that vast majority of the Medical and non-medical students held an optimistic attitude towards the COVID-19 epidemic[4].

There was significant correlation with knowledge, attitude and practice on COVID-19 among the nursing students which is significant at p<0.01 level which is similar with the study findings of Zhong B, Luo W *et al*, (2020)[5]. The results revealed that awareness had a direct impact on attitudes. Since COVID-19 has been declared a pandemic, increasing community awareness through health education is critical. As a result, expanded awareness would have an effect on COVID-19 attitudes and practices.

Table No.1: Mean, SD of pre and post-test knowledge Score

S.No	Area	Max. Score	Pre-test		Post-test		't' value	Significance
			Mean	SD	Mean	SD		
1	Standard Precautions	6	2.68	1.25	4.43	0.72	7.521	p<0.001
2	Common Medications	3	0.72	0.82	1.08	0.63	2.055	p<0.05
3	Care of Patients with COVID-19	5	1.38	0.34	3.92	0.91	3.217	p<0.001

Table No.2: Mean, SD, mean percentage of pre and post-test Practice Score

S.No	Area	Max. Score	Pre-test		Post-test		't' value	Significance
			Mean	SD	Mean	SD		
1	Standard Precautions	9	3.168	1.13	8.3	0.57	5.330	p<0.001
2	Common Medications	6	2.68	1.82	4.88	0.87	4.13	p<0.001
3	Care of Patients with COVID-19	5	1.08	0.84	3.29	1.13	3.156	p<0.001

CONCLUSION

In conclusion, training regarding COVID-19 is effective in increasing the KAP among the nursing students and it was more effective as it was given by their senior students through PATS. Hence, such training should be organized according to different factors such as educational level, work exposure and so on, so that we can effectively combat this war against COVID-19 as well as protect our health care professionals.

DECLARATION OF CONFLICTING INTEREST

The authors declare no conflict of interest. The funders had no role in the design of the study; in the collection, analyses, or interpretation of data; in the writing of the manuscript, or in the decision to publish the results.

BIBLIOGRAPHY

1. Coronavirus disease (COVID-19) pandemic, *World Health Organization,* 2020. https://www.who.int/emergencies/diseases/ novel-coronavirus-2019 [last accessed March 2020].
2. Taghrir M H, Borazjani R, Shiraly R. COVID-19 and Iranian medical students; A survey on their related-knowledge, Preventive behaviors and risk perception, *Arch Iran Med,* 23(4), 2020, 249-254.
3. Zhang M, Zhou M, Tang F *et al.* Knowledge, attitude and practice regarding COVID-19 among health care workers in Henan, China, *J Hosp Infect,* 105(2), 2020, 183-187.
4. Alzoubi H, Alnawaiseh N, Lubad M A, Aqel A, Al-Shagahin H. COVID-19 - knowledge, Attitude and practice among medical and non-medical university students in Jordan, *J Pure Appl Microbiol,* 14(1), 2020, 17-24.
5. Zhong B, Luo W, Li H *et al.* Knowledge, attitudes and practices towards COVID-19 among Chinese residents during the rapid rise period of the COVID-19 outbreak: A quick online cross-sectional survey, *Int J Biol Sci,* 16(10), 2020, 1745-1752.

Please cite this article in press as: Premalatha Paulsamy *et al.* Peer-assisted teaching strategies (PATS) on COVID-19 among nursing students, *International Journal of Medicine and Health Profession Research,* 8(1), 2021, 32-34.