

Effectiveness of Team Teaching Method on Knowledge Towards COVID19 Prevention and Outbreak among B.Sc. Nursing Students

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Abstract

In December 2019, COVID-19 emerged and rapidly spread worldwide. Transmission of SARS-CoV-2, the virus that causes COVID-19, is mainly transmitted through droplets generated when infected person coughs, sneezes, or exhales, countries worldwide have imposed rigorous public health measures, such as quarantine. This study aims to assess the effectiveness of training program on knowledge towards Covid19 prevention and outbreak among B.Sc. nursing students. The study is quantitative in nature i.e. pre-experimental research design, and the data were collected from 193 B.Sc. Nursing students through structured questionnaire who were studying in Bombay Hospital College of Nursing Indore. The result showed that the post test mean score was 16.14 with SD of 2.06 and the respondents post test knowledge score were significantly higher than the mean pre test knowledge score 8.95 with SD of 2.50 and computed paired 't' value 27.94 is higher than table value 1.96, which shows that training program was effective at 0.05 level of significance ($P \leq 0.05$).

Keywords: Covid19 prevention and outbreak, Knowledge, Team teaching method, B.Sc. Nursing students.

Introduction

Corona virus is a group of viruses that is the main root of diseases like cough, cold, sneezing, fever, and some respiratory symptoms (WHO, 2019). Corona virus is a contagious disease, which is spreading very fast amongst the human beings. COVID-19 is a new strain which was originated in Wuhan, China, in December 2019. Corona virus circulates in animals, but some of these viruses can transmit between animals and humans (Perlman & McIntosh, 2020). On March 24, India declared a country-wide lockdown of schools and colleges (NDTV, 2020) for preventing the transmission of the corona virus amongst the students. The first SARS-CoV-2 positive case in India was reported in the state of Kerala on January 30th, 2020. Subsequently, the number

of cases drastically rose. According to the press release by the Indian Council of Medical Research (ICMR) on May 8th, 2020, a total of 14, 37,788 suspected samples had been sent to the National Institute of Virology (NIV), Pune, and a related testing laboratory. The recent outbreak of COVID-19 in several countries is similar to the previous outbreaks of SARS and Middle East respiratory syndrome (MERS) that emerged in 2003 and 2012 in China and Saudi Arabia, respectively. Corona virus is responsible for both SARS and COVID-19 diseases; they affect the respiratory tract and cause major disease outbreaks worldwide. SARS is caused by SARS-CoV, whereas SARS-CoV-2 causes COVID-19. So far, there is no particular treatment available to treat SARS or COVID-19. In the current search for a COVID-19 cure, there is some evidence that points to SARS-CoV-2 being similar to human corona virus HKU1 and 229E strains even though they are new corona virus family members. These reports suggest that humans do not have immunity to this virus, allowing its easy and rapid spread among human populations through contact with an infected person. A brief qualitative review based on

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the application and effectiveness of virtual teaching during the COVID-19 pandemic was conducted by referencing keywords, including medical student virtual teaching COVID-19, virtual undergraduate medical education, and virtual medical education COVID-19, in the electronic databases of PubMed and Google Scholar. A total of 201 articles were found, of which 34 were included in the study.- Iskra Mircheva et. al (2020).

Objectives

1. To assess the baseline knowledge towards covid19 prevention and outbreak among B.Sc. nursing students.
2. To develop and implement the team teaching method towards covid19 prevention and outbreak.
3. To assess the post test knowledge towards covid19 prevention and outbreak among B.Sc. nursing students.
4. To find out the effectiveness of team teaching method on knowledge towards covid19 prevention and outbreak among B.Sc. nursing students.

Materials and Methods

This study was conducted pre-experimental research design and quantitative research in nature. The population included B.Sc. nursing programme students who are studying in Bombay Hospital College of Nursing Indore. The sample was consisted 193 nursing students and the purposive sampling (non probability) method was utilized to gather information from chosen population. The structured questionnaire was used to collect the knowledge towards COVID 19 prevention and outbreak. It covered the demographic variables, knowledge questionnaire regarding COVID 19 prevention and outbreak. Reliability of the instrument was calculated by using Karl Pearson Correlation Coefficient formula and significance of correlation was tested using Spearman Brown prophecy formula and the tool was found reliable. Formal permission was obtained from concerned authority for the data collection, at the end for describing the data, descriptive statistics (frequency, mean and standard deviation and paired t test) were used.

Results

Analysis and interpretation is based on the objectives of the study. The analysis was done with the help of descriptive statistics.

Table 1.1- FREQUENCY AND PERCENTAGE DISTRIBUTION OF DEMOGRAPHIC INFORMATION

Sr. No.	Demographic variables	Frequency (n)	Percentage (%)
1.	Age in years		
	· 18- 19 years	80	41.5
	· 20-21 years	85	44.04
	· 22-23 years	24	12.4
	· >24years	04	2.07
2.	Last year passing percentage (%)		
	· 51 – 60	15	7.7
	· 61 – 70	40	20.7
	· 71 - 80	97	50.2
	· 81- 90	41	21.2

Cont... Table 1.1- FREQUENCY AND PERCENTAGE DISTRIBUTION OF DEMOGRAPHIC INFORMATION

3.	Religion		
	· Hindu	134	69.4
	· Muslim	04	2.07
	· Christian	55	28.4
	· Others	00	0
	Source of knowledge on Covid 19		
	· Multimedia	75	38.8
	· Classroom	118	61.2
5.	Year of study in B.Sc. Nursing programme		
	· 1st year	50	25.9
	· 2nd year	46	23.8
	· 3rd year	47	24.3
	· 4th year	50	25.9

KNOWLEDGE SCORES OF B.Sc. NURSING STUDENTS TOWARD COVID19 PREVENTION AND OUTBREAKS

Table 1.2- The criteria measures of the knowledge score of the students.

	Pre test	Post test	“t” value
Mean	8.95	16.14	27.94
SD (standard deviation)	2.50	2.06	

The analysis of findings concluded that the team teaching method is an effective method to increase the knowledge towards Covid19 prevention and outbreak as the computed ‘t’ test was significant at 0.05 level of significance. The post test mean score was 16.14 with SD of 2.06 and the respondents post test knowledge score were significantly higher than the mean pre test knowledge score 8.95 with SD of 2.50.

Discussions

Our study focused on assessing the nursing students’ knowledge toward COVID-19. Students should be responsible and pay attention to truthful details on social media. This finding suggests that nursing education

should establish programs such as educational and awareness campaigns aimed at directing students to trustworthy student-centered sources of COVID-19 information. Nurse educators should help students choose the best sources of knowledge and include study materials. This research lays the groundwork for creating an educational campaign aimed at enhancing nursing students’ understanding of COVID-19. Nursing students would be better prepared to react to similar public health crises in the future if they have sufficient awareness and the proper preventive behavior against COVID-19. The findings revealed several areas where nursing education could concentrate. The findings revealed some areas that should be focused on by nursing education, as well as

MOH and other health agencies,

Conclusion

Corona virus disease 2019 (COVID-19) is an ongoing pandemic, It is essential to understand the level of knowledge of the students towards COVID 19 and infection control measures towards COVID 19. Health education programs aimed at improving COVID-19 knowledge toward prevention and outbreak among the nursing students. The results of the study recommended strongly the need of effective structured educational interventions target undergraduate nursing students. The program should provide the basic knowledge among students towards covid19.

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