

Problem Statement: A Quasi Experimental Study to Assess the Effectiveness of Structured Teaching Programme on knowledge Regarding Prevention of Covid-19 Among Staff Nurse working in Selected Hospital

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Abstract

The covid-19 is a pandemic make in India is a part of the worldwide pandemic of corona virus disease. Corona virus are a large family of virus that causes illness ranging from the common cold to more severe disease such as middle east respiratory syndrome and severe acute respiratory syndrome. Novel corona virus is a new strain that has not been previously identified in human. Corona virus are zoonotic meaning they are transmitted between animal and people.¹

Epidemiological evidence shows that 2019 and covid-19 can be transmitted from one individual to another. In previous outbreak of other corona virus such as any covid and SARS, human-to-human transmission occurred most commonly through droplets, personal contact and contaminated object.²

Keywords: Effectiveness of Structure teaching programme on knowledge regarding prevention of covid-19; Staff Nurses at selected hospital.

Introduction

A novel coronavirus (Co-V) is a new strain of coronavirus. The disease caused by the novel coronavirus first identified in Wuhan, China, has been named coronavirus disease 2019 (COVID-19) 'CO' stands for corona, 'VI' for virus, and 'D' for disease. Formerly, this disease was referred to as '2019 novel coronavirus' or '2019-nCoV.' The COVID-19 virus is a new virus linked to the same

family of viruses as Severe Acute Respiratory Syndrome (SARS) and some types of common cold.

The virus is transmitted through direct contact with respiratory droplets of an infected person (generated through coughing and sneezing), and touching surfaces contaminated with the virus. The COVID-19 virus may survive on surfaces for several hours, but simple disinfectants can kill it. Symptoms can include fever, cough and shortness of breath. In more severe cases, infection can cause pneumonia or breathing difficulties. More rarely, the disease can be fatal. These symptoms are similar to the flu (influenza) or the common cold, which are a lot more common than COVID-19. This is why testing is required to confirm if someone has COVID-19. It's important to remember that key prevention measures are the same frequent hand washing, and respiratory hygiene (cover your cough or sneeze with a flexed elbow or tissue, then throw away the tissue into a closed bin).³

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Activities such as vaccination, COVID appropriate behaviour, testing and treatment of cases, IEC and surveillance are core activities which should be carried out on priority in all districts of India while other activities such as contact tracing, restrictions on gatherings, closure of business and travel restrictions should be undertaken based on prevalent scenario in an area.⁴

Masud Rana, et.al; (2020) A study was conducted on the Knowledge of prevention of COVID-19 among the general people in Bangladesh: A cross-sectional study in Rajshahi district. The study was conducted from March 10 to April 25, 2020. The aim of the study was to assess the knowledge of the general people, Bangladesh regarding the COVID-19 preventive measures. Data were collected with a semi-structured questionnaire from 436 adult respondents selected by using a mixed sampling technique. The result of study is only 21.6% of the respondents had good knowledge of the COVID-19 preventive measures. The highest 67.2%. The conclusion is the knowledge level of the general people regarding prevention of COVID-19 was alarmingly low in Bangladesh.⁵

Jingjing Shang Ashley M. Chastain (19 January 2021) The Study was conducted on the state of infection prevention and control at home health agencies in the United States prior to COVID-19. The aim of the study was they conducted a national survey to assess infection prevention and control-related policies, infrastructure, and procedures prior to the SARS-CoV-2 pandemic. The method of study was Survey data were linked to publicly-available data on the quality of patient care, patient satisfaction, and other agency characteristics. The result of the study was 35.6% of agencies responded (n = 536). Rural agencies are more likely to not have anyone in charge of infection prevention and control compared to those in urban areas. Only 39.7% of agencies provide N95 respirators to their clinical staff; rural agencies are significantly more likely to provide those supplies than urban agencies (50.7% vs. 37.7%, p = 0.004).⁶

Problem definition: "A study to assess the effectiveness of structure teaching programme on knowledge regarding prevention of COVID-19 among staff Nurses in selected Hospital".

Methodology

Research Approach: Quantitative evaluative research approach was used for this study.

Research design: Quasi experimental one group pre-test and post test research design.

Variables under study

- **Independent Variable:** Structure teaching programme on prevention of COVID-19.
- **Dependent Variable:** Knowledge of Staff Nurses on prevention of COVID-19. The study was conducted in selected Hospital.

Population: In this study, the population included student in selected hospital

Target population: Staff nurses at selected hospital. Accessible population staff nurses in selected hospital. Who fulfill the inclusive and exclusive criteria.

Sample and sampling technique

Sample: In the study Staff Nurses in selected Hospital.

Sample size: The sample size for the present study is 30 Staff Nurses who fulfill the set inclusion criteria.

Sampling technique: Probability simple random sampling.

Inclusion criteria: Students who are

- Staff Nurses, who are able to read, write and speak English.
- Staff Nurses who are willing to participate in the study.

Exclusion criteria: Students who are

- Who are sick at time of data collection

Preparation of the tool

Section A: Demographic data,

Section B: Assessment of level of knowledge

Section C: Effectiveness of structured teaching programme.

Section D: Association of level of post-test knowledge score regarding prevention of covid-19 among staff nurses in relation to demographic variable.

Results: Organization of the data

Section I: Demographic Variables

This section deals with percentage wise distribution of staff nurses with regards to their demographic characteristics. A convenient sample of 30 subjects was drawn from the study population, who were

from selected hospital in a city. The data obtained to describe the sample characteristics including age, gender, education, previous knowledge regarding prevention of COVID-19 and source of information respectively.

Percentage wise distribution of Staff Nurses according to their age in years: Each 16.70% of staff nurses were in the age group of less than 22 years and more than 24 years, 40% of them were in the age group of 22-23 years and 26.70% were in the age group of 23-24 years.

Percentage wise distribution of Staff Nurses according to their gender: 76.70% of staff nurses were females and 23.30% of them were males.

Percentage wise distribution of Staff Nurses according to their educational level: 50% of staff nurses were educated up to BSc nursing, 10% up to MSc nursing and 40% of them were educated up to P.B. BSc nursing.

Percentage wise distribution of Staff Nurses according to previous knowledge on prevention of COVID-19: All (100%) of staff nurses were having knowledge about prevention of COVID-19

Percentage wise distribution of Staff Nurses according to source of information about prevention of COVID-19: 56.70% of staff nurses were having knowledge about prevention of COVID-19 from mass media, each 3.30% had information through family and friends, books/journals and other sources and 33.30% had knowledge through workshop/conference and workshop.

Table 1: Percentage wise distribution of staff nurses according to their demographic characteristics.

Demographic Variables	No. of Staff Nurses	Percentage (%)
Age in years		
<22 yrs.	5	16.7
22-23 yrs.	12	40.0
23-24 yrs.	8	26.7
>24 yrs.	5	16.7
Gender		
Male	7	23.3
Female	23	76.7
Educational Status		
BSc Nursing	15	50.0
MSc Nursing	3	10.0
PBBSc Nursing	12	40.0

Previous knowledge regarding prevention of COVID-19

Yes	30	100
No	0	0

Source of information

Mass Media	17	56.7
Family and friends	1	3.3
Workshop/conference/ seminar	10	33.3
Books/Journal	1	3.3
Others	1	3.3

Section-B: This section deals with the assessment of level of knowledge regarding prevention of COVID-19 among staff nurses working in selected hospital. The level of knowledge score is divided under following heading of poor, average, good, very good and excellent.

Pre Test: 23.33% of the staff nurses had good level of knowledge score and 76.67% of staff nurses had very good level of knowledge score.

Minimum knowledge score in pretest was 16 and maximum knowledge score in pretest was 22.

Mean knowledge score in pretest was 19.26±1.70 and mean percentage of knowledge score in pretest was 64.22±5.66.

Post Test: 83.33% of the staff nurses had very good level of knowledge score and 16.67% of staff nurses had excellent level of knowledge score.

Minimum knowledge score in posttest was 19 and maximum knowledge score in posttest was 25.

Mean knowledge score in posttest was 22.36±1.80 and mean percentage of knowledge score in posttest was 74.55±6.03

Section-C: This section deals with the effectiveness of structured teaching program on knowledge regarding prevention of COVID-19 among staff nurses working in selected hospital. The hypothesis is tested statistically with distribution of pretest and posttest mean and standard deviation and mean percentage knowledge score. The levels of knowledge during the pretest and post-test are compared to prove the effectiveness of Structured Teaching Program. Significance of difference at 5% level of significance is tested with student's paired 't' test and tabulated 't' value is compared with calculated 't' value. Also, the calculated 'p' values are compared with acceptable 'p' value i.e., 0.05.

the comparison of pretest and post-test knowledge scores of staff nurses regarding prevention of COVID-19. Mean, standard deviation and mean difference values are compared and student's paired 't' test is applied at 5% level of significance. The tabulated value for $n=30-1$ i.e., 29 degrees of freedom was 2.05. The calculated 't' value i.e., 10.57 are much higher than the tabulated value at 5% level of significance for overall knowledge score of postnatal working mothers which is statistically acceptable level of significance. Hence it is statistically interpreted that Structured Teaching Program on knowledge regarding prevention of COVID-19 among staff nurses was effective. Thus, the H1 is accepted.

Section D: The association of knowledge score with age in years of staff nurses from selected hospital of the city. The tabulated 'F' values were 2.98 ($df=3,26$) which is less than the calculated 'F' i.e., 9.56 at 5% level of significance. Also, the calculated 'p'=0.0001 which was less than the acceptable level of significance i.e., 'p'=0.05. Hence it is interpreted that age in years of staff nurses is statistically

associated with their post-test knowledge score.

Conclusion

The study findings concluded that the staff nurses had poor knowledge regarding prevention of covid-19. The structure teaching programme had great potential for accelerating the awareness regarding knowledge of prevention of covid-19.

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