

Knowledge on Covid-19 Among nursing Students

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Abstract- Background: Corona virus disease (COVID-19) is an infectious disease caused by corona virus. This disease becomes life threatening and pandemic now in worldwide.

Methods: A descriptive study was conducted at Army Institute of Nursing, Guwahati, Assam. Data was collected using email, using a structured questionnaire consisting of 25 questions to assess Knowledge on Covid-19. Analysis of the data was done using inferential and statistical methods. **Results:** Among 230 students 84.78% were undergraduates and 15.22 % were postgraduates. The result showed that majority of the students' (56.96%) overall knowledge was good. **Conclusion:** The students have good level of knowledge on general information and disease related information on covid-19. However the students need to improve their knowledge on personal protection from covid-19 and need to practice measures

Keywords- Knowledge, Covid-19, Nursing Students.

I. INTRODUCTION

Background:

Corona Virus Disease (COVID-19) was known in Wuhan City, China on December 2019. The foremost common symptoms of COVID-19 are fever, tiredness, and dry cough. Some patients may have aches and pains, nasal congestion, runny nose, sore throat, diarrhea, loss of taste and loss of smell too. The symptoms are mild and increase gradually. Some people become infected but don't develop any symptoms if their immunity level is good. Many persons (about 80%) recover from the disease without any special treatment. Among every six covid-19 infected, one becomes seriously ill and develops breathing difficulty¹. The COVID-19 virus spreads primarily through droplets of spit or discharge from the nose once associate degree infected person coughs or sneezes and touching the surfaces also contaminated with the virus..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 it². The protective measures against corona virus are

washing hands with soap and water regularly, when soap and water is not available use hand sanitizer with at least 60% alcohol, don't touch eyes, nose and mouth. Use mask, throw used tissues into closed bins immediately after use, cover the nose and mouth with hand kerchief/tissue while sneezing or coughing, avoid mass gathering and crowded places and maintain social distancing.³

Need for the study:

In India, a confirmed case of COVID-19 was reported on 30th January 2020, who was a student traveled from Wuhan, China, and has successfully recovered from the infection on 14th February 2020.⁴Globally, as of CEST, 26 July 2020, there have been 15,785,641 confirmed cases of COVID-19, including 640,016 deaths, reported to WHO.On 27th July 2020, the Ministry of Health and Family Welfare confirmed a total of 485114active cases, 917567cured/discharge cases, and 32771death cases in the country from 32 states/ union territories⁵. On 27th July 2020, Assam has32,299 confirmed cases,8,106 active cases and 79 deceased.⁶The battle against COVID-19 is still going on in the whole world and India too.

Shivani P and Abhijeet G. et al conducted a survey study to assess the knowledge on covid-19 among common population in India. It reported that 58.2%of the population knowledge on covid-19 was poor.⁷ As the cases are increasing day by day knowledge on covid-19 is an important factor to be assessed. With this aim this present study was conducted to assess the knowledge on covid-19 among nursing students.

II. RESEARCH METHODOLOGY

2.1 Study Design:A descriptive study was conducted among 230 nursing students who attended online courses at Army Institute of Nursing, Guwahati. All students who study in nursing college were included in the study. Students were participated in the study after explaining the purpose of conducting the study.

2.2Tool: One tool was used in this study by the researcher for collection of patient data and achieving the aim of the study as follows;

1. Structured Multiple-Choice Questionnaires on Knowledge on Covid-19. It consists of 25 questions with four options. Each correct answer was given 1 mark.

2.3Data Collection:

The data was collected after obtaining prior permission from the concerned authority. Verbal consent was obtained from all participants prior to taking part in the study and data were collected by self-administered questionnaire through mail. The study was conducted in Army Institute of Nursing College in Guwahati.

2.4 Data Analysis:

The collected data was analyzed in terms of descriptive and inferential statistics. The data was calculated as four domains as follows Knowledge regarding general awareness on covid-19, disease related, prevention of transmission and personal protection.

(n=230)

S. No	Level of Knowledge	Frequency	Percentage
1.	Poor Knowledge (0 - 34.0 %)	11	04.78 %
2.	Adequate (34.1 - 68.0%)	63	27.39 %
3.	Good (68.1 - 100 %)	156	67.83 %

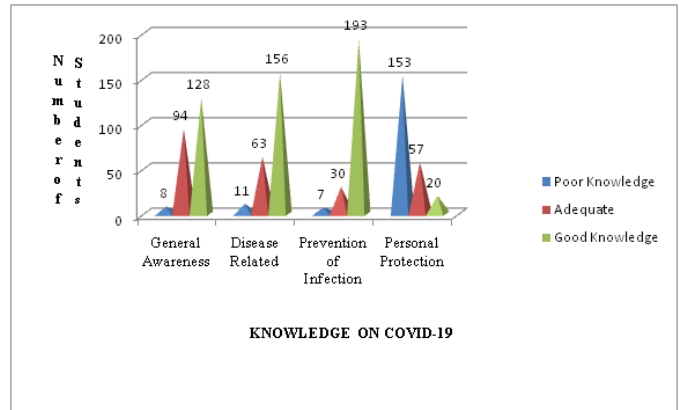


Figure 1: Comparison of four domains of Knowledge on Covid-19.

III. RESULTS

Table 1: Knowledge regarding general awareness on covid-19

(n=230)

S. No	Level of Knowledge	Frequency	Percentage
1.	Poor Knowledge (0 - 34.0 %)	08	08.48 %
2.	Adequate (34.1 - 68.0%)	94	40.87 %
3.	Good (68.1 - 100 %)	128	55.65 %

Table 2: Knowledge on covid-19 disease related information

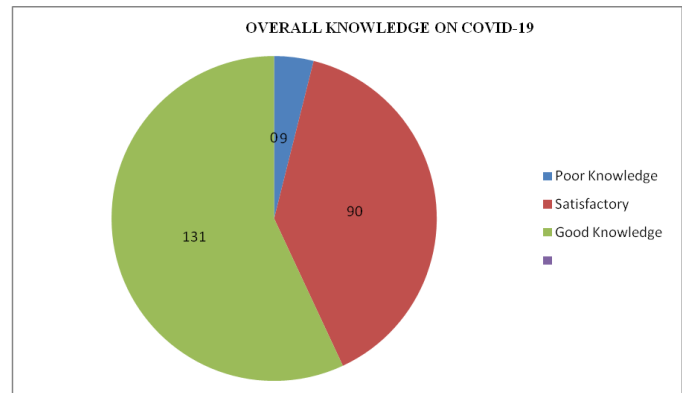


Figure 2: Overall knowledge regarding covid-19

Table 3: Comparison of all four domains of knowledge on COVID-19 (n=230)

General Information		Disease Related		Prevention of Transmission		Personal Protection		Overall Knowledge	
Mean	S.D	Mean	S.D	Mean	S.D	Mean	S.D	Mean	S.D
71.41	20.74	78.26	17.37	79.78	16.98	36.78	32	71.51	14.32

IV. DISCUSSION

The present study assessed the knowledge on covid-19 among nursing students. Table 1 shows that majority of the students' knowledge (55.65 %) on general awareness of covid-19 was good. A study conducted by Zhang M., Zhou M and Tang F in China to assess the knowledge, attitude and practice regarding covid-19 among health care workers in Henan, revealed that 89 % health care workers have sufficient knowledge about general information on covid-19.⁸

Table 2 revealed that majority of the students (67.83%) had good knowledge on covid-19 disease related information which included cause and mode of transmission and sign and symptoms. Amin N, Aolymot I et al conducted a cross sectional study on Knowledge and Information Sources about Covid-19 among University Students in Jordan. A Jordan study revealed that the students showed moderate to good knowledge of the transmission mode of Covid-19.⁹In the present study answers for the mode of transmission question score ranged from 64.9 to 94.7%. Most of the students (94.9 %) were aware that elderly and immune-compromised persons (81.0%) are at higher risk to develop severe cases of COVID-19. Further, 89.8% and 60.1% of the students realized that healthy adults and children, respectively, are not at higher risk for severe illness.

This study showed that 83.92% of the students had good level of knowledge regarding prevention of transmission. (Figure 1). A study on knowledge of covid-19 among nursing and allied health care professionals working in tertiary care Hospital at Chennai was conducted by Kamineni S.R, Balu P et al revealed that maximum of the students (63.3%) had good knowledge on prevention of transmission of covid-19. It showed that the majority of the students (66.52 %) have poor knowledge regarding personal protection measures of covid-19.¹⁰Pranav DM, Girija N et al conducted a questionnaire-based survey on Covid-19 awareness among Healthcare Students and Professionals in Mumbai Metropolitan Region. Results showed that only 52.5 % of the students (52.5 %) were not aware of personal protective measures like wearing masks etc.¹¹

The current study revealed that majority of the students (56.96 %) were having overall good knowledge regarding covid-19. (Figure 2). A cross sectional study was conducted on Knowledge and awareness among nursing students regarding the Covid-19 in Telangana, India by K.P.Joshi, Leena M et al. A study showed that over all 75.58±3.21 participants showed good knowledge and awareness about Covid-19.¹²

Many studies reported that knowledge regarding on covid-19 where not only students but the public also are aware and have very good knowledge regarding covid-19. But they were not having good knowledge regarding personal protection from covid-19. Several studies also reported that though some have knowledge on personal protection they are not practicing. That's why now we see many people are getting the disease and dying from it.

V. CONCLUSION

The present study shows good knowledge of COVID-19 among postgraduate and undergraduate nursing students in Guwahati with an overall knowledge score of 56.96%. The students have good level of knowledge on general information and disease related information on covid-19. However the students need to improve their knowledge on personal protection from covid-19 and need to practice measures. But students are not having good knowledge regarding personal protection from covid-19. That's now we see many people are getting the disease and dying. By educating and reinforcing students on morbidity can be prevented.

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