

# A Study to Assess the Knowledge and Attitude of Student Nurses regarding COVID-19 and its Prevention in Selected Nursing School of New Delhi

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**Abstract:** COVID-19 is an infectious disease caused by a newly discovered coronavirus. The novel Corona virus officially known as SARS COV-2 or coronavirus disease 2019 (covid-19) was first reported in December 2019 as a cluster of acute respiratory illness in Wuhan China from where it spread rapidly to over 198 countries. The aim of this study was to assess the knowledge and attitude regarding COVID-19 and its prevention among nursing students in selected school of New Delhi. The research approach was quantitative and Non experimental Descriptive research design was used. Sample selected was nursing students of selected school of nursing New Delhi. Structured Questionnaire and optionarrie was developed to collected the data, which showed positive attitude towards COVID-19 and 39.6% students had good knowledge and 60.29% students had average knowledge regarding COVID-19.

**Keywords:** COVID-19, infectious, student nurses, knowledge, attitude, prevention

## 1. Introduction

*“There will be interruptions, and I don’t know when they will occur, and I don’t how deep they will occur, I do know they will occur from time to time, and I also know that we’ll come out better on the other end”*

*-Warren Buffet*

COVID-19 is an infectious disease caused by a newly discovered coronavirus. The novel Corona virus officially known as SARS COV-2 or coronavirus disease 2019 (covid-19) was first reported in December 2019 as a cluster of acute respiratory illness in Wuhan China from where at spread rapidly to over 1989 countries. It was declared as global pandemic by WHO on 12th March to 2020.<sup>[1]</sup>

SARS COV-2 belongs to the larger family of ribonucleic acid (RNA) viruses leading to infection from the common cold to move serious disease such as middle cast respiratory syndrome (MERS-COV) and serve acute respiratory syndrome (SARS-COV). The covid-19 virus spread primarily through droplets of saliva or discharge from the nose when infected person cough or sneeze, so it's important to practice respiratory etiquette.<sup>[2]</sup>

As of February 2021, more than 10.9 million causes of covid-19 has been confirmed resulting in 1, 55, 000 death throughout India. Covid-19 affects different people in different way, tiredness and less common symptoms are body ache and pain, sore throat, diarrhea, conjunctivitis headache, loss of thirst or smell, rashes on skin or discoloration of finger or toes serious symptoms are difficulty in breathing and shortness of breath, chest pain or pressure loss of speech or movement.<sup>[3]</sup>

Nurse play a vital role in Heath Care System, especially nurses are on the frontline, battling against this pandemic

and providing services to patient, which is helpful to prevent and control COVID-19 pandemic. Everyone is great full to corona worriers especially frontline health care workers because they are working round the clock, staying away from home and family putting themselves at risk to fight against this pandemic. India has 1.7 nurse per 1000 population to fight, 43% less than the World Health Organization norm (3per 1000).<sup>[4]</sup>

Nursing students are the future health care providers and their quality training and teaching will definitely affect the outcomes. The objectives of this study are to assess the knowledge and attitude of student nurses about COVID-19 and its prevention in selected Nursing School of Delhi.

## 2. Material and Methods

The data was analyzed as per the objectives of the study in April 2021. A quantitative research approach with non-experimental descriptive research design was used to assess the knowledge and attitude of student nurses regarding COVID-19 in selected nursing school, New Delhi. Permission from Principal and ethical clearance from Organizational Review Board was taken before starting the study. Total of 136 nursing students of Apollo School of Nursing (First Year, Second Year and Third Year) was taken. Total enumerative sampling technique was used for data collection. The nursing students were given structured questionnaires and structured optionaire form to fill and give the responses. Before the questionnaire was given to the participant’s, written consent was taken, aims and objectives were explained to them. The Structured Questionnaire to assess the knowledge regarding COVID-19 comprised of three sections. Section 1 consists of Demography Proforma including 06 items to collect information on subject’s demography characteristics (age, education, awareness regarding COVID-19, source of information, infected with

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COVID-19 and vaccination status.) Section 2 consist of structured knowledge questionnaire including 15 multiple choice items to assess the knowledge regarding COVID-19. The maximum score was 1 for each correct answer and no score was awarded for incorrect answer or question not attempted. The knowledge level grading criteria considered appropriate is mentioned in Table 1. Section 3 consist of Structured Attitude Optionaire including 10 items to assess the attitude of nursing students regarding COVID-19. The grading criteria considered a is mentioned in Table 2.

**Table 1:** Knowledge level grading criteria

Knowledge Level	Knowledge Score
Good	11-15
Average	6-10
Poor	0-5

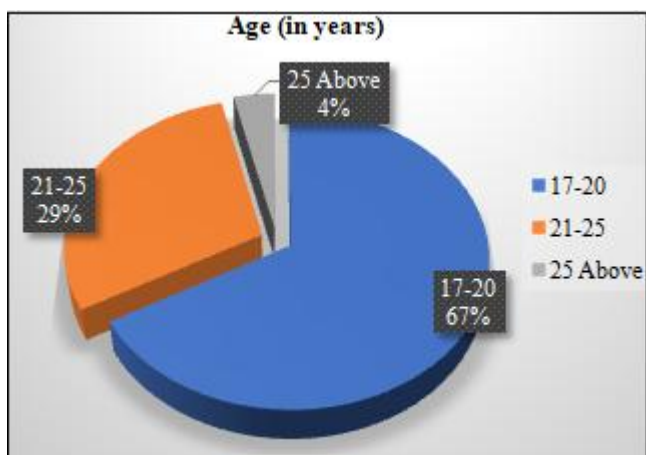
**Table 2:** Attitude level grading criteria

Attitude Level	Attitude Score
Negative	1-20
Positive	21-40

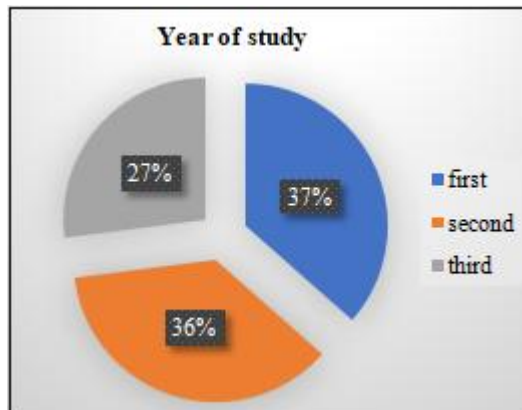
### 3. Results

Figure 1 to figure 5 depict the demographic variables of the student nurses.66.91% [96] of the student nurses were in the age group of 17-20 years, 29.41% [40] were in the age group of 21-23 and 3.68% [5] were in the age group of 23-25 years. With regard to the year of study of the student nurses 36.76 % [50] were in GNM first year, 36.73% [49] were in GNM second year and 27.21% [37] were from GNM third year excluding the group of third year who were conducting the research. All the students were aware about COVID-19.86.76% [37] of the student nurses have not suffered from COVID-19 and few [18; 13.24%] have suffered from COVID-19. Mostly student nurses [103; 75.74%] were vaccinated and very less [33; 24.26%] weren't immunized against COVID-19.

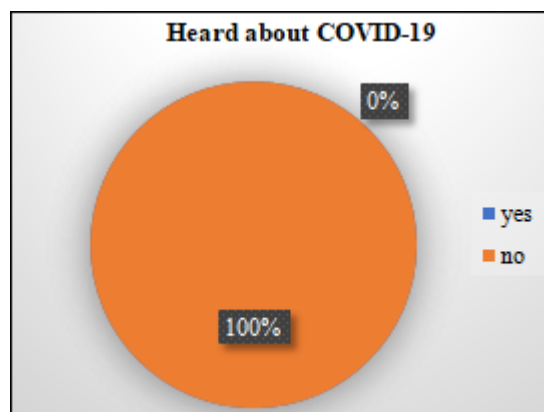
Table 3 depicts that 39.7% [54] were having good knowledge and 60.29% [82] are having average knowledge regarding COVID-19 and its prevention. Table 4 depicts that all the student nurses [100%] are having positive attitude towards COVID-19 and its prevention.



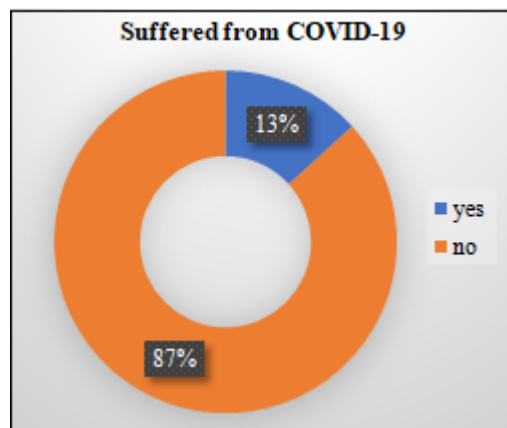
**Figure 1:** Percentage distribution of student nurses as pre their age (in years)



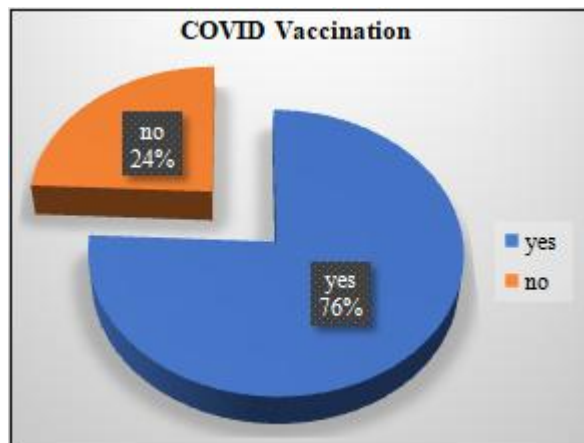
**Figure 2:** Percentage distribution of student nurses as pre their year of study.



**Figure 3:** Percentage distribution of student nurses who heard about COVID-19.



**Figure 4:** Percentage distribution of student nurses who have suffered from COVID-19



**Figure 5:** Percentage distribution of student nurses who had taken COVID-19.

**Table 3:** Showing the Frequency and Percentage distribution of the knowledge score of student nurses

Knowledge Level	Knowledge Score	Frequency (F)	Percentage (%)
Good	11-15	54	39.70
Average	6-10	82	60.29
Poor	1-5	0	0

**Table 4:** Showing the Frequency and Percentage distribution of the attitude score of student nurses.

Attitude Level	Attitude Score	Frequency	Percentage
Negative	1-20	0	0%
Positive	21-40	136	100%

#### 4. Discussion and Conclusion

The present study findings reveal that majority of the students were knowledgeable about COVID 19 and were having positive attitude. This finding was in agreement with the findings of the study conducted by Khadijah Angwai, 2020, assessed the knowledge, attitude and practice towards COVID 19 among the public in the kingdom of Saudi Arabia. The study result showed that majority of the study participant were knowledgeable about COVID 19. The mean COVID 19 knowledge score was 17.96 (SD=2.24), indicating high level of knowledge. The mean score for attitude was 28.23 (SD=2.76) indicating optimistic attitude. The mean score for practice was 4.34 (SD=0.87) indicating good practice.<sup>[5]</sup>

Another study which supports the findings of current study was done by Rahul B. Pandit, Jan 2021, a cross sectional web-based survey was adopted to assess the Knowledge, attitude and practices of nursing students towards COVID 19. The results showed that mean knowledge score of nursing students towards COVID 19 was 11.74. Mean attitude and practices score of nursing students towards COVID 19 was 3.22 and 6.82 respectively. There was no significant association found between the findings with selected demographic variables among nursing students. Finding of the study suggest that, nursing students demonstrated excellent knowledge, good practices and positive attitude towards COVID 19. Nursing students have adequate knowledge and practices of COVID-19 and will be a large reservoir for health care response when the need arises.<sup>[6]</sup>

#### 5. Recommendations

- 1) Ensuring a positive learning environment by giving a learning situation where student are sheltered from harm, harassment, ridicule and negative feelings.
- 2) Developing the policies of attendance that incorporate accepted procedures, conveying attendance approaches, assuring strategies are reliably authorized, and leading attendance strategy assessment.
- 3) Keeping exact records of attendance and computing absenteeism rates at frequent interval to recognize every individual's example of attendance.
- 4) Study of the relationship between teacher attendance, student attendance, accomplishment, and behavior.
- 5) Study of the relationship between academic building conditions and educational achievement.

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