Knowledge, Attitude and Practices of Nursing Students towards COVID - 19: A Cross Sectional Study

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ABSTRACT

Corona virus disease 2019 (COVID-19) is an ongoing pandemic, for which appropriate infection prevention and control measures need to be adopted. To facilitate the management of the pandemic, it is essential to understand the level of attention on COVID 19. Nurse's infection control measures are affected by their knowledge, attitude and practices towards COVID 19. The aim of this study was to assess the Knowledge, attitude and practices of nursing students towards COVID 19.

Methods: A cross sectional web based survey method was adopted for present study. The study comprised of 150 nursing students of selected nursing colleges. The survey questionnaire was used to collect the knowledge, attitude and practices towards COVID 19. Convenience sampling technique was used for data collection. Formal permission was obtained from concerned authority for data collection. The analysis of the data was done by using descriptive statistics.

Result: The results showed that, 54.67% of nursing students were in the age group of 20 - 25 years and majority 62% were females. 56.67% of nursing students were studying in Basic B. Sc. Nursing course. 81.33% of nursing students had previous knowledge regarding COVID 19. Most of the nursing students 79.33% gained information from social media and 15.33% gained from family and friends. 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.

Conclusion: The study showed that about 68.67% of nursing students have excellent knowledge regarding COVID 19. Finding of the study suggest that, nursing students demonstrated excellent knowledge, good practices and positive attitude towards COVID 19 and will be a large reservoir for health care response when the need arises.

Keywords: Knowledge, Practices, Attitude, COVID, Nursing students

INTRODUCTION

The novel Corona virus, officially known as SARS-CoV-2 or Corona virus 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. It was declared as a global pandemic by WHO on 12th March 2020.[1] COVID-19 is defined as an illness caused by a novel corona virus, now called Severe Acute Respiratory Syndrome Corona virus 2 (SARS-CoV-2). COVID-19 is an emerging respiratory infection that was first discovered in December 2019, in Wuhan city, Hubei Province, China.[2]

SARS-CoV-2 belongs to the larger family of ribonucleic acid (RNA) viruses, leading to infections, from the common cold, to more serious diseases, such as Middle East Respiratory Syndrome (MERS-CoV) and Severe Acute Respiratory

Syndrome (SARS-CoV). The main symptoms of COVID-19 have been identified as fever, dry cough, fatigue, myalgia, shortness of breath, and dyspnoea.[3]

COVID-19 is characterized by rapid transmission, and can occur by close contact with an infected person. The details on the disease are evolving. As such, this may not be the only way the transmission is occurring. COVID-19 has spread widely and rapidly, from Wuhan city, to other parts of the world, threatening the lives of many people.[4]

In India, by early April 2020, country officials had identified several areas as hotspots of COVID-19 infections in the country. India faces threat of a serious outbreak due to deep challenges in practicing social distancing and access to water and soap for hand washing, with densely populated urban areas and a highly mobile population in some states.[5]

In order to introduce and implement effective control measures, having knowledge about basic hygiene principles, modes of disease transmission, and measures in such an environment is, therefore, of vitally importance. To achieve an ultimate success against the ongoing encounter against COVID-19, people's commitment to these control measures is necessary. According to the KAP theory, this is generally affected by their knowledge, attitude, and practices (KAP) concerning COVID-19 (9, 10). Public education is considered as one of the most important measures that can help control the diseases, as has been the case regarding SARS.[6]

Online descriptive cross-sectional study conducted on to determine the knowledge, attitude, and practices of medical students in Uganda on the COVID-19 pandemic. Medical students in 9 of the 10 medical schools in Uganda were approached through convenience sampling. Result shows that 91% had good knowledge, 74% had a positive Attitude and 57% had good practices.[7]

OBJECTIVES

1. To assess the knowledge of nursing students towards COVID 19.
2. To assess the attitude of nursing students towards COVID 19.
3. To assess the practices of nursing students towards COVID 19.
4. To associate the findings with the selected demographic variables.

METHODS AND MATERIAL

A cross sectional web based survey method was designed for present study. The study was conducted in July – Aug 2020. The study comprised of 150 nursing students of selected nursing colleges. The survey questionnaire was used to collect the knowledge, attitude and practices towards COVID 19. It covered the demographic variables, knowledge questionnaire regarding COVID 19, attitude and practice checklist regarding COVID 19. Convenience sampling technique was used for data collection. The survey was conducted through a link shared on social networking sites. Google Form was created and participants were invited to complete and submit the form. 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 data collection. The analysis of the data was done by using descriptive statistics.

RESULT

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

The above Table 1 shows that distribution of nursing students according to age, gender, nursing course, previous knowledge and source of information. Majority 54.67% of the nursing students were in the age group of 20 - 25 years and majority 62% were females. 56.67% of nursing students were studying in Basic B.

Sc. Nursing course. 81.33% of nursing students had previous knowledge regarding COVID 19. Most of the nursing students 79.33% gained information from social media and 15.33% gained from family and friends.

Table 1: Percentage wise distribution of nursing students according to their demographic characteristics, n=150

Age in years	Frequency	Percentage
20 - 25 yrs	82	54.67
26 - 30 yrs	43	28.67
31 - 35 yrs	20	13.33
Above 35 years	05	3.33
Gender		
Male	57	38.00
Female	93	62.00
Nursing Course		
RGNM	17	11.33
Basic B. Sc. Nursing	85	56.67
Post Basic B. Sc. Nursing	35	23.33
M. Sc. Nursing	13	8.67
Previous knowledge		
Yes	122	81.33
No	28	18.67
Source of Information		
Social Media	119	79.33
Books and Journals	08	5.34
Family and Friends	23	15.33
Workshop, Seminar, Training Programme	00	00

Table 2: Level of knowledge score of nursing students towards COVID 19, n=150

Level of Knowledge Score	Frequency	Percentage
Poor	0	0
Average	23	15.33
Good	24	16.00
Excellent	103	68.67

The above table 2 shows that, 16% of the samples had good level of knowledge score and 68.67% had excellent level of knowledge score regarding COVID 19.

Table 3: Assessment of knowledge score of nursing students towards COVID 19, n=150

Category	Minimum score	Maximum score	Mean	Standard deviation	Mean percentage
Knowledge	10	13	11.74	1.05	90.30

The above table 3 indicates that most of the nursing students were having excellent knowledge towards COVID 19. Mean knowledge score of nursing students towards COVID 19 was 11.74.

Table 4: Assessment of attitude score of nursing students towards COVID 19, n=150

Category	Minimum score	Maximum score	Mean	Standard deviation	Mean percentage
Practices	1	4	3.22	0.78	80.50

The above table 4 depicts that the mean attitude score of nursing students towards COVID 19 was 3.22. The mean percentage score was 80.50. This indicates that most of the nursing students were having positive attitude towards COVID 19.

Table 5: Assessment of practice score of nursing students towards COVID 19, n=150

Category	Minimum score	Maximum score	Mean	Standard deviation	Mean percentage
Practices	5	7	6.82	0.51	97.42

The above table 5 depicts that the mean practice score of nursing students towards COVID 19 was 6.82. The mean percentage score was 97.42. This indicates that most of the nursing students were having good practices towards COVID 19.

DISCUSSION

The present study shows that, 54.67% of nursing students were in the age group of 20 - 25 years and majority 62% were females. 56.67% of nursing students were studying in Basic B. Sc. Nursing course. 81.33% of nursing students had previous knowledge regarding COVID 19.

Most of the nursing students 79.33% gained information from social media and 15.33% gained from family and friends. 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.

A cross sectional study conducted on to evaluate the knowledge, attitude and practices towards SARS-CoV-2 among the nursing students of University of Palermo during the rapid rise period of the COVID-19 pandemic. On-line questionnaires were used for the collection of the data by providing a survey in all nursing students. The questionnaire consisted of two parts: demographics and Knowledge, Attitude and Practices (KAP) survey. 525 students were interviewed and their mean age was 21.8. The overall score indicates good practices among the three courses of study (p=0.025). The Multivariable logistic regression showed that the dependent variable "Practice poor score" is statistically significant associated with these independent variables.[8]

CONCLUSION

The aim of this study was to assess the Knowledge, attitude and practices of nursing students towards COVID 19. 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.

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