



RELATIONSHIP BETWEEN KNOWLEDGE AND PRACTICES AGAINST COVID-19 AMONG THE STUDENT NURSES

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Abstract:

Knowledge and practices must be considered in the planning better educational interventions for the (COVID-19) pandemic and in raising awareness about the health risks caused by this disease. Nurses being the frontline health care workers, play a critical role in protecting the public during COVID-19 PANDEMIC. This study has been undertaken to investigate the relationship between knowledge and practices of against COVID-19. Descriptive survey design was adopted for this study. Purposive sampling was used and 50 B.Sc Nursing students were selected. Structured knowledge questionnaire and structured practice checklist was used. An information booklet on COVID-19 was distributed after the study so that they gain right knowledge and adapt right practices against the COVID-19 and educate the same to the public they encounter with.

Introduction:

The highly contagious viral respiratory illness, Coronavirus disease 2019 (COVID-19), had a disastrous effect on the world's demography. According to WHO, it has infected more than 10 million people and taken lives of approximately 501,000 worldwide as of July 2020. Thus, it has become apparent as the most resultant global health crisis after the period of the influenza pandemic of 1918. COVID-19 is caused by severe acute respiratory syndrome coronavirus that first appeared in Wuhan, China. In India, the first COVID-19 case was reported in Trissur, Kerala on 27th January¹. This virus is transmitted by droplets, direct contact, fecal-oral route. The symptoms ranged from flu-like to respiratory failure and death. It is emphasised that preventive measures play an important role in controlling the rapid spread of COVID-19. The WHO has issued specific preventive measures like wearing face masks, hand washing using alcohol-based sanitizers, social distancing, crowd avoidance, self-isolation, medical attention for a person with mild symptoms to minimise the spread of infection². The World Health Organisation is playing a significant role in creating awareness on COVID-19 among health care workers and others. In India, the MoHFW educates the public on Covid-19 by using different communication channels and mobile apps such as AarogyaSetu.

Significance of the study:

The unregulated social media and lack of crisis communication offered vast amount of misinformation and deception, which shaped the clouding understanding of COVID-19, panic, and confusion³. Poor knowledge, and practice patterns among the people might endanger them for possible high transmission. The rapid spread of COVID-19 pandemic has become a major cause of concern for the health care profession in all over the world. All health care professional must stay aware of the latest information on the COVID-19 outbreak. Nurses being front line health care workers, play a critical role in protecting the community during Covid -19 pandemic⁴. Student nurses as part of health team should know the Corona virus disease like other communicable diseases. Knowledge perception and preventive behaviour should be considered in the planning of effective educational interventions for the COVID-19 pandemic and in increasing awareness about the health risks brought about by this disease. In order to prevent and reduce the occurrence of new cases it is important to assess the existing knowledge and practice against COVID-19. The present study addresses the need for assessment of relationship between knowledge and practice against COVID-19 among the student nurses.

Keywords: COVID-19, knowledge, practice, relationship, student nurses, nursing college

Statement of the problem:

A study to assess the relationship between the knowledge and practices regarding COVID-19 among student nurses in a selected nursing college in a view to develop information booklet.

➤ **Objectives:**

1. To determine the knowledge regarding COVID-19 among student nurses.
2. To assess the practices regarding COVID-19 among student nurses.
3. To find the relationship between knowledge and practices regarding COVID-19 among student nurses.
4. To prepare, validate and distribute an information booklet on COVID-19.

Methodology:➤ **Research approach:**

A quantitative research approach was adopted

➤ **Research design:**

Non-experimental descriptive survey design was adopted

➤ **Population:**

B.Sc. Nursing students from a selected nursing college, Mangalore.

Sampling procedure:➤ **Sample and sample size:**

The samples consisted of 50 B.Sc. nursing students studying in first year B.Sc nursing.

➤ **Sampling Technique:**

Purposive sampling technique was used

➤ **Development and validity of the tool:**

A self-structured knowledge questionnaire and self- structured practice checklist was prepared after thorough review of literature related to COVID-10 and validated with the help of experts.

➤ **Description of the tool**

The tool consists of 3 parts: first part is socio-demographic data, second part is self – structured knowledge questionnaire to assess the knowledge and self-structured practice checklist to assess the knowledge and practices on COVID 19 among student nurses.

➤ **Socio- Demographic proforma:**

It consists of items such as age, religion, residence, type of family, previous knowledge on COVID 19.

➤ **Knowledge questionnaire**

It consists of 30 items related to the knowledge on COVID 19 among student nurses. The respondents are asked to respond “YES”, “NO” or “DON’T KNOW”. Each right response carries ‘1’ mark and ‘0’ for wrong answers. Minimum and maximum scores that can be obtained are ‘0’ and ‘30’ respectively. The overall scoring can be interpreted as 3 broad ranges 21-30 [good], 11-20[average] and 0-10 [poor].

➤ **Practice checklist**

It consists of 30 items related to the practices on COVID 19 among student nurses. The respondents are asked to respond “ALWAYS”, “SOMETIMES”, “NEVER”. Each right response carries ‘3’, ‘2’ and ‘0’ for wrong answers. The minimum and maximum scores that can be obtained are ‘0’ and ‘30’. The overall scoring can be interpreted as 3 broad ranges 61-90[good], 31-60 [average], 1-30[poor].

➤ **Data collection technique:**

After getting the permission from the head of the institution, samples were selected based on inclusion criteria. The researcher obtained informed consent from the samples. The research tool was administered to the samples. The participants took 25 minutes to fill it. Later, information booklet on COVID-19 was disseminated to the samples.

➤ **Ethical considerations:**

- A formal permission was obtained from the head of the institution where the study was conducted
- Informed consent was obtained from the samples
- Privacy and confidentiality of the setting, samples and their responses.

➤ **Data analysis:**

The collected data were analysed through descriptive and inferential statistics.

Results➤ **Section 1: Distribution of the samples according to socio-demographic variables**

About half of the student nurses aged 18 and 34% aged 19. Majority of the student nurses 62% were Christians. Majority of student nurses (98%) belongs to rural community. All student nurses (100%) had previous knowledge regarding COVID-19. Majority of the student nurses 98% were not infected with COVID-19.

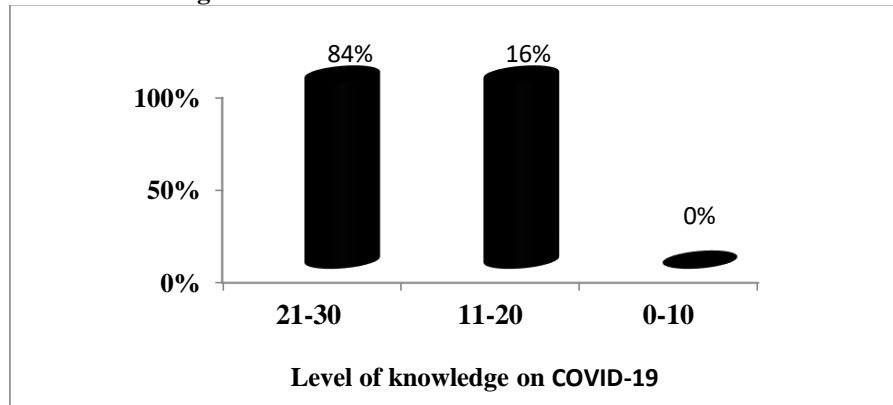
➤ **Section 2: Assessment of the knowledge on COVID-19**

Figure 1: Cylindrical diagram showing distribution of student nurses according to knowledge on COVID-19

Data presented in figure 1 show that majority (84%) had good knowledge, (16%) of students had average knowledge and none of them had poor knowledge on COVID-19

➤ **Section 3-Assessment of the practice against COVID-19**

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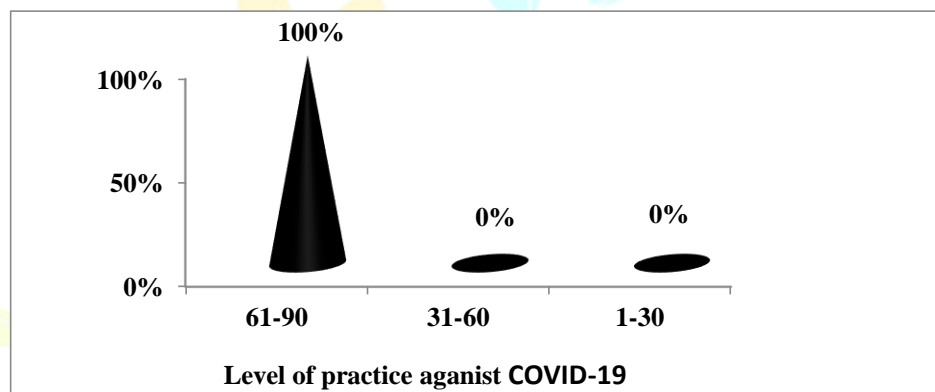


Figure 2: Cone diagram showing distribution of student nurses according to practice against COVID-19

Data in the figure 2 illustrates that level of practice of student nurses against COVID-19. All of them had good practice (100%) against COVID-19.

➤ **Section 4: Relationship between the knowledge and practice against COVID-19**

The Karl Pearson's coefficient of correlation (r) value was calculated to analyse the relationship between knowledge and practices of student nurses against COVID-19.

N=50

Sl. No	Score	Mean	SD	Correlation Co-efficient	Significance
1	Knowledge on COVID-19	22.7	2.76	0.33	Positive correlation
2	Practices against COVID-19	74.16	5.04		

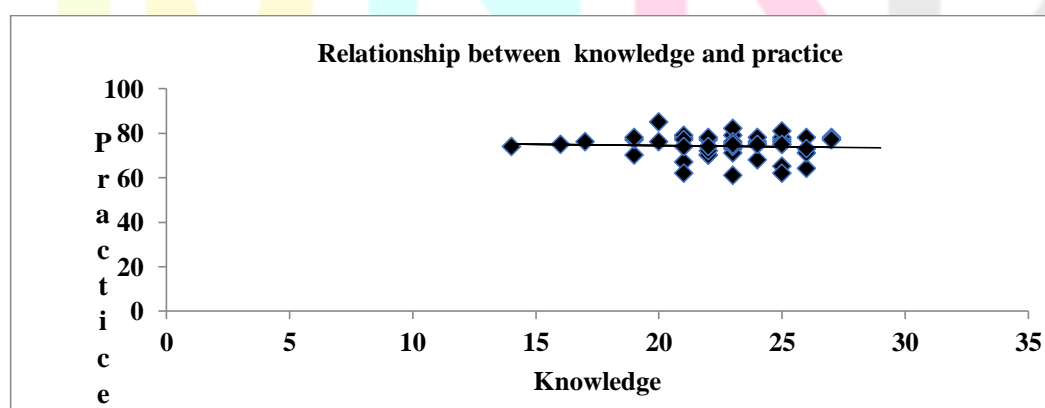


Figure 3: Scatter diagram showing relationship between the knowledge and practice against COVID-19

The figure 3 depicts that there was a positive relationship between the knowledge and practice against COVID-19 among student nurses. The computed 'r' value (0.33).

Discussion

➤ Assessment of the level of practice against COVID-19

In the current study, assessment of level of knowledge of student nurses revealed that majority 84% had good knowledge, whereas 16% of the students had average knowledge on COVID-19. The result shows that the overall level of mean percentage of knowledge of student nurses on COVID-19 was 75.6% (Mean=22.7, SD=2.76)

The study findings were supported by similar study where majority had good knowledge on COVID-19^{5, 6, 7, 8} and contradicted by other study findings which had moderate knowledge level⁹.

➤ Assessment of the level of practice against COVID-19

In the present study, assessment of the level of practice against COVID-19 revealed that all of them had good practices (100%) against COVID-19. The result shows that the overall level of mean percentage of practice of student nurses against COVID-19 was 82.4% (Mean=74.16, SD=5.04)

The study findings were supported by similar study where majority had good practice level on COVID-19^{7, 9, 10, 11, 12} and contradicted by other study findings which had inadequate practice level⁸.

➤ Relationship between the knowledge and practice against COVID-19

In the present study, relationship between the knowledge and practice against COVID-19 shows that there was significant relationship between the knowledge and practice against COVID-19. Karl Pearson's coefficient of correlation was found to be 0.33. So, the null hypothesis was rejected. The study result revealed that there was positive and significant correlation between knowledge and practice against COVID-19 among student nurses.

The study findings were supported by other study findings where there was a positive correlation between knowledge and practice scores^{11, 12, 13} and was contradicted by a study which had weak relationship between knowledge and practice scores¹⁰.

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