



A descriptive study to assess the level of knowledge and awareness of COVID-19 pandemic among nursing students of Desh Bhagat institution of nursing of district Fatehgarh Sahib, Punjab

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Abstract

According to the World Health Organization has declared the corona virus disease 2019 a pandemic. A Global coordinated effort is needed to stop the further spread of the virus. A pandemic is defined as “occurring over a wide geographic area and affecting an exceptionally high proportion of the population. The last pandemic reported in the world was the H1N1 flu pandemic in 2009.

Corona viruses are enveloped viruses containing a single stranded, positive sense RNA genome of approximately 29,000 nucleotides. A distinctive club shaped projection is present over the virus surface which gives the appearance of a crown or corona from which its name was derived. Four virus genera (Alpha, Beta, Gamma and Delta) have been identify so far, with human infection only seen in Alpha Guery et al., 2013. The virus contains five structural proteins Spkie or S-protein, hem agglutinin esterase, matrix, envelop and nucleotide. Spike protein is a glycoprotein envelops which helps in the attachment of the cells and cell membrane.

Understanding the transmission of disease is incompletely understood. Initial investigations in Wuhan at the beginning of the outbreak have identified the source of the infection from a wet market. The virus is transmitted from person to person in the form of fomites, when the person coughs and sneezes. The infection also spreads from when an individual comes in direct contact with the infected surface and the touches his or her nose, eye or mouth. Droplet transmission usually do not travel more than 6 feet and do not linger in air for a longer period (Schwartz and Graham, 2020)

Aim of study: The aim of study is to aware the nursing students regarding transmission, prevention and providing care of covid -19.

Keywords: knowledge, prevention, individual

Introduction

Nursing students are the future of health care provider and quality training will definitely affect the outcomes. This was based study on question that prepared from current guidelines and information provided by Indian council of Medical Research and world organization.

In summary, COVID19 has reached the pandemic state and has become a topic of discussion in media outlets and among general public, especially health care workers and patients. For this reason we have investigated health care workers knowledge towards the present emerging health crisis. Today everyone is grateful to all corona warriors, specially nurses because they away from family, putting them self at risk, the fight against this pandemic. We have seen unprecedented of overwork by nurses directly involved in the response to the COVID-19 pandemic. India has 17 nurses per 1000 population 43% less than the world health organization norms (3 per 1000). This includes nurses, midwives, woman health workers, student nurses.

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Objectives

1. To assess the level of knowledge and awareness of COVID-19 pandemic among the nursing students.
2. To find out the association between knowledge and awareness with their selected demographic variables

Assumptions

The B.sc students have the some knowledge of the COVID19 pandemic during the time of study.

Material and Method

In present study an experimental approach was adopted for the study to assess the level of knowledge and awareness of COVID19 pandemic among the nursing students. A checklist on COVID19 was prepared to assess the level of knowledge and awareness of covid19 pandemic among the nursing students, the review of literature from books, internet, journals and expert is opinion and investigators own experience provided the basis for construction of the tool. Analysis and interpretation of data was done according to objectives of the study.

Ethical Cinsideration

Written permission was taken from research committee of Desh Bhagat Institute of Nursing, Mandi Gobindgarh, Punjab was taken before starting the study. Written permission was sought from the concerned authority. Anonymity and confidentiality of the subjects were maintained and the samples for the research study were made clear that data will be used for the research purpose only.

Results

Table No 1: Percentage and frequency Distribution of Demographic variables. N=60

Variables	Opts	Percentage (%)	Frequency(f)
AGE	I)	100.0%	60
	II)	0.0%	0
	III)	0.0%	0
Gender	Male	46.7%	28
	Female	53.3%	32
	Transgender	0.0%	0
Education	Diploma	100.0%	60
	Undergraduate	0.0%	0
	Postgraduate	0.0%	0
	Others	0.0%	0
Area of Residence	Urban	61.7%	37
	Rural	38.3%	23
Religion	Sikh	58.3%	35
	Muslim	23.3%	14
	Hindu	15.0%	9
	Christian	0.0%	0
	Others	3.3%	2
Sources of Information	Mass media	85.0%	51
	Family members	6.7%	4
	Siblings	1.7%	1
	Neighbours	6.7%	4
Income	5000-10000	50.0%	30
	10100-20000	23.3%	14
	30000-40000	11.7%	7
	Above 40000	15.0%	9

Table1 showing percentage and frequency of socio-demographic profile of the nursing students

It was evident that majority of respondent (100%) was from the age group of 18-23. (figure1) In relation to gender (figure2) of the nursing students, the female (53.3%) nursing students was maximum as compare to the males respondents (46.7%) Furthermore (100%) of nursing students were graduate (figure3)as compare to the postgraduate and diploma. In relation of area of residence (figure4) the (61.7%) nursing students were residing an urban areas, followed by (38.3%) were from rural areas. Moreover (58.3%) nursing students were (figure5) sikh as followed by (23.3%) of muslim and (15.0%) were Christian. (3.3%) was included in other religion In the relation of (figure6) sources of information (85.0%) was from mass media, whereas (6.7%) were from family members. Siblings gave (1.7%) and neighbors were (6.7%). The majority (50.0%) of family monthly income (figure7) was between5000-10000, whereas (23.3%) 10100-20000. However, (11.7%) was in the income of 30000-40000 and remaining (15.0%) included into above 40000

Table 2: Frequency and percentage distribution of knowledge score of COVID19 pandemic among nursing students.

Criteria measure of knowledge Score		
Level of Scores N= 60	Percentage	Frequency
EXTREME. (16-20)	0.0%	0
GOOD. (11-15)	81.7%	49
AVERAGE. (6-10)	18.3%	11
POOR. (0-5)	0.0%	0

Maximum =40 Minimum=0

Table 2- is illustrating that the majority of (81.7%) of nursing students had good knowledge and awareness, followed by (18.3%) have average knowledge and awareness.

Hence, it was evident that majority of nursing students had good knowledge and awareness of COVID19 pandemic needs to be strengthened.

Table 3: Showing that mean had depicted the 12.05 of knowledge scores whereas, median had 12. Maximum score of knowledge is 15 and minimum is 7. N=60

Descriptive Statistics	Mean	Median	S.D.	Maximum	Minimum	Range	Mean %
KNOWLEDGE Score	12.05	12	1.81	15	7	8	60.25

Maximum=20 Minimum=0

Table 4: Association between the knowledge and awareness with their selected demographic areas.

Demographic Data			Levels of Knowledge (N=60)				Association with Knowledge Score			
Variables	Opts	Extreme	Good	Average	Poor	Chi Test	P Value	df	Table Value	Result
Age	I)			49		11		NA		
	II)			0		0		0		
	III)			0		0		0		
Gender	Male	21	7	1.558	0.212	1	3.841	Not Significant		
	Female			28		4		0		
	Transgender			0		0		0		
Education	Diploma			49		11		NA		
	Undergraduate			0		0		0		
	Postgraduate			0		0		0		
	Others			0		0		0		
Area of Residence	Urban	32	5	1.498	0.221	1	3.841	Not Significant		
	Rural			17		6		0		
Religion	Sikh	27	8	3.037	0.386	3	7.815	Not Significant		
	Muslim			11		3		0		
	Hindu			9		0		0		
	Christian			0		0		0		
	Others			2		0		0		
Sources of Information	Mass media	42	9	3.818	0.282	3	7.815	Not Significant		
	Family members			2		2		0		
	Siblings			1		0		0		
	Neighbours			4		0		0		
Income	5000-10000	23	7	1.044	0.791	3	7.815	Not Significant		
	10100-20000			12		2		0		
	30000-40000			6		1		0		
	Above 40000			8		1		0		

Table 4 shows that the association between the level of score and socio demographic variable. Based on the objectives used to Chi-square test used to associate the level of knowledge and selected demographic variables.

There is no significance association between the level of scores and other demographic variables. The calculated chi-square values were less than the table value at the 0.05 level.

Summary

The chapter deals with the research methodology that includes research approach, research design, setting of the study, target population, sample and sampling technique, criteria for selection of sample, development and description of tools, pilot study, validity and reliability of tool, data collection procedure and plan of data analysis.

Discussion

In this study the level of knowledge and awareness of COVID19 pandemic among the nursing students. In the split out test (81.7%) of nursing students had good level of knowledge and awareness, (18.3%) had Data was collected by using Checklist. Analysis and interpretation was done according to the objectives of the study. Descriptive and inferential statistics were used for the analysis and interpretation. The table and bar diagram were used to present the data. The analyzed data was discussed with previous studies. Average level of knowledge and awareness.

Conclusion

The knowledge and awareness level of the nursing students was low and good after administering the education. The difference between the knowledge and awareness overall score 12.05. The value was significant at $p < 0.05$. Level the association between knowledge and awareness with selected demographic variables. The result revealed that there was a no significant association found in age, gender, education, area of residence, family monthly income and sources of information

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