



ISSN: 0975-833X

Available online at <http://www.journalcra.com>

INTERNATIONAL JOURNAL
OF CURRENT RESEARCH

International Journal of Current Research
Vol. 12, Issue, 09, pp.13612-13616, September, 2020

DOI: <https://doi.org/10.24941/ijcr.39691.09.2020>

RESEARCH ARTICLE

"A STUDY TO ASSESS THE BASIC KNOWLEDGE ABOUT CORONA VIRUS (COVID-19) AMONG UNDERGRADUATE NURSING STUDENTS IN SELECTED EDUCATIONAL INSTITUTION IN INDIA."

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ARTICLE INFO

Article History:

Received 15th June, 2020
Received in revised form
27th July, 2020
Accepted 04th August, 2020
Published online 30th September, 2020

Key Words:

Knowledge, Corona Virus (COVID-19),
Undergraduate
Nursing Students.

ABSTRACT

Introduction: Corona virus disease (COVID-19) is an infectious disease caused by a newly discovered corona virus. Most people infected with the COVID-19 virus will experience mild to moderate respiratory illness and recover without requiring special treatment. Older people, and those with underlying medical problems like cardiovascular disease, diabetes, chronic respiratory disease, and cancer are more likely to develop serious illness. The best way to prevent and slow down transmission is be well informed about the COVID-19 virus, the disease it causes and how it spreads. The today's the Nursing students helping people and family members for corona related awareness in family and society. **Materials and Methods:** In this study pre-experimental descriptive design purposive sampling techniques for collecting data. In this study 100 Nursing students participated to survey of knowledge related to corona pandemic disorder. In that 82% Basic B sc Nursing and 18% General Nursing Midwifery students. The Data wear analysis Chi-square test used for the association of knowledge score and demographic variable. The association result shows that no any significant difference in knowledge score. Result shows that 72% participants have moderate level, 18% Adequate level of Knowledge related of COVID-19. **Conclusion:** The majority of students have Moderate level of knowledge related to corona pandemic disease. Students have better knowledge about coronapandemic disorder.

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Citation: Vikrant Kulthe. 2020. "A study to assess the basic knowledge about corona virus (covid-19) among undergraduate nursing students in selected educational institution in india.", *International Journal of Current Research*, 12, (09), 13612-13616.

INTRODUCTION

Protect yourself and others from infection by washing your hands or using an alcohol based rub frequently and not touching your face Corona viruses (CoV) are a large family of viruses that cause illness ranging from the common cold to more severe diseases such as Middle East Respiratory Syndrome (MERS-CoV) and Severe Acute Respiratory Syndrome (SARS-CoV). A novel corona virus (nCoV) is a new strain that has not been previously identified in humans. Corona viruses are zoonotic, meaning they are transmitted between animals and people. Detailed investigations found that SARS-CoV was transmitted from civet cats to humans and MERS-CoV from dromedary camels to humans. Several known coronaviruses are circulating in animals that have not yet infected humans. Common signs of infection include respiratory symptoms, fever, cough, shortness of breath and breathing difficulties. In more severe cases, infection can cause pneumonia, severe acute respiratory syndrome, kidney failure and even death.

Standard recommendations to prevent infection spread include regular hand washing, covering mouth and nose when coughing and sneezing, thoroughly cooking meat and eggs. Avoid close contact with anyone showing symptoms of respiratory illness such as coughing and sneezing. The today's the Nursing students helping people and family members for corona related awareness in family and society.

Objective: 1. Assess the basic knowledge related COVID-19 of undergraduate health sciences students of selected educational institutions. 2. To find out association between knowledge related to COVID-19 and selected demographic variable of selected educational institutions.

MATERIALS AND METHODS

An evaluative research approach was adopted to test the main objective of assess the basic knowledge related to COVID-19 of undergraduate health sciences students of selected educational institutions. In this study assess the basic knowledge related to COVID-19 in Nursing student by making same tool for survey.

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Today the COVID-19 so nobody can directly participate in study they all are solve the tool with the help of Google form. In this study 100 participants form College of Nursing in between 82% from Basic B Sc Nursing, 18% from General Nursing Midwifery. The study was conducted in selected Institute of Nursing Education. In this study both courses are involving and 100 students are participated. Why the nursing students? Because of today the nursing students knows the actual transmission, diseases, spread, prevention in basic subjects so its easily understand the prevention, control, spread, diagnosis, from corona virus. The students understand the tool and they are using the knowledge to control corona in society, family, and colugos. As per environment we are selected the sample by "Google Form" those who are interested they solve the tool and then we are sending the response sheet with explanation to improve the knowledge of student. After explaining the purpose of the study, written consent was obtained from the subjects. Based on the baseline data, subjects who met inclusion criteria were included in the study. Baseline Performa consist of thirteen in that Age, Gender, Religion, Native residential, Academic Performance in last year, types of family, fathers and Mothers education, Occupation, monthly income, Attended any seminar, and any habbitsetc.

Knowledge Questioner: A blueprint was prepared prior to the construction of knowledge questioner, which showed the distribution of items according to the content area and the percentage distribution of each item for each content area. A knowledge questioner was prepared by the investigator. It consists of 15 items covered Definition, Sign/symptoms, spread, Treatments, Prevention, Nursing application. Grading of the scores is as follows: Adequate knowledge: 11-15, Moderate knowledge: 06-10, Inadequate knowledge: 01-05.

STATISTICAL ANALYSIS: The data on sample characteristics were analysed using descriptive statistic. The baseline characteristics are Age, Gender, Religion, Native residential, Academic Performance in last year, types of family, fathers and Mothers education, Occupation, monthly income, Attended any seminar, and any habits. Table no 01 shown that total 100 students are participated of this study by its own interest. In that 82% participants are belongs to Basic B Sc Nursing students and 18% students from General Nursing Midwifery (G.N.M) course. In both group female students is more then male that mean 47% of female and 53% of Females, but as per distributions of seats in Nursing the females greater than males. Majority of Hindu people in study is 85% and Christian 4% and Buddhism 11% both the GNM and Basic B Sc Nursing. The 65% students from Rural area and 20% students from Urban, 15% students from Semi-Urban or Under-developmental area. As per Academic Performance in last year is 54% in first class, 22% in second class, in ATKT 14% and Distinction students in 10% students. The 58% students belong to Nuclear family, 39% Joints family and 3% Extended family. As per participants father's education 30% are Graduate and 30% is illiterate parents, 33% Higher secondary and 7% Post graduate fathers of students. According to survey the student's mothers 50% Higher secondary and Illiterate Mothers is 33%, total graduate mothers is 15% and 2% post graduate. As per occupations 41% occupations is private sectors, 39% is Own business and 20% is Government sectors. In Monthly income of 51% above 10,000 monthly and 27% 5000 to 1000 rupees monthly and 22% people have 2000 to 5000 rupees monthly

income. 50% people attended any seminar, conferences, talks, work shop on corona infection and its prevention and 50% participants is not attended any activity. participants leisure time activity is watching TV 16%, 22% students visiting to social networking site and 40% Other types of activities. As per the survey no any participants have a bad Habits. After doing all the Item analysis come to a conclusion that Item Definition in that maximum possible score out of 100 is 3.00, mean is 2.03, SD is 0.69, Median is 2.00 and mean percentage of Definition is 67.67%. The sign and symptoms it includes 3 items and maximum possible score is 2.00, Means is 0.94, SD is 0.72, median is 1.00, means percentages is 47.00%. In that Infection spread item and maximum possible score is 3.00, Means is 2.29, SD is 0.80, median is 2.00, means percentages is 76.33%. the treatment related knowledge of corona infection out of 100 participants max possible score is 1.00, mean is 0.48, SD is 0.48, the median is 1.00 and the percentage of mean is 66.00%. as that's the prevention is 3% maximum score, mean is 1.97, SD is 0.70, median is 2.00, Mean percentage is 65.67%. The Nursing application 3 is possible score, mean 3.00, SD is 0.71, Median is 0.00, Mean percentages is 19.33%. Over all the Mean Percentage 56.47%.

Above the Bar diagram shows that that three categories of knowledge score in that Adequate, Inadequate, and Moderate. According to bar diagram 18% participants have Adequate knowledge, 72% participants have Moderate knowledge and 10% participants have Inadequate knowledge related to corona virus, transmission, treatments, prevention and soared in community. Above the Bar diagram shows that that three categories of knowledge score in that Adequate, Inadequate, and Moderate. According to bar diagram 18% participants have Adequate knowledge, 72% participants have Moderate knowledge and 10% participants have Inadequate knowledge related to corona virus, transmission, treatments, prevention and soared in community.

Find out the association of demographic variable with knowledge score: Since all the p-values are large (greater than 0.05), none of the demographic variables was found to have significant association with the Knowledge score related to corona virus and its Infection.

DISCUSSION

Result show's that total 100 students are participated of this study by its own interest. In that 82% participants are belongs to Basic B Sc Nursing students and 18% students from General Nursing Midwifery (G.N.M) course. Result show's that both group female students is more than male that mean 47% of male and 53% of Females, but as per distributions of seats in Nursing the females greater than males. As per Results majority of Hindu people in study is 85% and Christian 4% and Buddhism 11% both the GNM and Basic B Sc Nursing. The 65% students from Rural area and 20% students from Urban, 15% students from Semi-Urban or Under-developmental area. As per Academic Performance in last year is 54% in first class, 22% in second class, in ATKT 14% and Distinction students in 10% students. The 58% students belong to Nuclear family, 39% Joints family and 3% Extended family. As per participants father's education 30% are Graduate and 30% is illiterate

Table no 01. Frequency and Percentage Distribution of the Baseline Performa

		N=100	
		Frequency	Percentage %
Which Educational year?	B Sc Nursing	82	82.0%
	GNM Nursing	18	18.0%
	Total	100	100.0%
Gender	Female	53	53.0%
	Male	47	47.0%
	Total	100	100.0%
Religion	Christian	4	4.0%
	Hindu	85	85.0%
	Buddhist	11	11.0%
Native Residential Area	Total	100	100.0%
	Rural	65	65.0%
	Semi Urban	15	15.0%
Academic Performance in last year	Urban	20	20.0%
	Total	100	100.0%
	ATKT	14	14.0%
Type of Family	First class	54	54.0%
	first class Distinction	10	10.0%
	Second class	22	22.0%
Father's education:	Total	100	100.0%
	Extended	3	3.0%
	Joint	39	39.0%
Mother's education:	Nuclear	58	58.0%
	Total	100	100.0%
	Graduate	30	30.0%
Father's / Guardian's occupation	Higher secondary	33	33.0%
	Illiterate	30	30.0%
	Post Graduate	7	7.0%
Monthly Income	Total	100	100.0%
	Graduate	15	15.0%
	Higher secondary	50	50.0%
Have you attended any seminar, conferences, talks, work shop on corona infection and its prevention?	Illiterate	33	33.0%
	Post Graduate	2	2.0%
	Total	100	100.0%
Your leisure time activities	Private sector	41	41.0%
	Government Sector	20	20.0%
	Own Business	39	39.0%
Do you have any habit	Total	100	100.0%
	10.1 Rs.2,000 to 5,000	22	22.0%
	10.2 Rs.5,001 to 10,000	27	27.0%
Total	10.3 Above 10,000	51	51.0%
	Total	100	100.0%
	No	50	50.0%
Total	Yes	50	50.0%
	Total	100	100.0%
	playing game	22	22.0%
Total	Visit to social networking site	22	22.0%
	watching TV	16	16.0%
	Other	40	40.0%
Total	Total	100	100.0%
	Other	100	100.0%
	Total	100	100.0%

Distribution of Item category and Mean, SD, Median, mean percentage:

N= 100					
Item section	Max. possible score	Mean	Std. Deviation	Median	Mean (%)
Definition	3.00	2.03	0.69	2.00	67.67
signs and symptoms	2.00	0.94	0.72	1.00	47.00
Sread	3.00	2.29	0.80	2.00	76.33
Treatment	1.00	0.66	0.48	1.00	66.00
Prevention	3.00	1.97	0.70	2.00	65.67
Nursing application	3.00	0.58	0.71	0.00	19.33
Over all know	15.00	8.47	2.16	9.00	56.47

parents, 33% Higher secondary and 7% Post graduate fathers of students. According to survey the student's mothers 50% Higher secondary and Illiterate Mothers is 33%, total graduate mothers is 15% and 2% post graduate. Result show's that as per occupations 41% occupations is private sectors, 39% is Own business and 20% is Government sectors. In Monthly income of 51% above 10,000 monthly and 27% 5000 to 1000 rupees monthly and 22% people have 2000 to 5000 rupees monthly income.

50% people attended any seminar, conferences, talks, work shop on corona infection and its prevention and 50% participants is not attended any activity. participants leisure time activity is watching TV 16%, 22% students visiting to social networking site and 40% Other types of activities. As per the survey no any participants have a bad Habits.

Item Analysis: As per the findings Overall the tool consists of 15 Items related to Corona virus Definition, sign and

Table No 03. Shows that association between the knowledge score with the selected demographic variables

		Over all know				p Value
		<Median(9)		≥Median(9)		
		Count	Row N %	Count	Row N %	
Which Educational year?	B Sc Nursing	35	42.70%	47	57.30%	0.007
	GNM Nursing	14	77.80%	4	22.20%	
Gender	Female	28	52.80%	25	47.20%	0.416
	Male	21	44.70%	26	55.30%	
Religion	Hindu	42	49.40%	43	50.60%	0.845
	Others	7	46.70%	8	53.30%	
Native Residential Area	Rural	30	46.20%	35	53.80%	0.623
	Semi Urban	9	60.00%	6	40.00%	
	Urban	10	50.00%	10	50.00%	
Academic Performance in last year	ATKT	5	35.70%	9	64.30%	0.224
	First class +Distinction	30	46.90%	34	53.10%	
	Second class	14	63.60%	8	36.40%	
Type of Family	Joint/extended	19	45.20%	23	54.80%	0.522
	Nuclear	30	51.70%	28	48.30%	
Father's education:	Graduate/Post graduates	16	43.20%	21	56.80%	0.065
	Higher secondary	13	39.40%	20	60.60%	
	Illiterate	20	66.70%	10	33.30%	
Mother's education:	Graduate/Post graduates	5	29.40%	12	70.60%	0.202
	Higher secondary	26	52.00%	24	48.00%	
	Illiterate	18	54.50%	15	45.50%	
Father's / Guardian's occupation	Private sector	20	48.80%	21	51.20%	0.108
	Government Sector	6	30.00%	14	70.00%	
	Own Business	23	59.00%	16	41.00%	
0 Monthly Income	10.1 Rs. 2,000 to 5,000	16	72.70%	6	27.30%	0.031
	10.2 Rs. 5,001 to 10,000	13	48.10%	14	51.90%	
	10.3 Above 10,000	20	39.20%	31	60.80%	
Have you attended any seminar, conferences, talks, work shop on corona infection and its prevention?	No	27	54.00%	23	46.00%	0.317
	Yes	22	44.00%	28	56.00%	
Your leisure time activities	playing game	10	45.50%	12	54.50%	0.411
	Visit to social networking site	8	36.40%	14	63.60%	
	watching TV	10	62.50%	6	37.50%	
	other	21	52.50%	19	47.50%	
Do you have any habit	other	49	49.00%	51	51.00%	

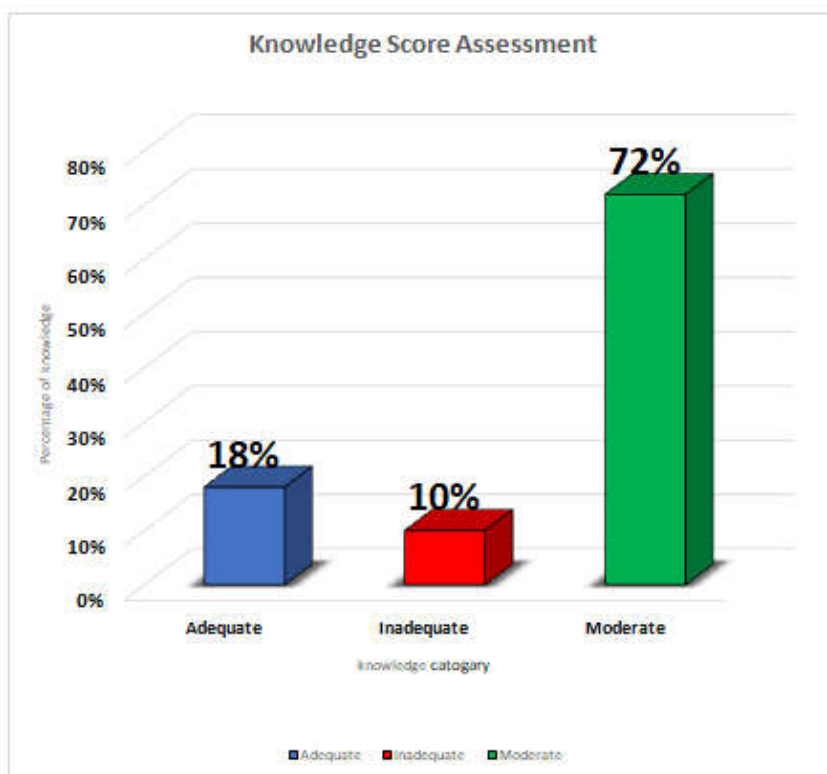


Fig 01. Distribution of knowledge score of the participants.

symptoms, spread, treatment and preventions in that the 04 items have greater positive response from the participants and that's why the tool is effective to collecting the data of the related subject.

Assessment of Knowledge of Nursing students related to corona virus: As per Results shows that that three categories of knowledge score in that Adequate, Inadequate, and Moderate. According to bar diagram 18% participants have Adequate knowledge, 72% participants have Moderate knowledge and 10% participants have Inadequate knowledge related to corona virus, transmission, treatments, prevention and soared in community.

Association between the knowledge score with the selected demographic variables: Chi-square test used for the association result shows that, all the p-values are large (greater than 0.05), none of the demographic variables was found to have significant association with the knowledge score related to corona virus.

Conclusion

I conclude that the knowledge related to corona virus in Nursing students is greater in moderate category and adequate also 18% so its clear that the knowledge level is good in the Nursing students. As per the associations with the demographic and knowledge score so it's not significant findings from the study.

Summary

The chapter deals with analysis and interpretation of data collected to assess the knowledge score related to Corona virus in the Nursing students by using self-made knowledge questioner in 15 relevant items. In this study total number of participants is 100 all from Nursing College and school. It's a descriptive type of design research study. As per the findings of research is 18% participants have Adequate knowledge, 72% participants have Moderate knowledge and 10% participants have Inadequate knowledge related to corona virus, transmission, treatments, prevention and soared in community. after the survey all participants received the correct questionnaires' for its email id to improve knowledge and awareness in Nursing students related to corona virus, its transmission, causative organism, spread, treatments and prevention.

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