International Journal of Advance Research in Community Health Nursing

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A study to assess the level of knowledge regarding management of COVID-19 in children among nursing students of selected college of nursing

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DOI: https://doi.org/10.33545/26641658.2023.v5.i2a.148

Abstract
Introduction: Children are capable of getting the virus that causes COVID-19, they don't become sick as often as adults. Most children have mild symptoms or no symptoms. However, some children become severely ill. They might need to be hospitalized, treated in the intensive care unit.
Methodology: A descriptive study was done among 110 subjects by convenience sampling, using self-structured knowledge questionnaire on management of COVID-19 in children.
Result: As per the findings majority (57.27%) had average level of knowledge, followed by 32.72% had high level and 10% had low level and there was significant association between previous year academic performance, educational status of the mother, area of residence and type of family.
Conclusion: Hence, it can be concluded that majority of the students had average level of knowledge and there is a need to improve knowledge of students.

Keywords: COVID-19, children, knowledge, students

Introduction
We have seen unprecedented work by nurses directly involved in COVID-19 pandemic. Overall, India has 3.07 million registered nursing personnel, government told the Rajya Sabha on March 3, 2020. This includes nurses, midwives, auxiliary nurse midwives, and woman health visitors. COVID -19 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 [1].

Nursing students are the future health care providers. The health of world is in the hands of nursing student. So, the quality of training and teaching definitely affect the outcomes. A committee of experts constituted under the National institute of Disaster Management (NIDM) has warned of an imminent third wave of COVID that could peak around October and sought better medical preparedness for children who might be at similar risk as adults [2]. Children are from the vulnerable group and are not vaccinated. They need special care and treatment. So, the researcher felt the need to conduct study to assess knowledge of the nursing students regarding management of COVID-19 in children.

Objectives of the study were
- To assess the level of knowledge regarding management of COVID-19 in children among nursing students.
- To find out the association between selected demographic variables with the level of knowledge among the nursing students.

Methodology
In this Quantitative research, Non-experimental descriptive research design was used. Sample size calculated based previous study by Kartheek AS, Gara KH, Vanamali DR [3]. By using Non probability convenience sampling technique. The inclusion criteria were nursing students who were studying in selected College of Nursing, Dadra & Nagar Haveli and who were present in the college during data collection.

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The tool was validated by eight experts from department of medicine, department of nursing and department of statistics. Split half method was used to check the reliability, where Karl Pearson's correlation coefficient (r=0.89) for knowledge, which showed the tool was reliable. Before the data collection the formal permission was taken from ethical committee and competent authority for data collection. The present study was conducted in Shri Vinoba Bhave College of Nursing, Silvassa on 23/10/2021 to 29/10/2021. Structured knowledge questionnaire was used along with Sociodemographic data. For statistical analysis descriptive and inferential statistics was used. Frequency and percentage were used for demographic data as well as to assess the level of knowledge. Chi-square test was used to find out the association between level of knowledge and selected demographic data.

Results
The study reveals that 74(67.3%) were between 19- 21, based on the year of studying most of samples 46 (41.8%) were from third year, followed by 43(39.1%), according to previous year academic performance majority 48 (43.6%) had pass class, 36 (32.7%) had first class, With regard to educational status of mother 38 (34.5%) had high school education, with regard to educational status of father 50 (45.5%) had high school education, with regard to infected with COVID-19, majority 101 (91.8%) had COVID-19 infection and 9 (8.2%) didn't had COVID-19 infection and data reveals that majority 95(86.4%) has worked in COVID-19 unit.

The study shows that, majority (57.27%) had average level knowledge, followed by 36 (32.72%) high level and 11 (10%) low level. Therefore, it can be concluded that majority of the students had average level of knowledge.

There was a significant association found between previous year academic performance, educational status of the mother, area of residence and type of family with the level of knowledge regarding management of COVID-19 in children among students of selected college of nursing at 0.05 level of significance.

Discussion
The first objective of the study was to assess the level of knowledge regarding management of COVID-19 in children among students. In relation to this objective, the findings of the present study revealed that majority (57.27%) had average level knowledge, followed by 36 (32.72%) high level and 11 (10%) had low level of knowledge. The supporting study related to the current study was conducted by Sudhakar D to assess the knowledge regarding COVID 19 (transmission, management & prevention) among B.Sc. nursing students. The study findings showed that majority 18(60%) had average knowledge, followed by 7(23.4%) had good knowledge and 5 (16.6%) fair knowledge [4].

Another objective of the study was to find out the association between selected demographic variables with the level of knowledge of the students. In relation to this objective, the findings of the current study where, significant association was found between previous year academic performance, educational status of the mother, area of residence and type of family with the level of knowledge regarding management of COVID-19 in children among students of selected college of nursing at 0.05 level of significance. Other data has no significant association with level of knowledge. Similar findings were examined in the study conducted by Gupta P. et al to assess knowledge, attitude and practice towards coronavirus disease among medical students. Finding showed that no significant relationship was found between different religions, age-categories in terms of knowledge [5].

Table 1: Level of Knowledge

Level of Knowledge	Score	Students	
		Frequency	Percentage
Low level	0-8	11	10
Average Level	9-16	63	57.27
High Level	17-25	36	32.72
Total	25	110	100

Table 2: Frequency and Percentage distribution of level of knowledge among students, N=110

Level of knowledge	Score	Students	
		Frequency (F)	Percentage (%)
Low level	0-8	11	10
Average level	9-16	63	57.27
High level	17-25	36	32.72
Total	25	110	100

Table 3: Association between Level of Knowledge and selected demographic variables, (N=110)

Demographic Variables	Characteristics	Level of Knowledge (F)			χ^2	Critical Value	DF	p-value
		Low	Average	High				
Age in years	a. 19	1	2	1	1.485	9.49	4	0.829
	b. 19-21	7	44	23				
	c. > 21	3	17	12				
Marital Status	a. Married	1	0	3	5.577	5.99	2	0.0614
	b. Unmarried	10	63	33				
Year of the studying	a. Third year	5	20	21	7.126	9.49	4	0.129
	b. Fourth year	4	30	9				
	c. Internship	2	13	6				
Previous year academic performance	a. Pass class	5	23	20	17,922	12.59	6	0.006*
	b. Second class	2	2	8				
	c. First class	3	28	5				
	d. First class with distinction	1	10	3				
Educational status of the mother	a. No formal education	1	15	4	19.837	18.31	10	0.038*
	b. Primary school	2	9	9				
	c. Middle school	1	4	9				
	d. High School	7	21	10				

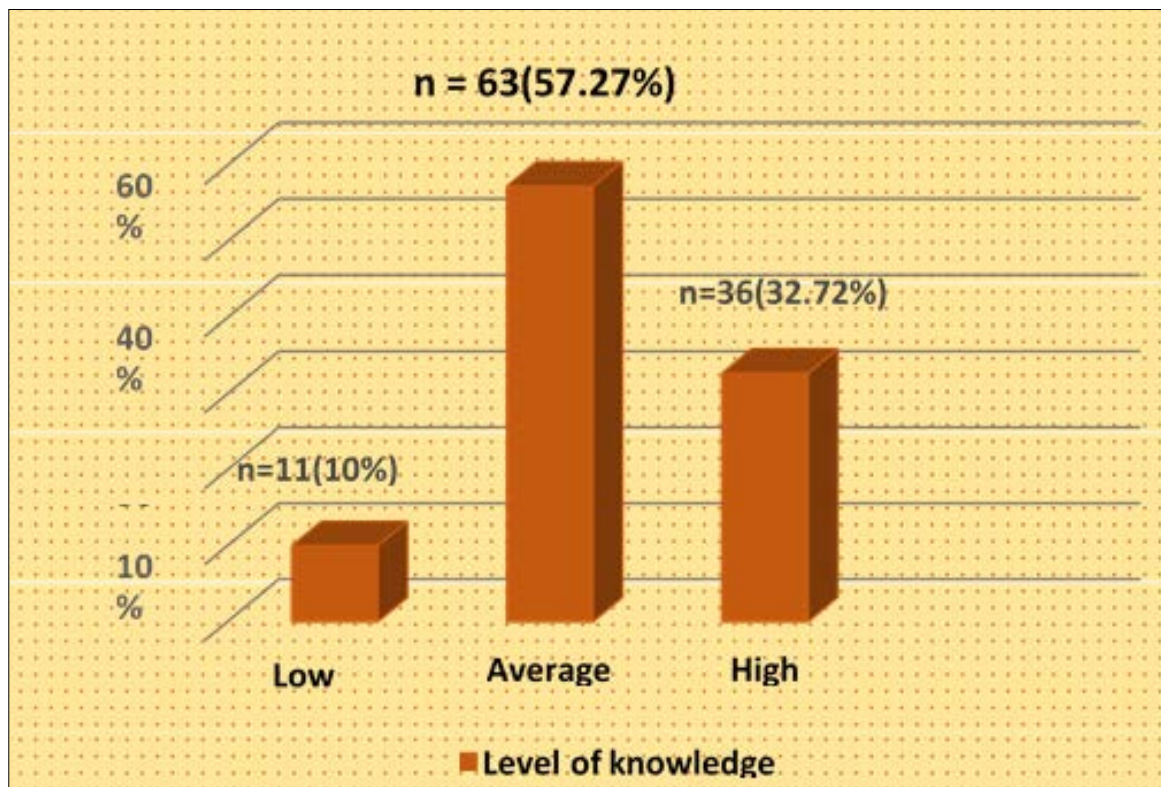|								
	e. Intermediate	0	3	3				
	f. Graduate	0	11	1				
Educational status of the father	a. No formal education	0	1	0	9.6	18.31	10	0.474
	b. Primary school	0	9	5				
	c. Middle school	3	5	3				
	d. High School	5	25	20				
	e. Intermediate	1	7	4				
	f. Graduate	2	16	4				
Area of Residence	a. Rural	11	38	32	13,872	5.99	2	0.97
	b. Urban	1	25	3				
Type of family	a. Nuclear	3	49	24	11.33	5.99	2	0.0034*
	b. Joint	8	14	12				
Have you ever been infected with covid-19	a. Yes	1	12	2	3.12	5.99	2	0.211
	b. No	10	54	31				
Any of the family member got infected with covid-19	a. Yes	2	10	9	1.242	5.99	2	0.537
	b. No	9	53	27				
Any training attended on covid-19?	a. Yes	6	43	26	1.213	5.99	2	0.545
	b. No	5	20	10				
Have you ever worked in covid-19 unit?	a. Yes	11	51	33	4.162	5.99	2	0.124
	b. No	0	12	3				

*Significant

Fig 1: Level of Knowledge among Students

Conclusion
This study has highlighted the significance of awareness among student nurses, given that a majority of them demonstrated only average levels of Knowledge. Moving forward, it is imperative to incorporate additional educational sessions aimed at enhancing the understanding of nursing students regarding covid-19 in the context of pediatric care.

Conflict of Interest:
Not available

Financial Support:
Not available

References
1. Mallapur C. India's shortage of doctors, nurses may hamper COVID-19 response. India spend team 2020 March, 27.
2. Thakur P. COVID third wave looms. May peak in October, hit kids: MHA panel to PMO, Times of India. 2021 Aug 23. http://timesofindia,indiatimes.com/india/states-need-to-boost-covid-care-facilities-for-children-expert-panel/articleshows/85549194.cms
3. Kartheek AS, Gara KH, Vanamali DR. Knowledge, attitude and practices towards COVID-19 among Indian residents during the pandemic: A cross- sectional online survey. J NTR University Health Science 2020;9:107-15.

4. Sudhakar D. Knowledge regarding COVID-19 (Transmission, Management & Prevention). World Journal of Pharmaceutical and Medical Research. 2020;6(8):95-96.
5. Maheshwari S, Gupta PK, Sinha R, Rawat P. Knowledge, attitude, and practice towards coronavirus disease 2019 (COVID-19) among medical students: A cross-sectional study. J Acute Dis. 2020;9(3):100-104.

How to Cite This Article
Mutalikadesai S, Patel K, Shaikh S, Mistry CJ, Patel KK. A study to assess the level of knowledge regarding management of COVID-19 in children among nursing students of selected college of nursing. International Journal of Advance Research in Community Health Nursing. 2023;5(2):57-60.