

## STUDY TO ASSESS THE KNOWLEDGE AND ATTITUDE REGARDING COVID-19 AMONG CARETAKERS OF CHILDREN VISITING IN PEDIATRIC OPD BE INFORMED, BE PREPARED, BE SMART, BE SAFE, BE READY TO FIGHT COVID-19

Blessy Susan Biji\*<sup>1</sup>, Sr.Namitha Kurien<sup>2</sup>, Aneesha Shajil<sup>3</sup>

<sup>1</sup>Tutor, Child health nursing department , St. John's College of Nursing, Koramangala, Bengaluru, Karnataka 560034, India.

<sup>2</sup>Tutor, Medical Surgical nursing department , St. John's College of Nursing, Koramangala, Bengaluru, Karnataka 560034, India.

<sup>3</sup>4th year B.Sc., Nursing student, St. John's College of Nursing, Koramangala, Bengaluru, Karnataka 560034, India.

### ABSTRACT

As COVID -19 is a newly detected serious global health threat, it is important to prevent and treat the disease. Since children are not capable of taking care of themselves as well as to follow the preventive measures, it is necessary to assess the level of knowledge and attitude of caregivers towards Covid-19. So, the aims of the study were

1. To assess the knowledge of caretakers regarding Covid-19.
2. To determine the attitude of caretakers towards Covid-19
3. To find the association of knowledge with baseline variables of the care takers
4. To find the association of attitude with baseline variables of the care takers
5. To assess the correlation between knowledge and attitude of the caretakers regarding COVID-19

A descriptive, cross sectional study was done in the Pediatric OPD of St John's Medical College Hospital, Bangalore.69 care takers those who met the inclusion criteria were enrolled in to the study by purposive sampling technique. Self administered structured knowledge questionnaire and 3 point likert scale to assess the attitude was used to collect the data. The collected data were analyzed using descriptive and inferential statistics. The study shows that 44.9% of the samples had moderately adequate knowledge and 87% of the samples showed favourable attitude

**Key words:** Knowledge, attitude, COVID 19.

Corresponding Author  
**Mrs. Blessy Susan Biji**

Email:- [blessy.biji16@gmail.com](mailto:blessy.biji16@gmail.com)

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### INTRODUCTION

Corona virus disease 2019 (COVID 19) is a global pandemic caused by severe acute respiratory syndrome- corona virus-2 (SARS-CoV-2). These corona viruses are a large family of enveloped, single stranded RNA viruses. SARS-CoV-2 spreads primarily between people who are in close contact and through respiratory droplets produced during coughing or sneezing by an infected person.

As people assume their normal lives, they may tend to avoid following protocols adequately such as use

of mask, hand hygiene and social distancing. Children and families have been deprived of their educational, work, and sport activities, but also from all their friendship and relational contacts. Suddenly parents had to manage their children at home 24 hours a day and at the same time had to work from home for the daily living.

As researchers who are seeking to understand the impact of COVID 19 on children and families, we felt it important to involve caregivers of children in designing and implementing our new research. We hope that the ongoing partnership between parents and researchers will



promote leadership among parents as COVID 19 research. Therefore, this study is conducted for the application in present as well as future times to enhance the preventive measures thereby ceasing the disease in advance and thus prevent further crisis.

The COVID-19 pandemic has led to a dramatic loss of human life worldwide and presence an unprecedented challenge to public health, food systems and the world of work. The economic and social destruction caused by the pandemic is devastating. Millions of enterprises face an existential threat. Nearly half of the world's 3.3 billion global workforce are at risk for losing their livelihoods.[6]

The COVID-19 pandemic and subsequent countrywide lockdown measures has affected all aspects of our social and economic life and also people face education uncertainties, restrictions on their mobility, freedom and socialization, an increase in domestic chores, household conflicts and anxieties around their employment prospects.[7]

### **NEED FOR THE STUDY**

COVID-19 prompted implementation of public health protocols to control the spread of the virus, many of them involving social distancing, hand washing, and lockdown procedures, but has also resulted in creating public anguish and massive fear, particularly among the unaffected population. India has not previously experienced epidemics such as SARS and it is clear that the public healthcare systems were not readily prepared for COVID-19. The magnitude and rapid proliferation of COVID-19 through slightly symptomatic or asymptomatic infected people in India stresses the need to identify the behavioural responses of the population, such as to better address behavioural determinants of pandemic control.

Knowledge and Attitude is an important cognitive key in public health regarding health prevention and promotion. It involves a range of beliefs about the causes of the disease and exacerbating factors, identification of symptoms, and available methods of treatments and consequences.

Only limited number of studies are available on knowledge and attitudes of people towards Covid- 19 in India. Knowledge and Attitude is an important cognitive key in public health regarding health prevention and promotion. It involves a range of beliefs about the causes of the disease and exacerbating factors, identification of symptoms, The researchers during the clinical posting came across many caretakers, who followed no safety measures to prevent Covid-19 in the care setting While interacting with the caretakers, it was found that the care takers didn't possess adequate knowledge about Covid-19. With this background, researchers decided to study the knowledge and attitude of care takers regarding Covid-19.

### **OBJECTIVES**

#### **STATEMENT OF THE PROBLEM**

To assess the knowledge and attitude regarding COVID 19 among caretakers of children visiting in pediatric OPD of a selected tertiary care hospital, Bangalore

### **OBJECTIVES**

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2. To determine the attitude of caretakers towards COVID-19
3. To find the association of knowledge with baseline variables of the care takers
4. To find the association of attitude with baseline variables of the care takers
5. To assess the correlation between knowledge and attitude of the caretakers regarding COVID- 19

### **HYPOTHESIS**

1. H1: There will be a significant association of knowledge of caretakers regarding COVID-19 with selected baseline variables at 0.05 level of significance.
2. H2: There will be a significant association of attitude of caretakers regarding COVID-19 with selected baseline variables at 0.05 level of significance.
3. H3: There will be a significant correlation between knowledge and attitude of caretakers regarding COVID-19 with selected baseline variables at 0.05 level of significance.

### **REVIEW OF LITERATURE**

A cross-sectional study was conducted in Bangladesh to assess the knowledge, attitude and practice regarding COVID 19 outbreak. In Bangladesh, an array of measures were adopted to control the rapid spread of the COVID-19 epidemic. Such general population control measures could significantly influence perception, knowledge, attitudes, and practices towards COVID-19. Online based cross-sectional study conducted from March 29 to April 19, 2020, involving Bangladeshi residents aged 12–64 years, recruited via social media. Out of the 2,017 survey participants, 59.8% were male, the majority were students (71.2%), aged 21–30 years (57.9%), having a bachelor's degree (61.0%), having family income >30,000 per month (50.0%), and living in urban areas (69.8). After consenting, subjects completed an online survey assessing socio-demographic variables, perception, Knowledge, Attitude and Practices towards COVID-19. The survey revealed that 48.3% of participants had more accurate knowledge. Based on Attitude, the result revealed, among the participants, 98.8% agreed to report a suspected case to health authorities. 62.3% had more positive attitudes towards the disease. In conclusion, improving the Knowledge, attitude and practice of general population is



crucial during the rapid rise period of a pandemic outbreak such as COVID-19.[12]

A cross sectional study was conducted in Pune, Maharashtra to assess the knowledge attitude and practice towards COVID-19 among selected nursing college students in Pune. A total of 150 nursing students from the selected colleges were included in the study. Data were collected by using survey questionnaire on the knowledge, attitude and practices towards COVID-19. Convenience sampling technique was used for the data collection and analysis was done by descriptive statistics. The main sources of information were social media, families and friends. Among the 150, participants 54.67% of nursing students were in the age group of 20-25 years and majority 62% were females. 56.67% were Basic B.SC Nursing Students and 81.33% of students had previous knowledge regarding COVID-19. The study results revealed that 68.67% of nursing students have excellent knowledge regarding COVID- 19. The study also suggested that nursing students demonstrated excellent knowledge, good practices and positive attitude towards COVID-19[18].

A cross sectional study was conducted in Bhubaneswar district of Orissa to assess the knowledge and attitude towards COVID-19 among Indian residents of general population. A total of 620 subjects from urban community of Orissa were included in the study. A self-structured questionnaire was used to collect data. Participants were selected by using convenient sampling method. Among 620 participants 75.9% were females, 59.4% of participants were between 31 to 40 years, 75.1% were living in the nuclear family,76.4% participants were married. Based on knowledge the results revealed that 80.28% of participants had good knowledge. Based on Attitude the results revealed that 58.3% participants have positive attitude[19].

## METHODOLOGY

Methodology is the most important part in research as it provides the framework for conducting the study.

## RESEARCH APPROACH

A quantitative approach was considered as an appropriate research approach for the present study.

## RESEARCH DESIGN

Descriptive research design was selected for the present study.

## DESCRIPTION OF TOOL

- **Section -A** : Proforma to elicit baseline variables.
- **Section –B** :Structured knowledge questionnaire to assess the knowledge
- **Section –C**: 3-point likert scale to assess the attitude of the caretakers.

## Section - A: Proforma to elicit baseline variables

A structured questionnaire was used for the collection of baseline variables of the subjects. In this study, baseline variables are related to caretakers includes age, gender, type of family, area of living, education, occupation, monthly income, source of information and exposure to COVID -19

## Section - B: Self- administered structured knowledge questionnaire to assess the knowledge

Scoring:

Total questions - 16

Correct answer - 1

Incorrect answer – 0

Table shows that 62.3% were under the age group of 20-39 years, 59.4% were female,63.8% belong to nuclear family,82.6% were from urban area,27.5% were graduates, 40.6% are unskilled,44.9% earned between 11,000 - 39,000 , 65.2% gained information from mass media and 97.1% had no exposure to COVID-19.

## SECTION 2: Findings related to knowledge of caretakers regarding COVID 19.

**Objective: To assess the knowledge of caretakers regarding COVID-19.**

Figure II shows that, 14(20.3%) caretakers have inadequate knowledge, 31(44.9%) has moderately adequate knowledge and 24(34.8%) has adequate knowledge regarding COVID- 19 respectively.

## SECTION 3: Findings related to attitude of caretakers regarding COVID-19.

**Objective: To determine the attitude of caretakers regarding COVID-19.**

Figure IV shows that, 60 (87%) caretakers had favorable attitude and 9 (13%) caretakers had unfavorable attitude towards COVID-19 respectively.

## SECTION 4: Findings related to association between knowledge score and selected baseline variables

**Objective: To find the association of knowledge with baseline variables of the caretakers**

H1: There will be significant association of knowledge with selected baseline variables at 0.05 level of significance.

Table shows that there is no significant association of knowledge with the selected baseline variables such as age, gender, type of family and area at 0.05 level of significance respectively.

## SECTION 5: Findings related to association between attitude score and selected baseline variables

**Objective: To find the association of attitude with baseline variables of the caretakers**

H2: There will be significant association of attitude with the selected baseline variables at 0.05 level of significance



Table shows that there is no significant association of attitude with selected baseline variables age, gender, type of family, area of living, education, occupation, monthly income, source of information and exposure of COVID-19 at a 0.05 level of significance respectively.

**SECTION 6: Correlation between knowledge and Attitude**

**Objective: To assess the correlation between knowledge and attitude of the caretakers regarding COVID-19.**

H3: There will be a significant correlation between knowledge and attitude of caretakers regarding COVID-19 with selected baseline variable at 0.05 level of significance.

Table shows that there is very weak correlation between knowledge and attitude of caretakers regarding COVID-19 with selected baseline variables at 0.05 level of significance.

**SECTION 1: Findings related to baseline variables of caretakers of children**

Sl.No	Baseline variables	Frequency (f)	Percentage(%)
1.	<b>Age</b> 20-39	43	62.3
	40-59	26	37.7
2.	<b>Gender</b> Male	28	40.6
	Female	41	59.4
3.	<b>Type of family</b> Nuclear	44	63.8
	Joint	25	36.2
4.	<b>Area of living</b> Rural	12	17.4
	urban	57	82.6
5.	<b>Education</b> Primary	11	15.9
	Secondary	18	26.1
	Higher secondary	9	13
	Graduate	19	27.5
	Undergraduate	12	17.4
6.	<b>Occupation</b> Professional	15	21.7
	Skilled	10	14.5
	Semi- skilled	13	18.8
	Unskilled	28	40.6
	Unemployed	3	4.3
7.	<b>Monthly Income</b> <11,000	25	36.2
	11,000-39,000	31	44.9
	>39,000	13	18.8
8.	<b>Source of information</b> Social media	14	20.3
	Mass media	45	65.2
	Others	10	14.5
9.	<b>Exposure to COVID-19</b> Yes	2	2.9
	No	67	97.1

Sl. no	Demographic variable	Character	Knowledge Level						Test of significance	p-value
			Inadequate		Moderately adequate		Adequate			
			f	%	f	%	f	%		
1	Age	20-39	7	16.3	20	46.5	16	37.2	1.162#	0.588 NS
		40-59	7	26.9	11	42.3	8	30.8		



2	Gender	Male Female	8 6	28.6 14.6	11 20	39.3 4.8	9 15	32.1 36.6	2.021#	0.389 NS
3	Type of family	Nuclear Joint	9 5	20.5 20	18 13	40.9 52	17 7	38.6 28	0.957#	0.611 NS
4	Area	Rural Urban	4 10	33.3 17.5	7 24	58.3 42.1	1 23	8.3 40.4	5.064*	0.080 NS

**Objective: To find the association of attitude with baseline variables of the caretakers**

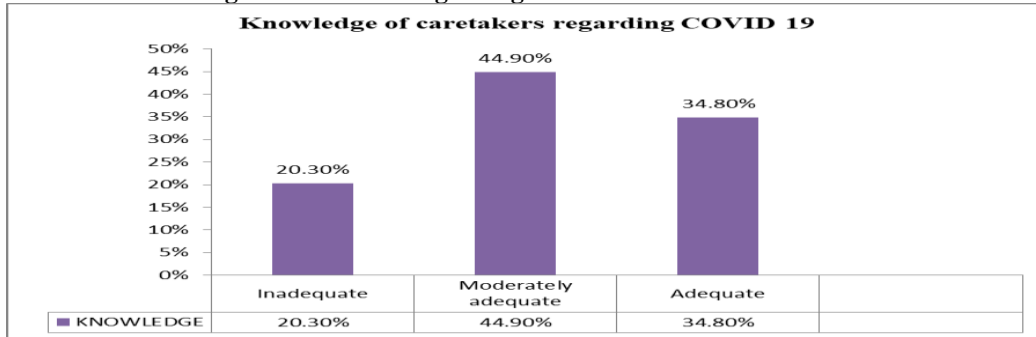
SL No	Demographic variable	Characters	Attitude Level				Test of significance	p-value
			Favorable		Unfavorable			
			f	%	f	%		
1	Age	20-39	7	16.3	36	83.7	1.053*	0.466 NS
		40-59	2	17.7	24	92.3		
2	Gender	Male	2	7.1	26	92.9	1.447*	0.294 NS
		Female	7	17.1	34	82.9		
3	Type of family	Nuclear	6	13.6	38	86.4	0.038*	1.00 NS
		Joint	3	12	22	88		
4	Area of living	Rural	2	16.7	10	83.3	0.168#	0.650 NS
		Urban	7	12.3	50	87.7		
5	Education	Primary	2	18.2	9	81.8	5.226*	0.219 NS
		Secondary	3	16.7	15	83.3		
		Higher Secondary	2	22.2	7	77.8		
		Graduate	0	0	19	100		
		Post Graduate	2	16.7	10	83.3		
6	Occupation	Professional	0	0	15	100	4.107*	0.346 NS
		Skilled	1	10	9	90		
		Semi-skilled	2	15.4	11	84.6		
		Unskilled	6	21.4	22	78.6		
		Unemployed	0	0	3	100		
7	Monthly income	<11,000	4	16	21	84	0.481*	0.900 NS
		11,000-39,000	4	12.9	27	87.1		
		>39,000	1	7.7	12	92.3		
8	Source of information	Social media	2	14.3	12	85.7	0.232*	1.00 NS
		Mass media	6	13.3	39	86.7		
		Others	1	10	9	90		
9	Exposure to COVID-19	Yes	1	50	1	50	2.480*	0.246 NS
		No	8	11.9	59	88.1		

**Objective: To assess the correlation between knowledge and attitude of the caretakers regarding COVID-19.**

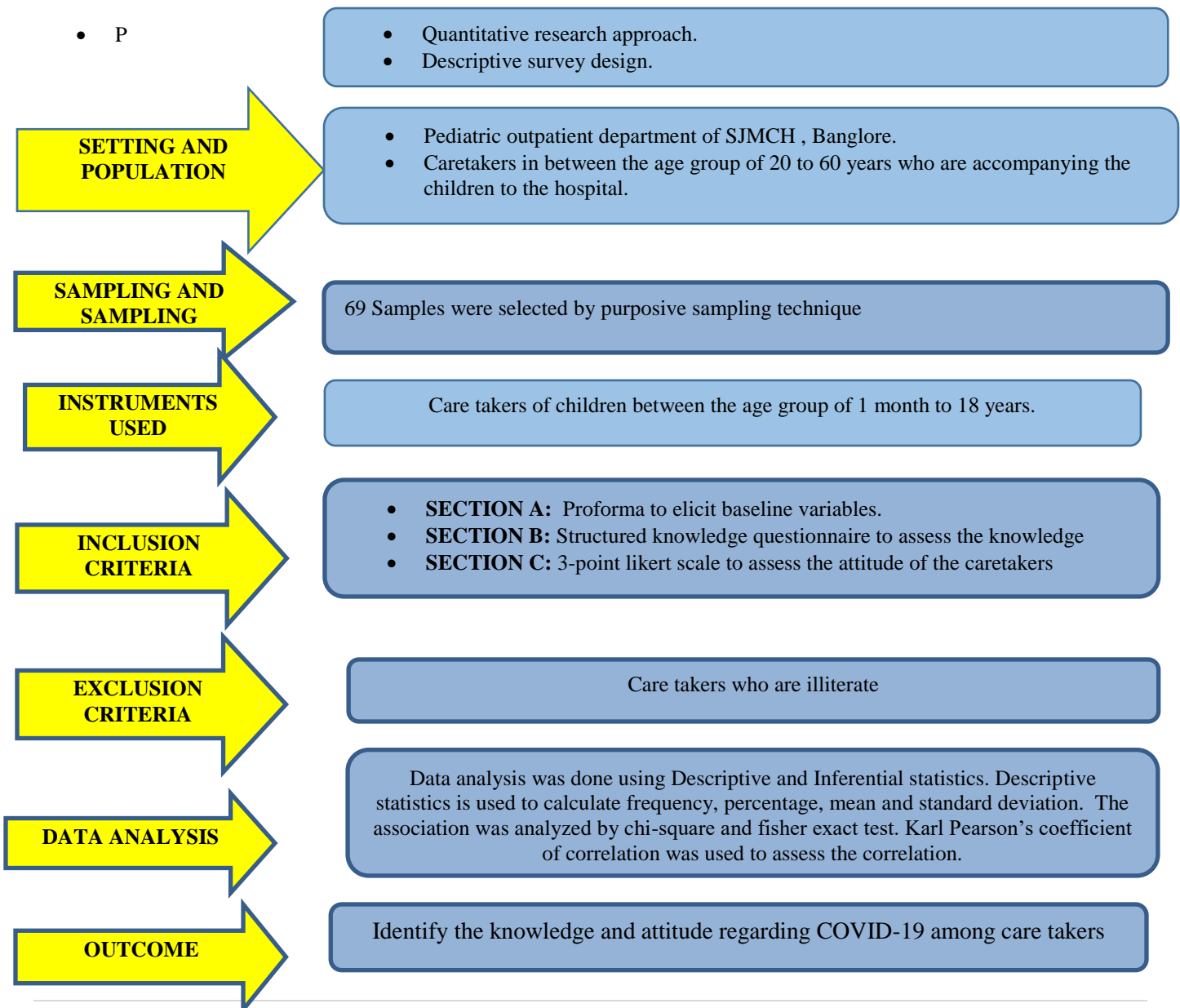
SL No	Variables	Mean	SD	r value	p value
1	Knowledge	10.80	3.428		
2	Attitude	44.22	10.083	0.142	0.244



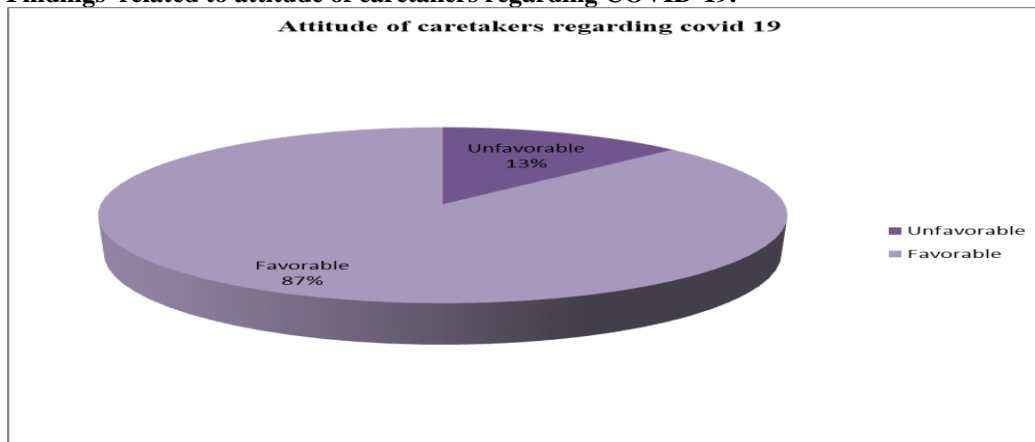
**Objective: To assess the knowledge of caretakers regarding COVID-19.**



**Figure 1: Schematic representation of research design**



### SECTION 3: Findings related to attitude of caretakers regarding COVID-19.



#### DISCUSSION

##### FINDINGS RELATED TO KNOWLEDGE SCORES OF CARE TAKERS OF CHILDREN REGARDING COVID-19

The present study reveals that 34.8 % have adequate knowledge, 44.9% have moderately adequate knowledge and 20.3% have inadequate knowledge.

A similar community based cross sectional study was conducted in Ethiopia April 2020 to assess the public knowledge regarding COVID-19. The majority of the respondents (58.6%) had moderate knowledge and 37.2% had good knowledge regarding COVID 19.[22] The findings of the study was similar to the present study.

##### FINDINGS RELATED TO THE ATTITUDE SCORES OF CARE TAKERS OF CHILDREN REGARDING COVID-19

The present study reveals that, 13% of care givers have unfavorable attitude towards COVID-19 and 87% of care givers have favorable attitude towards COVID – 19.

A similar cross -sectional study was conducted to assess the knowledge and attitude associated with COVID-19 among selected population of India. The sample size for the study was 1429 subjects. Based on Attitude, the results revealed that majority of subjects had positive attitude (84.2%) towards COVID-19. The findings was similar to the present study.

#### CONCLUSION

This study concluded that the nurse administrator should implement outreach programs to make public aware about COVID-19 to update their knowledge. This will be more effective and improve healthy lifestyle practices of public. Cost effective production of health education material by the nursing staff should be encouraged and necessary support to be provided to conduct such activities.

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