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# A DETAILED RESEARCH STUDY ON COVID-19 AND HEALTH CARE WORKERS IN THE STATE OF KERALA.

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### **ABSTRACT**

The World Health Organization (WHO) is calling on governments and health care leaders to address persistent threats to the health and safety of health workers and patients. The pandemic has also highlighted the extent to which protecting health workers is key to ensuring a functioning health system and a functioning society. Therefore a detailed study among health care workers should be done to understand their knowledge, attitude and practice towards Covid-19.

**KEYWORDS:** Covid-19, Pandemic, Vulnerable.

#### INTRODUCTION

COVID-19 has exposed health workers and their families to unprecedented levels of risk. Although not representative, data from many countries across WHO regions indicate that COVID-19

infections among health workers are far greater than those in the general population. While health workers represent less than 3% of the population in the large majority of countries and less than 2% in almost all low- and middle-income countries, around 14% of COVID-19 cases reported to WHO are among health workers.

### **METHODOLOGY**

STUDY AREA: State of Kerala

STUDY DESIGN: Cross sectional study

## INCLUSION CRITERIA

• Health care workers and heath care students. (194 participants)

EXCLUSION CRITERIA: Those who are not willing to participate

DURATION: May -September 2020.

STATISTICS: Data was entered into Excel sheet and statistics was done using SPSS

software.

### **RESULTS**

AGE					
		Frequency Percent	Valid	Cumulative	
		Frequency	rercent	Percent	Percent
	20-30	108	55.7	55.7	55.7
	30-35	73	37.6	37.6	93.3
	35-40	13	6.7	6.7	100.0
	Total	194	100.0	100.0	

SEX					
		Frequency	Percent	Valid Percent	Cumulative Percent
	MA LE	96	49.5	49.5	49.5
	FEM	98	50.5	50.5	100.0
	Total	194	100.0	100.0	

MARITAL STATUS								
		Frequency	Percent	Valid Percent	Cumulative Percent			
	SIN.	123	63.4	63.4	63.4			
	MAR.	56	28.9	28.9	92.3			
	SEP.	15	7.7	7.7	100.0			
	Total	194	100.0	100.0				

QUAI	QUALIFICATION								
		Frequency	Percent	Valid Percent	Cumulative Percent				
	DIP	8	4.1	4.1	4.1				
	UG	27	13.9	13.9	18.0				
	SS	26	13.4	13.4	31.4				
	PG	84	43.3	43.3	74.7				
	Intern.	41	21.1	21.1	95.9				
	Work.	8	4.1	4.1	100.0				
	Total	194	100.0	100.0					

NUM	NUMBER OF FAMILY MEMBERS								
		Frequency	Percent	Valid Percent	Cumulative Percent				
	1	24	12.4	12.4	12.4				
	2	26	13.4	13.4	25.8				
	3	4	2.1	2.1	27.8				
	4	64	33.0	33.0	60.8				
	5	38	19.6	19.6	80.4				
	6	24	12.4	12.4	92.8				
	7	14	7.2	7.2	100.0				
	Total	194	100.0	100.0					

UNDERLYING DISEASE									
		Frequency	Percent	Valid Percent	Cumulative Percent				
	DEP	29	14.9	14.9	14.9				
	HTN	12	6.2	6.2	21.1				
	Obes.	4	2.1	2.1	23.2				
	Stress	19	9.8	9.8	33.0				
	none	77	39.7	39.7	72.7				
	others	53	27.3	27.3	100.0				
	Total	194	100.0	100.0					

APL/I	APL/BPL								
		Frequency	Percent	Valid Percent	Cumulative Percent				
	BPL	43	22.2	22.2	22.2				
	APL	151	77.8	77.8	100.0				
	Total	194	100.0	100.0					

# I) Knowledge items towards Covid-19

COVI	COVID-19 INFECTION CAN BE PREVENTED								
CORI	RECT	Frequency	Percent	Valid	Cumulative				
ANSWERS		Frequency	Fercent	Percent	Percent				
	YES	166	85.6	85.6	85.6				
	NO	28	14.4	14.4	100.0				
	Total	194	100.0	100.0					

KNOW ABOUT DIAGNOSIS AND LAB TESTING PROCEDURES								
		Frequency	Percent	Valid Percent	Cumulative Percent			
	YES	146	75.3	75.3	75.3			
	NO	48	24.7	24.7	100.0			
	Total	194	100.0	100.0				

MENTIONED ATLEAST ONE DRUG OF COVID19							
		Emagnanav	D4	Valid	Cumulative		
		Frequency	Percent	Percent	Percent		
	YES	194	100.0	100.0	100.0		

	KNOW ABOUT THE VACCINE TRIAL STATUS ACROSS THE WORLD								
		Frequency	Percent	Valid Percent	Cumulative Percent				
	YES	134	69.1	69.1	69.1				
	NO	60	30.9	30.9	100.0				
	Total	194	100.0	100.0					

# II) Attitude items towards Covid-19

WILL GO OR CALL FOR CONSULTATION IF YOU HAVE SIGNS AND SYMPTOMS OF COVID-19								
		Frequency	Percent	Valid	Cumulative			
		Trequency	1 ercent	Percent	Percent			
	YES	157	80.9	80.9	80.9			
	NO	37	19.1	19.1	100.0			
	Total	194	100.0	100.0				

AVOIDING MASS GATHERING IS NECESSARY FOR PREVENTION						
		Frequency	Percent	Valid	Cumulative	
				Percent	Percent	
	YES	181	93.3	93.3	93.3	
	NO	13	6.7	6.7	100.0	
	Total	194	100.0	100.0		

WEARING PPE KIT IS NECESSARY							
		Fraguency	Darcont	Valid	Cumulative		
		Frequency	Percent	Percent	Percent		
	YES	169	87.1	87.1	87.1		
	NO	25	12.9	12.9	100.0		
	Total	194	100.0	100.0			

FACEMASK IS NECESSARY FOR COVID19 PREVENTION						
		Frequency	Percent	Valid	Cumulative	
				Percent	Percent	
	YES	161	83.0	83.0	83.0	
	NO	33	17.0	17.0	100.0	
	Total	194	100.0	100.0		

PHYSICAL DISTANCING IS NECESSARY FOR COVID- 19 PREVENTION							
		Emagyamay	Domoont	Valid	Cumulative		
		Frequency	Percent	Percent	Percent		
	YES	169	87.1	87.1	87.1		
	NO	25	12.9	12.9	100.0		
	Total	194	100.0	100.0			

## III) Practice items towards Covid-19

EXTREMELY SCARED ABOUT COVID-19							
		Frequency	Percent	Valid	Cumulative		
				Percent	Percent		
	YES	86	44.3	44.3	44.3		
	NO	108	55.7	55.7	100.0		
	Total	194	100.0	100.0			

PERFORM REGULAR EXERCISE							
		Frequency	Percent	Valid	Cumulative		
				Percent	Percent		
	YES	76	39.2	39.2	39.2		
	NO	118	60.8	60.8	100.0		
	Total	194	100.0	100.0			

KEEP DIETARY BALANCE						
		Frequency	Percent	Valid	Cumulative	
				Percent	Percent	
	YES	58	29.9	29.9	29.9	
	NO	136	70.1	70.1	100.0	
	Total	194	100.0	100.0		

	CHECK SIGNS AND SYMPTOMS OF COVID-19 REGULARLY							
REGU			Dorgant	Valid	Cumulative			
		Frequency	Percent	Percent	Percent			
	YES	172	88.7	88.7	88.7			
	NO	22	11.3	11.3	100.0			
	Total	194	100.0	100.0				

PRACTICE PROPER HAND WASHING						
		Frequency	Percent	Valid	Cumulative	
				Percent	Percent	
	YES	106	54.6	54.6	54.6	
	NO	88	45.4	45.4	100.0	
	Total	194	100.0	100.0		

USE APPROPRIATE FACE MASKS							
		Frequency	Percent	Valid	Cumulative		
				Percent	Percent		
	YES	130	67.0	67.0	67.0		
	NO	64	33.0	33.0	100.0		
	Total	194	100.0	100.0			

#### **DISCUSSION**

The current study is conducted among health care workers and students from health care sector in the state of Kerala. There were 55.7% participants from age group 20-30 years, 37.6% from 31-35 years and 6.7% from 35-40 years respectively. 49.5% were males and 28.9% were married, 63.4% 50.5% were females. were single, 7.7% separated/widowed. In the study, 4.1% had only Diploma level education, 13.9% had UG, 13.4% had Super speciality, 43.3% PG, 21.1% interns and 4.1 % were permanent working category. In the study majority (33%) have four family members at their home, 19.6% have five members and so on. The major study finding was that only 39.7% didn't have any kind of comorbidities. 6.2% have hypertension, 14.9% have depression, 2.1% have obesity, 9.8% have stress, and 27.3% have other kind of disorders. The percentage of health care population with depression and stress clearly shows the work burden or some other kind of pshychological difficulties which they face during the life time. Majority of the study population belong to APL category 77.8% but 22.2% are still in BPL category which clearly shows the inadequate salary in the health care field.

Majority of the population (85.6%) know how to prevent the infection, 75.3% know about diagnosis and lab testing procedures. Surprisingly, all the population mentioned at least one drug of Covid-19. 69.1% knew about the current vaccine trial status. Surprisingly 30.9% don't have a clear idea about the vaccine trials and its updates.

80.9% mentioned that they will go or call for consultation if they have any signs and symptoms. 93.3% know avoiding mass gatherings is necessary and 87.1% know wearing PPE kit is necessary. 83% know that facemask can prevent covid-19 infection, 87.1% know about the importance of physical distancing too.

It was found that 44.3% are extremely scared about the infection. Majority (60.8%) don't perform regular exercise and 70.1% don't keep dietary balance too. 88.7% check regularly for the signs and symptoms of the infection, and only 54.6% practice proper hand washing. Shockingly, just 67% use appropriate face mask during this pandemic situation.

#### **CONCLUSION**

Coronavirus disease 2019 (Covid-19) poses an important occupational health risk to health workers (HWs) that has attracted global scrutiny. To date, several thousand Health care workers globally have been reported as infected with the severe acute respiratory syndrome coronavirus 2 virus that causes the disease. It is therefore a public health priority for policymakers to understand risk factors for this vulnerable group to avert occupational transmission.

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