

Awareness of Preventive Measures, Knowledge and Attitude of Affected People Visiting COVID-19 Suspected Unit in Nishtar Hospital Multan the Tertiary Care Hospital, Punjab, Pakistan

Awareness of Preventive Measures, Knowledge and Attitude of Covid-19

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ABSTRACT

Objective: To determine the awareness of preventive measures, knowledge and attitude of the suspected, documented cases of covid-19 or their close family members also, admitted through corona filter counter in corona suspected units in a tertiary care hospital of Multan (Pakistan).

Study Design: Descriptive cross sectional study

Place and Duration of Study: This study was conducted at the suspected wards of Pandemic Corona Virus, Nishtar hospital-Multan from December, 2020 to December, 2021.

Materials and Methods: Patients or their attendants admitting through corona filter counter for the suspicion of corona virus infection on the basis of history like cough, shortness of breath, fever from last two weeks, infiltrates on X-ray chest or HRCT sent through corona filter to corona suspected wards were included in the study. Main variables of study were use of preventive measures, knowledge about disease and attitude. SPSS version 23 was used for data analysis.

Results: Most of the patients 52.2%, arrived from Multan. 33.3% patients had travel history. Only thirteen patients traveled to abroad and 49.1% had family contact. It was seen that preventive measures, knowledge and attitude were associated with Covid-19 effected patients.

Conclusion: Knowledge, attitude and practice of preventive measures was not good in Pakistani population, factors which are influencing good practice were area of living and family contact. Most of infective patients in our study were those who travel recently in high infective areas.

Key Words: Awareness, COVID-19, Knowledge, Attitude, Prevention

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INTRODUCTION

Novel coronavirus disease is a Ribonucleic Acid (RNA) virus was outburst in 2019 in the world a named as COVID-19 by world health organization¹. It was found spreading respiratory illness with severe respiratory symptoms².

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Initially it was classified as a zoonotic disease transmitted from animal to human and later on directly from human to human via airway droplets and contact². Infected patients presents with the clinical symptoms of cough, fever, sore throat and shortness of breath within two weeks of incubation period³.

Peoples with older age and previous chronic illness like cardiac disease, hypertension, cancer, lung disease and diabetes mellitus have been observed at greater risk of severity of disease and mortality^{4,5}. Due to lack of cure world health organization recommended prevention as a only single strategy to prevent the spread of COVID-19 disease which include hand washing, respiratory hygiene, personal protective equipment, social distancing and disinfection of air born infection⁶.

Like other countries hit by second wave of corona virus, Pakistan is also affected by the pandemic. Multan city (biggest city of southern Punjab in Pakistan) was declared to be affected badly by corona virus along with other big cities of country like Karachi, Lahore and Rawalpindi. Prevention is the best policy to

overcome the pandemic as there is no definite treatment of this disease and vaccine is still in trials and may be effective in near future⁷. The world health organization and other institutions have issued preventive measures for the control of current pandemic like repeated hand wash with soap and water or hand sanitizer, use of face mask, and social distancing etc⁸.

Different online sessions, guidelines and training courses have been designed to enhance the awareness of community to prevent the pandemic situation but learning is still deficit⁹. Siddiqui et al¹⁰ in their study in Saudi Arabia 443 people for awareness of corona prevention and level of knowledge was ranging from 75% to 95% in general population.

Different studies done in the world or locally were involving people from general population while this study is unique in a sense that we assessed the awareness of the knowledge of preventive measures, behaviors and attitude of the patients either suspected or confirmed corona cases as well as their attendants close to the patients in hospital settings.

MATERIALS AND METHODS

This descriptive cross sectional study was conducted at suspected wards of Pandemic Corona Virus, Nishtar hospital-Multan. This study was conducted by the approval of ethical committee of the university. Patients or their attendants admitting through corona filter counter for the suspicion of corona virus infection on the basis of history like cough, shortness of breath, fever from last two weeks, infiltrates on Xray chest or HRCT sent through corona filter to corona suspected wards were included in the study. Patients and their attendants were explained about purpose of study and written informed consent was obtained. A questionnaire proforma was filled by the post graduate registrar who was asked the questions from the patients or either attendants to whom willing in participation in the study. The questionnaire was have biography data including name, age, sex and information about preventive measures they adopted like hand washing, use of sanitizer, facemask, time spent in home or outside etc and their knowledge and behaviors towards disease and its spread. Unconscious patients or mentally handicapped peoples who are unable to communicate were excluded. Sample size was determined using World Health Organization (WHO) sample size calculator. The calculations of sample size were based on the given proportion of respondents (54.87%) kept good knowledge about the transmission of COVID-19 pandemic. Confidence interval was taken as 95% and 90% power of the test. Total 381 patients were required to conduct the study. Patient's response and collected data was entered on SPSS version 23 was

used for data analysis. Mean and SD was calculated for numerical variables and frequency percentages were calculated for categorical variables. Test of significance (t-test and chi-square test) was applied to see association among variables. P value ≤ 0.05 was taken as significance.

RESULTS

Over the study period, 318 patients were admitted through corona filter counter for the suspicion of corona virus infection on the basis of history. Out of these 206 (64.8%) were males and 112 (35.2) were females. The mean age of the patients was 44.85 ± 17.13 years, minimum age 16 years and maximum age 88 years, with the majority (32.7%) of patients between 45-60 years. Most of the patients $n=166$ (52.2%), arrived from Multan. $n=106$ (33.3%) patients had travel history. Only thirteen patients traveled to abroad. $n=156$ (49.1%) had family contact. (Table. I).

It was seen that preventive measures, knowledge and attitude were associated with Covid-19 effected patients. (Table. II & Table. III).

Table No.1: Demographic characteristics of the patients

Variable	Frequency	Percentage
Gender		
Male	206	64.8
Female	112	35.2
Age distribution		
<18 years	6	1.9
18-29 years	88	27.7
30-45 years	66	20.8
45-60 years	104	32.7
>60 years	54	17.0
Area of living		
Multan	166	52.2
Khanewal	46	14.5
Muzaffergarh	30	9.4
D.G.khan	6	1.9
Layyah	3	0.9
Vehari	20	6.3
Other	47	14.8
Travel History		
Yes	106	33.3
No	212	66.7
Place of travel		
Punjab	56	52.8
Other Province	37	34.9
Abroad	13	12.3
Family contact		
Yes	156	49.1
No	162	50.9

Table No.2: Association between Covid-19 effected patients with preventive measures, knowledge and attitude

Preventive measures, knowledge and attitude	Covid-19 effected patients			P-value
	Suspected on symptoms	Confirmed on PCR	Attendant	
Following SOPs	108 (67.9)	23 (67.6)	109 (87.2)	0.001
Hand washing	142 (90.4)	29 (85.3)	120 (96.0)	0.069
Hand sanitizer	71 (44.9)	19 (55.9)	88 (70.4)	0.000
Face mask	97 (61.0)	25 (73.5)	108 (86.4)	0.000
Time spent in home				
< 12 hours	29 (18.2)	12 (35.3)	51 (40.8)	0.000
≥12 hours	130 (81.8)	22 (64.7)	74 (59.2)	
Going to mosque	42 (26.6)	13 (38.2)	51 (40.8)	0.035
Time spent at work				
< 6 hours	99 (62.3)	17 (50.0)	47 (37.6)	0.000
≥6 hours	60 (37.7)	17 (50.0)	78 (52.6)	
Do you think corona as disease	118 (74.2)	28 (82.4)	111 (88.8)	0.008
Do you do exercise not less than 20 minutes	32 (20.1)	8 (23.5)	44 (35.2)	0.015
Any mortality with Covid-19 in family	8 (5.0)	0 (0.0)	7 (5.6)	0.380
Do you think lockdown as affective way to prevent corona	81 (50.9)	26 (76.5)	81 (64.8)	0.006

Table No.3: Association between Covid-19 effected patients with preventive measures, knowledge and attitude

Preventive measures, knowledge and attitude	Covid-19 effected patients			P-value
	Suspected on symptoms	Confirmed on PCR	Attendant	
Any Co-morbidity	112 (70.4)	20 (58.8)	11 (8.8)	0.000
Previous status				
Infected	5 (3.1)	7 (20.6)	6 (4.8)	0.003
Not infected	135 (84.9)	23 (67.4)	104 (83.2)	
Don't know	19 (11.9)	4 (11.8)	15 (12.0)	
Symptoms	148 (93.1)	33 (97.1)	17 (13.6)	0.000
Hand washing how many times				
<5 times	16 (10.1)	6 (17.6)	5 (4.0)	0.024
≥ 5 times	143 (89.9)	28 (82.4)	120 (96.0)	
Hand sanitizing how many times				
<5 times	100 (62.9)	18 (52.9)	47 (37.6)	0.000
≥ 5 times	59 (37.1)	16 (47.1)	78 (62.4)	
Cough	106 (66.7)	22 (64.7)	9 (7.2)	0.000
Fever	95 (59.7)	31 (91.2)	9 (7.2)	0.000
Shortness of breath	124 (78.0)	19 (55.9)	4 (3.2)	0.000
Loss of taste and smell	6 (3.8)	6 (17.6)	2 (1.6)	0.000
Diabetes mellitus	76 (47.8)	12 (35.3)	3 (2.4)	0.000
Hypertension	74 (46.5)	18 (52.9)	6 (4.8)	0.000
Chronic liver disease	3 (1.9)	0 (0.0)	2 (1.6)	0.722
Chronic renal failure	22 (13.8)	2 (5.9)	0 (0.0)	0.000

DISCUSSION

Many researchers carried out studies on different practices of about knowledge and attitude of people towards preventive measures of Covid-19 and reported limited evidences. Our study was a institution based cross sectional study designed to examine the status of such types of preventive measures. A Pakistani study

conducted by Hussain et al¹¹ in 2020 and reported that 82.16% of participants have good knowledge about Covid-19, its mode of transmission, risk factors and preventive protocols.

Jemal et al¹² conducted a study on this topic on Ethiopian population and reported that 88.2% of people have good knowledge about Covid-19 but practice relatively low. Ways of telecommunication are

positively associated with knowledge sharing and learning about covid-19. Another study was conducted by Christopher et al¹³ on Nigerian population specifically on Urban community and reported 99.7% participants have good knowledge and attitude. More education and effort is suggested to improve role of preventive measures.

A contrary study was conducted by Abdelhafiz et al¹⁴ on Egyptian population and reported that positive and good result in use of preventive measures along with good knowledge and attitude, this variation in results may be due to variation in socio economic status. Better findings in results are due to major steps from government side to limit the spread of pandemic. Egyptian government also took some necessary steps in vaccination and treatment in infective persons.

Variations in findings reported in different studies are usually due to change in study period, coverage of awareness and socio-demographic changes in study population. Another Ethiopian study by Kebede et al¹⁵ reported 72.5% good outcomes regarding knowledge, attitude and use of preventive measures. Results of our study were in line of study conducted by DP et al¹⁶ on Indian population and reported that 70% of population have good knowledge on Covid-19.

A study by Belete et al¹⁷ conducted on this topic to evaluate the practices of knowledge, attitude and use of preventive measures and observed that 69.3% of participants have good knowledge, positive attitude in 62.6% of persons and 49.3% of participants using good preventive measures which is a result of effective health care education. Similar findings were concluded by Farah et al¹⁸ that knowledge of covid-19 is much better but level of attitude is quite lower which promotes the need of strategy implementation.

Two relevant studies were conducted in Vietnam and China and reported much better results in comparison to the studies conducted in Pakistan and Ethiopia. Huynh et al¹⁹ carried out a study in Vietnam health care providers and reported that majority of health care workers have good knowledge along with positive attitude and practice of Covid-19. Similarly Zhang et al²⁰ reported positive results regarding attitude and knowledge of health care providers in China.

While other study done in India by Singh et al²¹ involved 522 general people for awareness of knowledge and behavior of common people about Covid 19 virus and almost 90% of people were aware of preventive measures and spread of the disease.

CONCLUSION

Knowledge, attitude and practice of preventive measures was not good in Pakistani population, factors which are influencing good practice were area of living and family contact. Most of infective patients in our study were those who travel recently in high infective areas.

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