

COVID-19 Related Practices and Fears among Patients with Chronic Diseases

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ABSTRACT

Background: Chronic diseases are considered as added risk of severity of COVID-19 infection. This study was planned to assess practices and fears of patients with chronic diseases during COVID-19 pandemic.

Participants and Methods: An online questionnaire was developed and shared with potential participants using the snowball technique. The questionnaire included questions about sociodemographic characteristics, practices and fears related to COVID-19. A total of 181 patients with chronic diseases filled the questionnaire.

Results: About 72.4% reported fear due to increased risk of severe COVID-19 infection. Male, married and those living with two or more chronic diseases were more panic as compared to others. About 56% were worried about emergency care for their existing condition.

Conclusion: The analysis showed good practices especially wearing a mask and avoiding crowded places among patients with chronic diseases. However, the presence of fear of the severe infection and emergency care might affect their mental health which needs attention and counseling.

Keywords:

COVID-19, Practices, Fears, Chronic Diseases, mental health

INTRODUCTION

COVID-19 infection appeared in China and became a pandemic.¹ Many countries imposed lockdowns to contain the infection and recommended physical distancing. Similarly, the mass has been asked to practice standard guidelines to avoid infection, including frequent hand washing, wearing masks, and avoiding crowded places.³ Patients with chronic diseases like diabetes, cardiovascular diseases, and hypertension have been shown an increased risk for severe COVID-19 infection.⁴ Therefore, these patients need extra preventive measures and follow the standard guidelines. Similarly, COVID-19 has also affected the routine management of the existing condition due to restricted movement and difficulties in getting routine medical care.⁵ Therefore, these patients have increased psychological stress due to fear of the increased risk of severity and mortality due to underlying conditions.⁶ This study was planned to assess the practices and fears related to COVID-19 among chronic patients, which

might help to understand the challenges and issues of patients with chronic diseases during pandemics.

PARTICIPANTS AND METHODS

Ethical approval was obtained from the ethical review committee of the Pakistan Institute of Medical Sciences, Islamabad. All participants gave written consent before filling the questionnaire. This study was conducted in Islamabad. Participants aged 18 and above with any of the four chronic diseases, i.e., diabetes, hypertension, cardiovascular disease, or mental health, were enrolled using a purposive sampling technique. In two separate sections, we developed a semi-structured questionnaire targeting patients with chronic diseases. The first section was related to the effect of the lockdown on routine living and the health of patients with chronic diseases. Considering the nature of the information collected, we published the first section separately.⁷ Here, we are reporting the findings of the second section, including the practices and fears of COVID-19.

After pretesting, an online link was created using Google-forms and shared with potential participants. Data was analyzed using SPSS (Inc., Chicago, Illinois, USA) version 26.0. Descriptive analysis was done to compute frequency and percentages, while Chi-square

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was applied to assess the association between patients' responses concerning demographic features. The statistical significance was set for all statistical tests at p-value <0.05.

RESULTS

Of the 181 participants, the majority (70%) was aged 50 years or above and 60% were male. Of the total, 41% were suffering from hypertension, followed by 19%

with mental health issues, 17% with diabetes mellitus, and 23% with two or more co-morbidities. Around 45.3% had good self-reported overall health. The participants were well aware of COVID-19 infection, especially about the mode of transmission (96%) and the association of chronic diseases with disease severity (82%).

Table 1: Demographic characteristics and knowledge score of chronic disease patients towards COVID-19

Characteristics	Total n (%)	Practices			Fears	
		Visited crowded place n (%)	Wear mask before leaving home n (%)	Frequent hand washing n (%)	Emergency care n (%)	Severe COVID-19 infection n (%)
Age						
Young	127 (70.2)	18(14.2)	117 (92.1)**	85(66.9)	74(58.3)	92(72.4)
Elderly	54 (29.8)	10(18.5)	54(100)**	37(68.5)	27(50)	39(72.2)
Gender						
Female	72 (39.8)	6(8.3)**	69(95.8)	49(68.1)	44(61.1)	46(63.9)**
Male	109 (60.2)	22(20.2)**	102(93.6)	73(67)	57(52.3)	85(78.0)**
Education						
≤ 12 years of schooling	25 (13.8)	5(20)	24(96)	19(76)	10(40)	15(60)
Graduate or postgraduate	156 (86.2)	23(14.7)	147(94.2)	103(66)	91(58.3)	116(74.4)
Occupation						
Unemployed	98 (54.1)	14(14.3)	92(93.9)	68(69.4)	53(54.1)	63(64.3)**
Employed	83 (45.9)	14(16.9)	79(95.2)	54(65.1)	48(57.8)	68(81.9)**
Marital status						
Unmarried	62 (34.3)	7(11.3)	55(88.7)**	41(66.1)	39(62.9)	38(61.3)**
Married	119 (65.7)	21(17.6)	116(97.5)**	81(68.1)	62(52.1)	93(78.2)
Chronic condition						
Diabetes mellitus	30 (16.6)	6(20)	29(96.7)	20(66.7)	17(56.7)	24(80)**
Hypertension	75 (41.4)	11(14.7)	69(92)	56(74.7)	37(49.3)	52(69.3)**
Mental health issue	35 (9.3)	5(14.3)	33(94.3)	18(51.4)	23(65.7)	20(57.1)**
Two or more co-morbidities	41(22.7)	6(14.6)	40(97.6)	28(68.3)	24(58.5)	35(85.4)**

** Significant difference

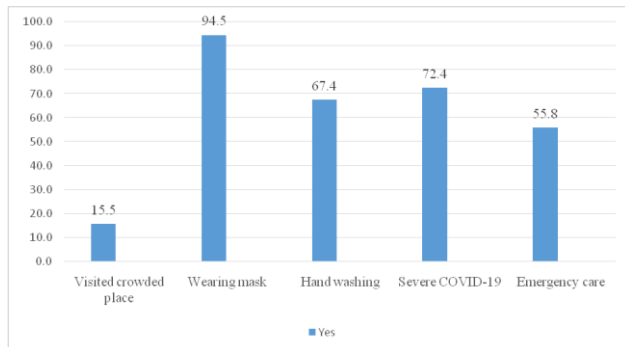


Figure 1: Practices and fears of patients with chronic diseases related to COVID-19

We assessed practices using three questions: visiting crowded places, wearing a mask before leaving home, and frequent hand washing after issuing guidelines to avert infection (Figure 1). A vast majority (84.5%) did not visit crowded places. In examining the association between demographic characteristics and visiting crowded places, a significant association was observed among gender only. The male participants

were more reluctant to visit crowded places than the female patients. Similarly, a large number of the participants (94.5%) wore a mask before leaving home, which was found to be associated with age groups, and marital status. Elderly and married people were shown a higher percentage in wearing a mask before leaving home than youngsters and unmarried persons. When asked about hand hygiene, almost one-third of participants (32.6%) reported not washing their hands frequently. However, there was no significant association between demographic features and frequent hand washing (Table 1).

Participants were asked two questions to assess the fear related to COVID-19. The first question was whether they felt fear due to the association of severe COVID-19 infection with the underlying condition. More than two-thirds of the participants (72.4%) reported fear, which was significantly high among married males and those with two or more co-morbidities. Similarly, they were asked whether or not they worried about emergency care for their existing

disease due to overburdening of the healthcare system and the closure of routine hospital services. More than half (55.8%) were worried about their emergency care for the existing condition (Figure 1). However, no significant difference was observed for various demographic features (Table1).

DISCUSSION

The COVID-19 pandemic has unprecedented socioeconomic effects and has affected the healthcare delivery system.⁶ Patients with chronic diseases have a dual challenge to maintain their existing condition and face an increased risk of severe COVID-19 infection due to the underlying condition resulting in extra care and increased psychological stress. There has been sufficient published data on population knowledge, attitudes, and practices toward COVID-19, but limited information is available about the practices and fears of patients with chronic diseases. The current study explored the practices and fears among patients with chronic diseases.

As no treatment is available, prevention is the best strategy and could be achieved by practicing the standard guidelines to avoid infection. It is truer for patients with chronic diseases due to the increased severity risk. Almost 95% of the participants wore a mask before leaving home, and 85% did not visit crowded places indicating a high prevalence of these two practices. However, these findings are inconsistent with a previous study in which only 36.6% and 38.1% of patients with chronic diseases reported wearing a mask before leaving home and avoiding crowded places, respectively.⁸ It was noted that the practices of patients with chronic diseases, including wearing masks and avoiding crowded places, were almost similar to those of the general population.⁹ Frequent hand washing is a very important practice to avoid infection. We observed that one-third (32.6%) did not wash their hands frequently. These findings are almost similar to the previous report about practices of chronic patients, where 65.5% of participants were washing their hands.⁸ However, frequent hand washing was more, i.e., 85% in the general population.¹⁰

Fear is an adaptive response and might become chronic and burdensome. It is prevalent when the danger is continuous and uncertain. The COVID-19 pandemic has affected the normal living, health and resulted in various psychological impacts.¹¹ In the current study, a large proportion felt personally afraid due to the increased risk of severe COVID-19 infection

and the unavailability of emergency care for the existing condition.

These findings are consistent with previous reports indicating the impact of COVID-19-related stress on the mental health of patients suffering from various comorbidities.¹² Therefore, it is important to devise some strategy to minimize the impact of these fears on the mental health of these patients and provide psychological interventions to fulfill the need of the population.¹³

Besides, chronic patients need to be educated about the level of risk and management plan for their existing condition. This might help in averting unnecessary fears and would improve their health.

Though this study provides new insight into the impact of COVID-19 on the well-being of chronic patients, the current study has some limitations, like small sample size and collection of data through social media platforms. As a result, the possibility of biased opinions may exist.

CONCLUSION

This study suggests that patients with chronic diseases were following standard practices but had fear which might affect their mental health. Therefore, this aspect should be considered as part of the health impact of COVID-19 and addressed accordingly.

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