

Original Article

A Population Based Study on the Healthcare Seeking Behaviour During the COVID-19 Outbreak

Abdul Rehman Arshad¹, Imtiaz Bashir¹, Ahmad Tariq², Farhat Ijaz^{1*}, Rana Khurram Aftab³, Omair Farooq³

¹CMH Lahore Medical College and Institute of Dentistry (NUMS), Lahore, Pakistan

²Punjab Institute of Cardiology, Lahore, Pakistan.

³Akhtar Saeed Medical and Dental College, Lahore, Pakistan

* *Corresponding authors:* Dr. Farhat Ijaz, MBBS, MPhil. Assistant Professor, Department of Physiology, CMH Lahore Medical College and Institute of Dentistry, Lahore, Pakistan. Email: farhat_khurram_rana@cmhlahore.edu.pk

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ABSTRACT

Amidst a time when there is the global pandemic of COVID-19 and high levels of stress and anxiety among people, it was pertinent to study if people have modified their health-seeking behavior. A questionnaire-based cross-sectional study was performed in Lahore to assess the change in behaviors of people before and during the pandemic. The results show that the health seeking behavior of the people has changed during the pandemic, resulting in an increased trend of self-medication and a decreased number of people visiting the hospital for their ailments. People preferred private health providers over the government facilities. This might be due to the misinformation, panic, and uncertainties spread by the social media. Governmental health care providers should consider these aspects while addressing the policies related to the pandemic.

Abbreviations

Combined Military Hospital Lahore Medical College and institute of Dentistry (CMH LMD & IOD); Bachelor of Medicine, Bachelor of Surgery (MBBS); National University of Medical Sciences (NUMS); Coronavirus Disease 2019 (COVID-19); World Health Organization (WHO); Statistical Package for the Social Sciences (SPSS).

Keywords: COVID-19, Health Seeking Behavior, Pandemic, Coronavirus.

INTRODUCTION

Healthcare seeking behaviour is defined as any action undertaken by individuals who perceive themselves to have a health problem or to be ill, for the purpose of finding an appropriate remedy¹. Amidst a time when there is the global pandemic of Coronavirus Disease 2019 (COVID-19), and high levels of stress and anxiety among people, it is pertinent that we study if people have modified their health-seeking behavior.

As of the 15th of November 2020, there are 55,116,072 active cases of coronavirus infections in the world. The World Health Organization (WHO) officially declared COVID-19 as a global pandemic on the 11th of March 2020². Since then, there have been multiple avenues of media advertising precautionary health measures in the light of public service messages. And while the incidence of hand-washing has been reported to increase in previous pandemics, such as with the 2009 H1N1 Influenza virus³, such public service messages have led to an increase in practice of precautionary measures by a much greater percentage during the COVID-19 pandemic, including Pakistan, with up to 88.1% of

people reporting washing their hands for a period of 20 seconds or more⁴. Such an increase in precautionary measures has been positively correlated with an increased risk perception of the virus⁵. However increased risk perception has been warranted to cause fear and an overly pessimistic feeling in the perception of the risk⁶, which may in the future lead to individuals nullifying the validity of communications⁷. This has been postulated to be

due to the sheer amount of information readily available by the media⁶, the contents of which are presented rather objectively, and out of context, left merely for interpretation by the public⁸. This could be why, even though precautionary measures reported increased during previous pandemics, healthcare seeking behavior was still found to be not significantly higher in both developed and developing countries, as compared to the non-

Table 1. Demographic and socio-economic status of the participants

Variable	Percentage
Age	
5-12 years	1.2%
12-18 years	5.3%
18-30 years	45.7%
30-60 years	37.4%
>60 years	10.5%
Gender	
Male	61%
Female	39%
Marital Status	
Single	47.3%
Married	52.7%
Residence	
Village	23.1%
City	76.9%
Education	
Primary	2.2%
Middle	6.3%
Matric	18.8%
Intermediate	22.8%
Undergraduate	22.4%
Graduate	14.3%
Masters	5.8%
MPhil	4.2%
PhD	2%
Others	1.2%
Monthly Income (PKR)	
Less than or equal to 25000 (=/ \leq \$156)	19%
25000-50000 (\$156-\$312)	34.8%
50000 – 100000 (\$312-\$624)	31.2%
>100000 (>\$624)	10.5%
None (\$0)	4.5%
Economic Class	
Lower Class	2.8%
Middle Class	55.3%
Upper Middle Class	31.3%
Upper Class	2.8%

pandemic times^{3,9}.

There has been only sparse research on this topic in Pakistan and other countries, with the vast majority not considering the various determinants of healthcare seeking, instead the decision being strongly affected by sociocultural and religious influences¹⁰, with a common theme of people afflicted by poverty and living in rural areas being deterred from seeking healthcare^{11,12}, having poor adherence to medical treatment¹³, delaying treatment seeking¹⁴, and an overall adherent practice to consulting faith healers¹⁴. This by itself warrants more attention and study, let alone the existence of a global pandemic. Thus, our study attempts to compare and contrast the health-seeking behavior of the general population before and during the

COVID-19 pandemic (Table 1 and Table 2). Our study will be helpful in the development of health-related policies and educational courses by the government, also giving a new threshold for future studies on the similar subject. Our results can also be helpful in the planning of health-related guidelines and policies by concerned departments.

METHODS

This cross-sectional study was performed in Lahore, Pakistan, during the month of June of 2020. Pre-tested designed questionnaire in English from another study¹⁵ is utilized after seeking permission from the original author. In lieu of social distancing and safety measures due to the COVID-19 virus the

Table 2. Health Seeking Behavior of the participants before and during the pandemic

Variable	Before the Pandemic (%)	During the Pandemic (%)
Disease		
Pneumonia	4%	1.2%
Malaria	6.4%	5.4%
Diabetes (Hypoglycemia)	14.5%	5.8%
Angina	10%	8%
Diarrhea	6.6%	11.6%
Cholera	5%	8.8%
Fever	18.9%	10%
Cough	6.2%	0.2%
Allergy	6.8%	10.2%
Infection	6.6%	4.8%
Others	15%	34%
Severity of the Disease		
Mild	63.5%	70.3%
Severe	36.5%	29.7%
Self-Medication		
Yes	14.1%	24.6%
No	85.9%	76.4%
Healthcare Sought		
Local Clinic Visit	23.6%	35.6%
Hospital Visit	27.3%	12.8%
Hospitalization	18.2%	13.7%
Private Health Care Provider	18.4%	19.5%
Medical Store	0.4%	10.0%
Traditional Healers	3.3%	4.4%
Village Health Volunteers	8.8%	5%
Tests Done		
Yes	69%	55%
No	31%	45%

questionnaires were distributed online via a 'Google Form'. With a confidence level of 95% on a population size of 11.3 million and 5% margin of error, the sample size was calculated based on the central limit theorem to be 377. Everyone who was a citizen of Lahore and had a history of illness in the past four weeks, as well as the past year, was included in our study. Because it is an online questionnaire, and signatures cannot be obtained, participants were asked on the first page if they wish to consent to the study or not. Complete anonymity of the participants is assured before asking for their consent in the study. Also, a brief summary of the study is provided on each questionnaire to confirm and inform participants of what they are contributing towards. No personal questions are included that could reveal the identity of the participant. There are no risks to participants for participation in this study. The data was analyzed by using the SPSS 25.0 software. Data is presented in the form of frequency and percentages. Chi Square test was applied wherever required to find out the correlation between two variables and a p value less than 0.05 is considered significant.

RESULTS AND DISCUSSION

This descriptive study unveils the prevalence of various diseases within the past one year and describes the health seeking behavior of the people before and during the COVID-19 pandemic. With the onset of this pandemic, several governmental and non-governmental efforts were made to increase public awareness about the disease. Studies performed on the knowledge, attitude, and practices of people regarding coronavirus in the early days of the pandemic have shown a satisfactory level of knowledge and positive attitude of people^{16,17}. However, with the progress of this disease, whose various attributes remain yet unexplained, a plethora of misinformation on various social media platforms has ensued. There is a surge of rumors, hoaxes and misinformation, regarding the etiology, outcome, prevention and cure of the disease. This misinformation is masking healthy behaviors and promoting erroneous practices that increase the spread of virus and ultimately result in poor physical and mental health outcomes among individuals¹⁹.

Keeping in view the above points, we can explain our results. Our results show the share change in the health seeking behaviors of the people

before and during the pandemic. The trend of self-medication has risen during the pandemic (10% increase). Self-medication is a two-edged sword. It has both merits and demerits. Although self-medication during pandemic helps checking the spread of disease, it is also associated with higher risks of adverse effects of drugs, overdosage, misdiagnosis, drug interactions and polypharmacy¹⁹.

The percentage of people visiting the government hospitals has been reduced to more than half (27.3% to 12.8%). This can be in part due to certain irrational fears that people have related to the governmental hospitals, from the quality of the medical act to extreme, unfounded beliefs that the hospital may want to harm the patients in order to reduce the burden of patients in hospitals. A decreased trend to visit hospitals during the pandemic is also described in a study performed in the USA²⁰. Other reasons for this change in behavior include increased precautionary measures, and strictness during the lockdown.

Like every study, our study is also not free of limitations. There might be errors due to the improper or careless filling of the questionnaires by the respondents or due to self-concealing of information regarding their diseased state. A large-scale survey considering the reasons for changed health seeking behaviors during the pandemic should be performed.

CONCLUSION

Health seeking behavior of the people has changed during the pandemic resulting in an increased trend of self-medication and a decreased number of people visiting the hospitals for their ailments. People preferred private health providers over the government facilities. This might be due to the misinformation, panic, and uncertainties spread by the social media. Governmental healthcare providers should consider these aspects while addressing the polices related to the pandemic.

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Conflict of Interest

The authors declare no conflict of interest.

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