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BARRIERS IN ACCESSING ORAL HEALTH CARE SERVICES AMONG GENERAL PUBLIC DURING COVID-19 PANDEMIC: A QUESTIONNAIRE-BASED STUDY

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ABSTRACT

Objective: To Evaluate the Barriers in Accessing Oral Health Care Services among General Public during Covid-19 Pandemic.

Material and Methods: This was a questionnaire based cross sectional study. Data on barriers for utilization of dental services were collected by means of Self-administrated close ended questionnaire, distributed electronically through Google docs and dispersed through social media by taking the informed consent from the participants. Questionnaire contains two parts. The first part addressed the following aspects: Socio demographic characteristics such as age, gender, level of education, income and occupation. In the second part of the questionnaire, subjects were asked about barriers for utilization of dental services. Data analysis was done using SPSS version-26.

Results:

This study was done among 250 participants. The mean age of the participants was 24.04± 5.328 years. Females were 54% and males were 46%. The majority of population (72%) faced the barriers during Covid-19 pandemic. The responses for Unavailability of Dental Services as yes were 69%, for Transport barriers as yes were 79%, Financial crises as yes were 75%, Appointments by Dental Doctors as yes were 71%.

Conclusion: It was concluded that the most common barriers during Covid-19 pandemic were found as fear of transmission, financial crisis, lack of transport, unavailability of dental services and appointments by dental doctors.

Keywords: Barriers, Health facility, Oral care, Viral diseases, Covid-19.

Introduction

Disease outbreak due to novel pathogens is a global challenge to public health. Covid-19 is an infectious disease caused by (SARS-COV-2). Coronaviruses are a class of pathogens responsible for repeated disease outbreak in recent past[1]. During Covid-19 pandemic there was a significant negative impact on delivery of dental healthcare services[2]. Majority of the general public faced a lot of barriers that they confront during the Covid-19 pandemic like people's fear of Covid-19 because of its rapid transmission and financial crisis to get dental health services were observed to be major barriers in accessing oral health care services[3]. Dental patients are expected to seek care; they are the most suitable to express opinions about the barriers, they confront during the process of seeking oral care, especially when visiting dental health care centers[4,5]. In developing countries, access to dental care services is limited as compared to developed countries[6]. Oral health has great importance and impact on the general health of an individual. As oral diseases are increasingly prevalent, therefore, appropriate services at the right place and at right time ensure prevention, early intervention and avoid complications[7]. Identifying barriers is one of crucial and utmost important step that will help to understand patient compliance and role of dentist[8]. To promote oral health, prioritizing these access programs is necessary[9]. Identifying barriers is one of crucial and utmost important step that will help to understand patient compliance and role of dentist[10].

There is considerable lack of evidence in Pakistan so this study is novel, as no other investigations have been conducted in the population of north Sindh to identify the various barriers of dental care utilization during this pandemic. The main source of information regarding perceptions on barriers is the dental patients themselves. This study aims at assessing the barriers in accessing oral health care services among the general public during a Covid-19 pandemic. This study tries to identify the Covid-19 pandemic's influence on patients' utilization of dental services and also to find solution in order to cope, abolish, and solve such barriers in accessing oral Health care services among general public in case if pandemic situation arises in future.

Materials and Methods

After Ethical approval from the Ethical Review Committee of the University this descriptive cross-sectional study was performed among the population of Larkana, Sukkur, Khairpur and Shikarpur. Data were collected from 250 individuals who were selected through Non-Probability convenient technique. Study duration was one month from 14th March to 14th April 2022. Inclusion criteria were both gender and adult patients aged 18-70 years. Exclusion Criteria was unwillingness to participate in the

study. Data on barriers for utilization of dental services were collected by means of Self-administrated close ended questionnaire, distributed electronically through Google docs and dispersed through social media by taking the informed consent from the participants. Questionnaire contains two parts. The first part addressed the following aspects: Socio demographic characteristics such as age, gender, marital status, level of education, income and occupation. In the second part of the questionnaire, subjects were asked about barriers for utilization of dental services.

Data collection Procedure: The informed consent was taken from the participants. Self-administrated close ended questionnaire was distributed electronically through Google docs and dispersed through social media. The purpose of the study was explained and cooperation requested to fill the form.

Statistical Analysis: Data analysis was done using SPSS version-26. Descriptive statistics was used for data analysis. The categorical variables like gender, level of education, occupation, and questionnaire based variable were calculated as frequency and percentage. The continuous variables like age were calculated as mean and standard deviation.

Results

This study was done among 250 participants. The mean age of the participants was 24.04± 5.328 years and the age range was 18-70 year. There were more females (54%) than males (46%). The majority (81%) of population responded by students followed by employees. Responses for level of education were graduates (62%), intermediate (25%) as shown in Table-1.

The majority of population (72%) faced the barriers during Covid-19 pandemic (Figure 1)

49.6% of respondents strongly agreed that the major barrier in accessing oral health care services during Covid-19 pandemic was fear of getting Covid-19 transmission. (Figure-2).

The responses for Unavailability of Dental Services as yes were 69%, for Transport barriers as yes were 79%, financial crises as yes were 75%, Appointments by Dental Doctors as yes were 71% (Table 2).

Table 1: Descriptive statistics of demographic characteristics

Characteristics	Frequency	Percent
Gender		
Male	116	46.4
Female	134	53.6
Age		
Mean Age	24.04± 5.328	
Occupation		
Business man	9	3.6
Student	204	81.6
Employee	24	9.6
Un-employed	13	5.2
Level of Education		
Secondary	10	4.0
Intermediate	62	24.8
Graduation	156	62.4
Post-Graduation	22	8.8

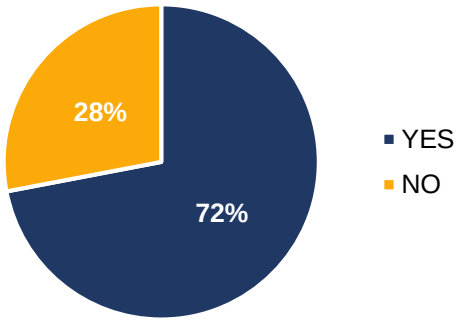

Figure 1: Descriptive statistics of barriers faced during Covid-19 pandemic

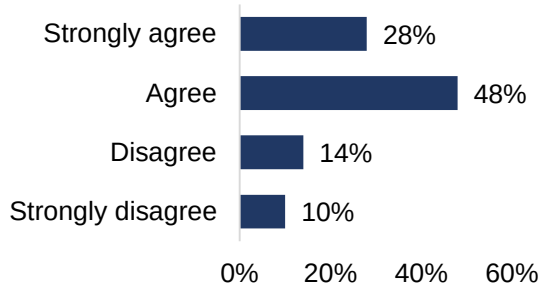

Figure 2: Descriptive statistics of barriers faced during Covid-19 pandemic

Table 2: Descriptive statistics of respondents for barriers of oral health care services

Characteristics	Frequency	Percent
Unavailability of Dental Services		
Yes	172	68.8
No	78	31.2
Transport barriers		
Yes	196	78.4
No	54	21.6
Financial crises		
Yes	188	75.2
No	62	24.8
Appointments by Dental Doctors		
Yes	177	70.8
No	73	29.2

Discussion

As dental health is related directly and indirectly to systemic health, it is crucial to consider the barriers which prevent population to access dental health care services[11]. These barriers are considered as a psycho-social factor when viewed as a two person-framework therefore a good dentist-patient relationship is very important, as it affects the barriers to accessing dental health care services[12]. There were not many studies carried out on the barriers of dental care utilization during the pandemic[13].

Studies on barriers for utilization of dental services provide a basis for formulation and execution of oral health promotion programs[14]. The findings of this study was based on gender, age, occupation , level of education, patient related factors such as fear of transmission of Covid-19, Transport barriers, financial crisis, lack of awareness and dental related factors such as Unavailability of Dental Services and unavailability of dental appointments. In our study barriers were identified from patient's point of view.

Our study had shown that, due to lack of dental problems, (28%) respondents did not plan a visit to a dentist; this suggests that there is lack of awareness and knowledge about regular visits to a dentist and the maintenance of good oral health respectively which is in agreement with the study of Ajayi et al[15]. One of the important findings received from the population of Larkana, Sukkur, Khairpur and Shikarpur reported the reason for

not visiting a dentist was not having pain, indicating the low felt need of the people which is comparable with the findings of Fotedar et al[16]. This can be attributed that they believe that dental diseases are not serious

Fear of transmission of Covid-19 was reported higher than the study results of Shanthi Vanka et al[17] who reported 58%[13]. The fear can be overcome by taking the proper precautions of infection control. The results of our study showed that financial crisis was identified as the 2nd most important barrier preventing access to dental health care services. This finding is not in agreement with that of Wardah et al[14]. This could be due to enormously high poverty status and lack of private dental insurance available and the majority of the people are unable to pay for dental health care in Pakistan. However, studies stated that the financial contribution from the government to patients may lead to a decrease in necessary visits in the hospital emergency Department[17,18]. A study conducted in Tehran showed that the financial crisis is one of the major factors in accessing the dental care due to insignificant insurance status[19].

A major barrier that is worth discussing in our study is the unavailability of transport. Most of our patients indicated that they have no any type of transport facility by government of Pakistan due to lockdown. This finding is comparable with the study conducted in Ibadan, South West Nigeria [19], in which they found the same barrier of transport problem for not seeking dental care.

In our study many people faced barrier of closure of dental OPDs and lack of dental appointments in public and private clinic that was responded as higher than the study results of Vanka S et al [15]. It may due to smart lockdown implemented by government and dentist's fear of getting Covid-19. The barrier of inadequate dental Services was found to be high in this study which is not in agreement with the finding of Wardah et al [13]. This could be due to the difference of urban and rural areas.

Conclusion

The most common barriers during Covid-19 pandemic were found as fear of transmission, financial crisis, lack of transport, unavailability of dental services and appointments by dental doctors. Dental health care system has been compromised during Covid-19 pandemic. Dental health education has to be imparted to the general public by dental health care practitioners and specialized institutes, to remove the barriers that patients face. The patients who fear to approach a dentist with afraid of transmission of Covid-19, must be explained about all precautions that they need to take before visiting dental practitioners. The stake holders should plan for removing the barriers. Preventive measures should be taken to tackle such barriers in accessing oral health care in case if pandemic situation arises in future.

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