

FACTORS THAT LIMIT ACCESS TO DENTAL CARE FOR PERSON WITH DISABILITIES

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ABSTRACT

Objective: To assess the perceived barriers to oral health care for persons with disabilities living in Islamabad.

Study Design: Cross-sectional study.

Place and Duration of Study: Study was conducted at general community organizations in Islamabad providing services to Persons with Disabilities (PWDs) from Jan 2013 to Jun 2013 over a period of 6 months.

Material and Methods: A total of 500 persons with disability who were dependent on someone to reach dental facilities were included in the study while those who were not dependent on someone were excluded from the study. A 12-item self-administered questionnaire was used. Patient's demographic data, type of disability and barriers to oral health care were recorded. Finally data was analyzed by using SPSS version 20.

Results: Out of 400 respondents the most common disability was physical impairment (33.25%) followed by visual impairment (20.75%) and polio (14.75%). The major barriers to oral health care were transportation difficulty (48%) followed by high cost of dental treatment (39.5%) and inability to sit on dental chair /co-operate with dentist (31.25%).

Conclusion: Significant barriers exist that limit the access to dental care for Person with Disabilities (PWDs).

Keywords: Barriers, Disability, Oral health.

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INTRODUCTION

Disability is an umbrella term; covering impairments, activity limitations, and participation restrictions¹. There are various types of disabilities including physical impairment by birth like muscular dystrophy or due to some disease like polio. Social model explains disability as functional limitations experienced by a person due to environmental and social barriers². The disability rate of Pakistan is 2.65% during year 2012 in Islamabad in 2012 approximately 16,352 people had disability, the most commonly reported disabilities in Islamabad were crippled (29.89%), insane (12.4%), deaf/mute (12.0%)³. Increase in growth rate, population and increased life expectancy is responsible for augmenting disable population each year. This signifies the need for good oral health provision

to disable population.

Most of the people with disability live with their parents /guardians and are dependent on family members for their health care needs, due to stomatognathic apparatus dysfunction. Hence majority of PWDs neglect their oral hygiene⁴. Dental health care accessibility means the availability of dental health care services⁵. Studies have shown that majority of disable population have poor oral and periodontal health⁶. Oral health care needs of people with disability are not addressed⁷. Access to oral health care is the right of every human being including the disabled population⁸.

Oral health holds vital importance for general well-being and health⁹. Significant association between chronic oral inflammation and general health is established¹⁰. Poor oral health is a known precipitating factor for serious health conditions like aspiration pneumonia, malnutrition, heart disease¹¹. Wide differences in oral health status exist among different social

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groups¹². Disabled population experience barriers in availing the basic human rights¹³.

This study aims to assess the barriers to oral health care perceived by the person with disability living in Islamabad and to determine if persons with disabilities believe that oral health care is important for general wellbeing. The knowledge of perceived barriers will be helpful in eliminating the hurdles to good oral health care of disabled population.

MATERIAL AND METHODS

A cross-sectional study comprising of 12-item self-administered questionnaire was distributed to the community organizations working for the disabled population in Islamabad over a period of 6 months. The questionnaire was used assess the barriers to oral health care, dental health care facilities in the community and past dental experience. The questionnaire was printed in both English and Urdu language and distributed to the community organizations

themselves or with the help of their attendant fill out the questionnaire and the only exclusion criteria was that if the person or his attendant could not fill the questionnaire. (Ethical approval was obtained from Armed Forces Institute of Dentistry (AFID)).

A non-probability consecutive sampling technique was employed. The questionnaire was filled by the disable persons or in case of severe disability involving difficulty to write it was filled by the personnel attendant after getting views from disabled person. A total of 500 questionnaires were distributed on voluntary basis to multiple organizations and 400 were returned. The organizations directly distributed the questionnaire to the disabled population.

The 400 returned questionnaires were entered and analyzed in Statistical Package for Social Sciences (SPSS) 20.0 database. Data analysis comprised of simple frequencies and percentages

Table-1: Major perceived barriers to oral health care facilities.

Barriers	Percentage
Transportation difficulty	192 (48%)
Dental clinic is difficult to access/poor parking	158 (39.5%)
Dental clinic is too far away	158 (39.5%)
Cost financial difficulty	158 (39.5%)
Unable to sit on dental chair /co-operate with dentist	125 (31.25%)
Dentist unwilling to treat because of inadequate training in treating disable patients	109 (27.25%)
No time	100 (25%)
Afraid of Dentist	58 (14.5%)
Dentist unwilling to treat because of inadequate facilities	41 (10.25%)
Dental treatment not important	41 (10.25%)
Nothing wrong with teeth	35 (8.75%)

working for the rights of disabled population in Islamabad. Along with that the questionnaire was distributed on various Disability awareness seminars and conferences including the World Disability Day. Inclusion criteria for this study was both males and females of age 15-90 years with a disability living in Islamabad who could

RESULTS

Out of 400 returned questionnaires 81.25% (n=325) were male and 18.75% (n=75) were female. 77% (n=308) of the individuals were in the 15-30 age group category while 13% (n=52) in 31-45 years, 8% (n=32) in 46-60 years and 2% (n=8) were in 61-90 years age group. The most

common disability among the respondents were Physical impairment 33.25% (n=133), Visual impairment 20.75%(n=83), Polio 14.75%(n=59) (fig-1).

The Persons with Disability (PWD) living with parents/guardian constituted 85.25 % (n=341), whereas only 10.5% (n=42) were living independently and 4.25% (n=17) were living in home group. The persons who believed that dental health care facilities were available in their community comprised 73% (n=292) whereas 27% (n=108) had no dental health care facility. Only 43.75% (n=175) persons believed that at present they required any sort of dental treatment where as 56.25% (n=225) did not require any dental treatment.

Regarding past dental treatment, only 56.25% (n=225) had received any form of dental treatment; where as 43.75% (n=175) never visited the dentist. Among those who had received

also comprised 50% (n=200) of respondents. Among the disabled people, those who visited dentist in private dental clinic were 64.5% (n=258) whereas only 35.5% (n=142) visited the hospitals for dental care facilities.

In terms of accessibility to dental care facilities, the majority of people 54.25% (n=217) had dental care available within 10 km of their residence, 35.5% (n=142) had within 10-50 km and 10.25% (n=41) had at a distance of more than 50kms, that is, their treating dentist lived at distance outside the city. With respect to the barriers perceived by the disabled population the major barriers comprised of transportation difficulty 48% (n=192), financial difficulty/ dental clinic is too far away/ dental clinic is difficult to access/poor parking 39.5% (n=158), inability to sit on dental chair /co-operate with dentist 31.25% (n=125) (table-1).

With regard to beliefs majority strongly



Figure-1: Frequency of disabilities among people living in Islamabad.

dental treatment in past, only 37.5% (n=150) visited dentist within the last one year whereas 62.5% (n=250) did not visit the dentist in the last one year. 23% (n=92) had a regular dentist and 77% (n=308) did not have a regular dentist. The majority of persons, that is, 60.5% (n=242) visited the dentist in emergency only whereas 39.5% (n=158) visited on their scheduled routine. The persons going to specialist constituted 50% (n=200) where as those going to general dentist

agreed on importance of oral health for general wellbeing and health.

DISCUSSION

The majority (56.25%) of disabled population were able to access dental care in Islamabad, and only 37.5% visited the dentist in last one year. These rates are less than the disabled populations of Ontario, Canada. Many factors are associated with the low accessibility of

dental care. The factors such as dental anxiety, inability to communicate dental pain and tolerate the dental procedures lead to the avoidance behavior of disable population, whereas environmental factors include cost, transportation problems, physical access and dentist related factors².

The majority of disabled persons (85.5%) lived with their parents/guardians and they were dependent on them for their health care needs. Most of the disabled population needed financial as well as physical assistance from other person to avail the oral health care facilities, it is due to this reason that majority of respondents believe that transportation difficulty is the major barrier to oral health care for them. It is difficult to maintain oral hygiene for disabled population due to lack of adequate manual coordination⁷. Whereas difficulty in access to/poor parking and cost factors are the second largest barrier to oral health care facilities, this is followed by inability to sit on dental chair /co-operate with dentist.

Large number of disabled population never visit dentist because of socioeconomic status which determines income of family, parental education and cost of dental treatment¹³.

Belief systems can affect whether individuals seek dental treatment and whether caregivers seek dental treatment for the people for whom they are responsible. Previous studies have shown that when informal caregivers have poor oral health, the people for whom they are responsible are more susceptible to dental neglect^{14,15}. In terms of beliefs, majority of persons (56.25%) strongly agreed that oral health is important for their general body health and well being. This reflects the awareness and significance of oral hygiene among the disabled population. Where as a large group (43.75%) of disabled population never visited the dentist for their oral health care needs in their life time, which is also reflected in the percentage of disabled persons (43.75%) who think that they require dental treatment at the time of filling the

questionnaire. This verifies that significant barriers in accessing oral health care exist.

Transportation difficulty is the important barrier which involve physical barrier in the form of no separate transport facilities for special persons in the city, lack of ramp outside the dental clinic limit the access to dental care facilities of disabled person using wheelchair. Since majority of disabled persons are dependent on their parents / guardian for their needs the cost of dental treatment is also responsible for avoiding adequate dental treatment by dentist. Jongh et al reported that communication problems and non-cooperation are important barriers that lead to low utilization of dental facilities by disabled population¹⁶.

CONCLUSION

Majority of the disabled population in Islamabad is able to access dental health care facilities, where as a large fraction of population has never visited dentist for their needs due to significant barriers. The most common barrier to oral health care needs are environmental followed by the personal factors in the form of fear of dental treatment, unable to cooperate/communicate with dentist.

CONFLICT OF INTEREST

This study has no conflict of interest to declare. Abstract and results of this study were accepted and presented in an oral presentation at the International conference on Medical Education, organised by Association for Excellence in Medical Education (AEME) and held on 07th - 09th March 2014 at University of Health Sciences (UHS) Lahore, Pakistan. No funding was received from any agency or institution.

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