KNOWLEDGE AND PRACTICE ABOUT ORAL HEALTH MAINTENANCE AMONG WOMEN IN SHELTER HOME: A CROSS SECTIONAL STUDY

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ABSTRACT

Objective: *To assess the knowledge about oral hygiene and practice of oral health maintenance among women of shelter home.*

Materials and Methods: *This was a cross-sectional survey using a self-administered structured questionnaire(5) written in English and validated through a pilot study. Data collection was done from women of shelter home in five visits and total duration of study was 6 months (January-June 2021). All the participants were explained the nature and purpose of the study. Total number of 92 Women responded. Data was analyzed by using SPSS version 20.*

Results: *Majority of the participants had knowledge about oral health(99%) knowledge regarding consequences of poor oral hygiene was (90%) and its effect on general health (93%) .knowledge related to inter dental aids was (6.5%). The second section showed oral health behavior and the attitudes of the participants: majority responded to practicing cleaning their teeth (99%), in which only 58% clean once daily and 54% uses tooth paste/brush. About 87% of the respondents had bleeding gums. Similarly 84% had halitosis and experienced symptoms of gingivitis Only 11% of the participants used mouth washes, visiting a dentist when having a problem was 81%. The third section was related to habits / addiction : majority were addicted to tea/coffee 86%, while frequency of intake 2-5 cup daily.*

Conclusion: *Women of shelter home have satisfactory knowledge about oral health but putting it into practice is not optimistic. There is need to improve their oral health through organized efforts and establishing a good oral health care system within the shelter home.*

Keywords: *Oral health. Oral hygiene, Knowledge, Practice, women clients, shelter home,Pakistan*

INTRODUCTION

Oral diseases affect 3.5 billion people worldwide.[1] Reasons of this increasing statistics of oral diseases is lack of oral health care, maintenance of good oral hygiene, early diagnoses and treatments.[2-4] Oral health is an essential component of general health and overall well-being of an individual. Oral health is equally important as our general health.[6] Poor oral hygiene leads to many oral diseases like dental caries, halitosis, periodontal diseases, oral cancers and also linked to diabetes, heart diseases.[7–9] Maintaining good oral health is a lifelong commodity, It is better to adopt good oral hygiene habits as earlier to avoid costly dental procedures and treatments.[6]

According to World Health Organization (WHO) among adult population there is nearly 50% suffer from dental caries, 15% to 20% have periodontal diseases (between the age of 35 to 44) (10). Similarly worldwide 30% (between the age of 65 to 74) are

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edentulous and out of 100,000 people between 1 to 10 cases of oral cancer reported in many countries (WHO). Unfortunately, burden of oral diseases is much higher among disadvantaged population groups (WHO)[6]

However, to have good oral hygiene, knowledge concerning maintenance of oral hygiene is important there are steps to be taken to reduce oral health problems like; brushing teeth with fluoridated toothpaste at least twice a day every day, use of interdental aid (floss/ toothpick) once a daily,[11,12] reduce intake of sugary diets, increase use of fiber diet (fruits & vegetable), avoidance of tobacco products, regular visits to professional dental care.[7]

In Pakistan, nearly one in three married women aged 15-49 reports experiencing physical violence at the hands of their husbands. Panah or shelter homes offers refuge and rehabilitation to women facing domestic abuse.[13] Dental treatment is much needed among domestic violence survivors, given that most women who experience domestic violence have head and neck injuries. In addition to sustaining injuries, domestic violence survivors also may present with oral health problems related to years of lack of dental treatment. Dental neglect—the inability to seek and follow through with treatment necessary to ensure a level of oral health essential for adequate function and freedom from pain and infection—is common in battered women. Survivors of domestic violence may be forced to delay dental care and may be less likely to complete follow-up treatments. Dental caries, periodontal diseases, and other oral conditions if left untreated can lead to pain, infection, and loss of function.[14]

To our knowledge, shelters rarely, if ever, find the means to offer dental care to their clients. Therefore, this study evaluated the knowledge and practice of oral health of women in shelter home of "Shaheed Benazir Bhutto Women Center, Ministry of Human Rights, Islamabad" and provided oral health awareness and needed oral health maintenance techniques.

MATERIALS AND METHODS

Descriptive cross sectional study was conducted on women in shelter home. Data collection was done by convenience sampling. Tool used for data collection was questionnaire this was pre-designed from valid questionnaires from literature (5) prior to data collection a pilot study was done so that any problem in the questionnaire could be resolved. This project was undertaken after approval from the Institutional Research and Ethics committee of Hazrat Bari Sarkar (HBS) Medical and Dental College, Islamabad and consent for data collection was taken from manager of shelter home- "Shaheed Benazir Bhutto Women Center, Ministry of Human Rights, Islamabad". The data collected from the participants was in a process of five (5) visits done by a single dental surgeon who knew English, Urdu and Punjabi, prior to the study the participants were explained the purpose of the research and then were inquired about their oral health knowledge, practices and maintenance. The data was collected in five months . A total of 100 participants were included in the study but only 92 participants showed up when data was collected. Data analysis was done using SPSS version 20. Descriptive analysis was done on all the categorical variables. Frequency and percentages were calculated and presented in figures.

Women of all ages living in the shelter home in reference to domestic or any other violence and consented to be the part of the study were included in the study.

RESULTS

The questionnaire was divided into three sections , section-A was about the "knowledge of oral health importance", Section-B,C evaluated the "practice to maintain oral hygiene & habits" like eating and addictions of participants. The different age groups of participants were 18-19yr, 32–40 years, 44–50 years and 51-60 years. Presented in Figure:1.

Section – A: (Oral Health importance / knowledge)

This section aims to evaluate the knowledge about the importance of oral health, total 9 questions were asked. Question 1, 2 & 3 evaluates the knowledge of clean teeth & halitosis, a total of 88 % had knowledge and 12% were not aware. Moreover, question 8 & 9 interpret the knowledge of interdental

aids and proper cleaning of teeth, only 6.5% knew about interdental while 93% had no idea.

94% of the participants knew how to brush their teeth. Questions related to periodontal diseases were asked ,all the participants had adequate knowledge which is presented in figure 2

Section – B: (Oral hygiene practice)

This section had total of 15 questions which were related to oral hygiene practices of participants. Unfortunately only 6.5% participants used dental floss daily and 82% of the participants never used a mouthwash hence, only 75% had a visit to a dentist. Majority of the participants uses tooth paste and tooth brush (54%) for cleaning teeth , while 23% uses tooth paste and miswak and only 11% use tooth brush & tooth powder. Only 5% use miswak and 2% use Manjan (figure 3).

Questions related to frequency of tooth brushing once daily was 58% (among age group of 32- 40/ 44 - 50) while, twice a day was 27% (between the age of 18 – 35) and only 9% clean their teeth more than twice.(fig 4) .Majority of participants use medium brush i.e. 47% , hard brush 22%, , soft brush 21% and 3.2% participants never noticed type of brush. 27% of participants uses combine and vertical brushing technique. Consequently only 75 participants (75%) visited a dentist in past in which majority consulted the dentist while in problem.

Section- C: Habits

This section investigated any form of dietary or addiction and type of food intake of participants. Majority were addicted to tea/coffee (86%).Only 1% were addicted to smoking .13% of the participants were addicted to betal nut chewing . 44% of participants between the age of 32 t0 55 have higher frequency of intake of tea/ coffee 2 – 5 cup a day. 30% of participants has intake of 6-7 cup a day where as 25% has only 1 cup a day . Majority took sugar in tea /coffee (91%), in which 82% were used 1- 2 tea spoon of sugar per cup. Fiber diet was common among age group of 44yr – 50yr / 51yr – 60yr (65%) while cake/ biscuit/ chocolate was more commonly ate among 18yr – 29yr /32yr – 40yr of age groups (21%).

DISCUSSION

As Pakistan strives to achieve universal health coverage, enhancement in oral health care delivery through the availability of skilled and determined health professional workers is essential.[15,16] The Vision 2030 report identifies challenges that will confront dentistry and the oral health community over the next decade and it proposes strategies for how these can be turned into opportunities to improve oral health, reduce oral health inequalities, and contribute to reducing the global burden of oral diseases.[17]

World dental federation aims to assist the profession in realizing delivery of optimal oral health to all – with no person left behind.[18]

Therefore, health care professionals should work together in order to plan evidence-based oral health promotion policies allowing them to play a role in prevention, early intervention or referral to specialized oral health care services. This study presented a comprehensive overview of oral health KAP of women in shelter home. In this study knowledge and practice of oral health maintenance were evaluated in separate sections. Knowledge related to oral health importance about cleaning of teeth and poor oral hygiene leads to oral diseases

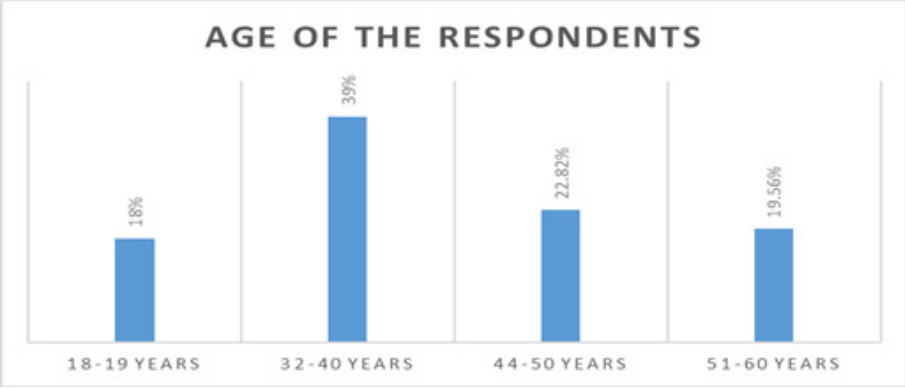

Figure 1: Age of the respondents

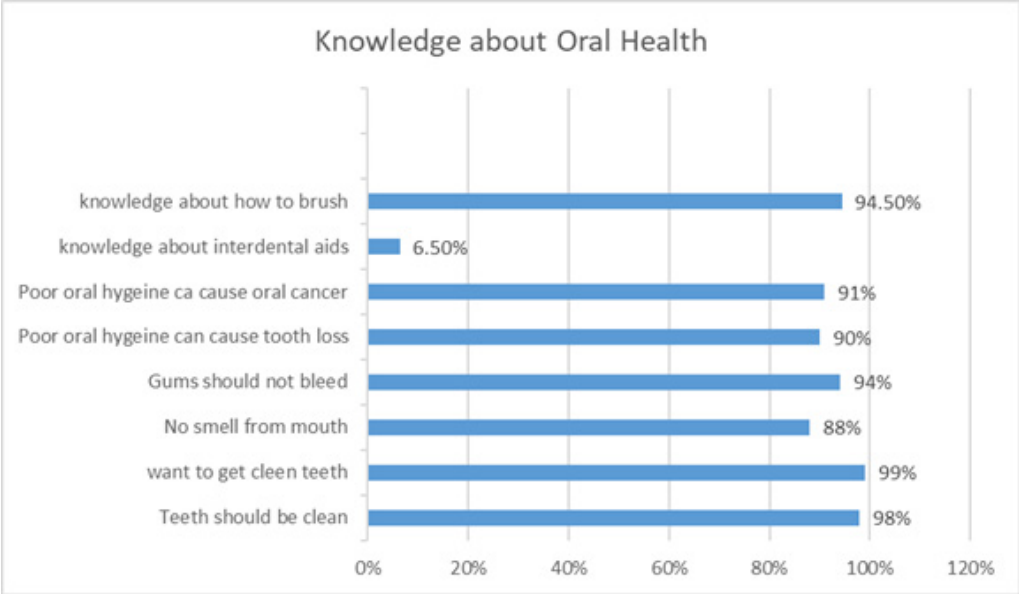

Figure 2: Knowledge about oral Health

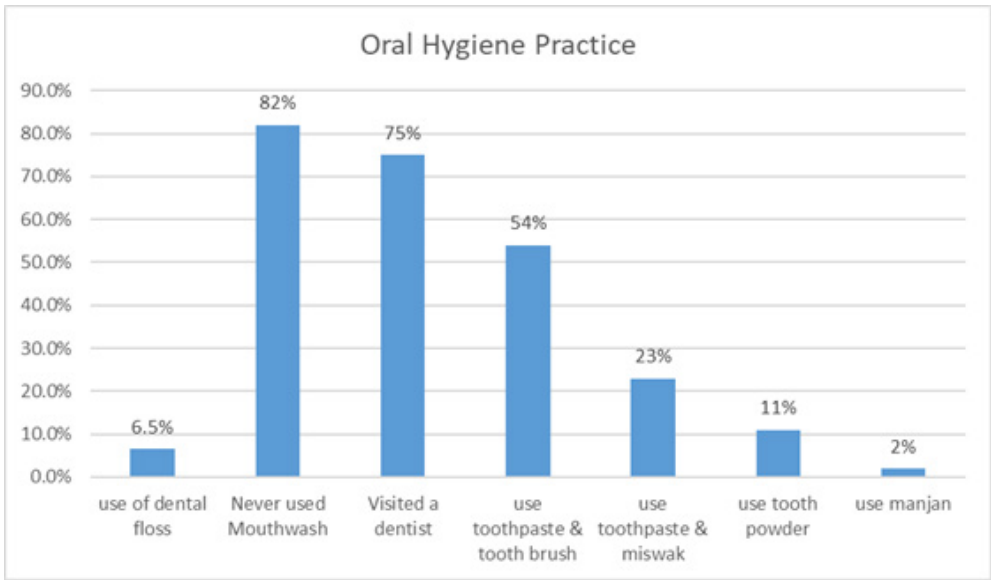

Figure 3 : Oral Hygiene Practices of the Respondents

was (94%) which was adequate among majority of respondents including all ages which was similar to a study done in Germany in refugees.[21] Knowledge regarding the use of inter-dental aid was only 6.5% between the age of 32 to 40 years which was similar to a study done in Hyderabad city, Pakistan.[15] Most of our respondents had a good knowledge of tooth brushing daily but knowledge about tooth floss was very low. Which are similar to results in a done in Manipur, India.[20] Therefore, only tooth-brushing is not sufficient to main oral hygiene. Use of inter-dental aids such as flossing/use of mouth wash if not recognized by participants will influence oral hygiene maintenance which consequently cause oral diseases.Furthermore it was reported by the respondents that 99% had knowledge of cleaning teeth but unfortunately frequency to clean their teeth "once a day" was only 58% which is similar to a study done in refugees in Germany.[21] While periodontal symptom were more common like bleeding gums (87%) and halitosis (84%) and only 86% women visit to dentist when they had a n problem, this too is similar to other studies done in refugees in Germany, Iraq & Pakistani immigrants in Norway.[21–23] This predicts

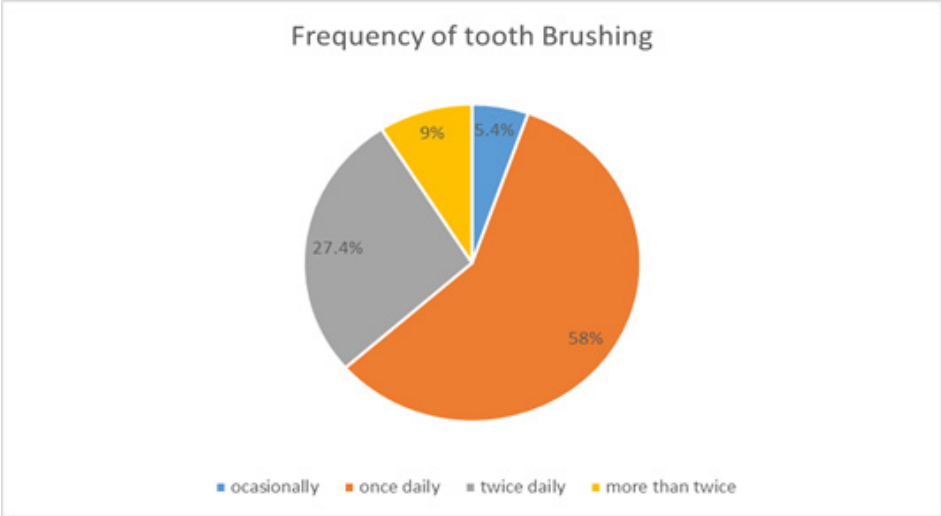

Figure 4 : Frequency of tooth brushing of the respondents

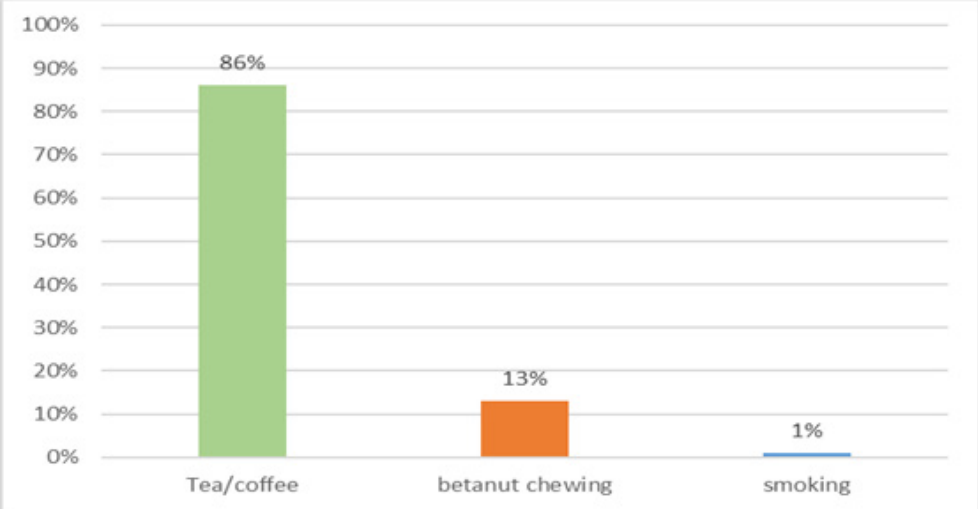

Figure 4: Addiction behaviors of the respondents

that either the respondents did not have knowledge or prioritized their oral health which leads to poor oral health practices or there could be difficulty in accessing oral health facilities due to poor transport system, residing in a rural area, or poor health. Moreover 47% of the participants use medium to hard type of tooth bristles and brushing technique practiced was "combine" and "vertical". which is similar to studies done in newly arrived refugees in Australia homeless in Portugal in different shelter homes[11,24] use of hard bristle tooth brush and vertical technique may cause gingival recession or trauma to gums, the possible cause could be no awareness regarding use of tooth cleaning.

Majority of women were addicted to tea/ coffee (86%), 44% consumed 2 to 5 cups a day which was pretty similar to study done in new Pakistani immigrants in Norway[2–4, 25] Perhaps increased consumption of tea coffee with 2 tea spoon of sugar may increase chance of developing dental caries and tooth staining. Our study reported that 65% of women between the age of 35- 60yrs use fiber diet but on contrary women between the age of 18- 29 yrs frequently used sticky food like cake, chocolate and biscuits which was similarly observed in study done in homeless in Portugal.[24,26] The cause could be as they animate in shelter home with less resources and decrease accessibility of fibrous food the respondents take food which is effortlessly obtainable and leads to oral health problems.

Inhabitants of the shelter homes should be aware about the importance of primary prevention.

The services should be provided on the basis of felt needs of the population so that utilization of dental services can be increased, thereby improving the oral health status of the women in shelter homes. Along with health care clinic a preventive dental clinic is recommended within the shelter home.

CONCLUSIONS

This study concluded that respondents had high knowledge of oral health but poor practices leads to deprived oral hygiene. The results of this study cannot be extrapolated as the sample size was small. Hence, studies exploring the same issue needs to be conducted on larger samples covering different shelter homes in Pakistan There is dire need to educate this population by informing, motivating and acting to improve oral health.

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