Problems Faced by Complete Denture-Wearing Elderly People Living in Jammu District

HARVINDER SINGH¹, SUMEET SHARMA², SARBJEET SINGH³, NIKHIL WAZIR⁴, RAJIV RAINA⁵

ABSTRACT

Context: Poor oral health is increasing dramatically among old people especially those living in rural and remote areas. Various factors such as low education background, low income, poor living conditions, unhealthy lifestyle, inadequate oral hygiene and tobacco use lead to poor oral health among older people which in turn lead to risks to their general health. The older people especially from rural areas are apprehensive about seeing a dentist and do not visit them regularly. This may lead to various problems which may have a detrimental influence on their quality of life.

Aim: To know the problems faced by complete denture wearers in rural areas in Jammu district.

Materials and Methods: Fifty patients from rural area Bishna, initially treated with a complete denture in the maxilla or mandibles were examined. The data were collected with the help of a questionnaire.

Results: The results revealed that majority of respondents were in the age – group of 65-70 y. Majority of respondents complained of "difficulty chewing", "sore spots", "painful and swollen gums". Majority of respondents had difficulty in speech, it was difficult for them to interact and communicate with their dentures on. Most of the respondents had lost confidence and had low self esteem. Clinical observations revealed that the commonest condition associated with denture wearing was Oral Stomatitis/ Burning mouth Syndrome, Superimposed infection and Angular cheilitis.

Conclusion: Older people should Communicate and visit dentists, regularly, so that the dentists can adjust the treatment and pace according to their needs. Behavioural therapy techniques can make dental visits relatively anxiety and painfree.

Keywords: Complete denture wearers, Elderly, Physical problems, Psychological problems, Social problems

INTRODUCTION

The elderly population is continuously increasing and also the problems faced by these people are increasing simultaneously. Older age can bring a variety of dental health problems. When it comes to oral health, many physical and psychological problems may develop. They can include tooth loss due to periodontal breakdown, coronal and root caries, tooth surface loss, cusp fracture, xerostomia, and deterioration in the sense of taste. Oral health is linked to overall health, happiness, and general well-being of the individual. The major block in oral health care of elderly and the residents would be the underestimation of the oral health care need by them.

India is currently home to about 1.19 billion people representing about 17% of the earth's population Over 72% of people live in rural areas (NOHCP). The geriatric population constitutes the major portion of the rural population, about 80% of the elderly resides in rural India, and among them 73% are illiterate and 75% are economically dependent. India is a developing nation where rural agriculture has a tremendous impact on the national economy. The flip side is that the majority of the rural population is below poverty line and resides in remote areas where oral health services are bare minimum or non-existent. The distribution of dentist to meet population requirements is grossly uneven. The need for geriatric oral healthcare will increase several fold in the coming years. To provide quality care, it is important to understand the physical, mental, socioeconomic and family background of the elderly, their chronic illnesses and drug treatment, and age-related disabilities such as poor vision, hearing and locomotor control. Thus, special training in geriatric dentistry is required [1].

Teeth when lost are replaced by dentures which serve as an indispensable part of the patient as it can help him/her in following ways-

- Mastication: as chewing ability is improved by replacing edentulous areas with denture teeth.
- Aesthetics: because the presence of teeth gives a natural appearance to the face, and wearing a denture to replace missing teeth provides support for the lips and cheeks and corrects the collapsed appearance that results from the loss of teeth.
- Pronunciation: because replacing missing teeth, especially the anteriors, enables patients to speak better. There is especially improvement in pronouncing words containing sibilants orfricatives.
- **Self-esteem:** because improved looks and speech boost confidence in the ability to interact socially.

Initially the patients face the problem of excessive salivation in first 12 to 24 hours of wearing dentures as the brain misinterprets it to be food. New dentures can also be the cause of sore spots as they compress the denture bearing soft tissues (mucosa). A few denture adjustments in the days following insertion of the dentures can take care of this problem. Gagging is another problem encountered by a minority of patients. At times, this may be due to a denture that is too loose, too thick or extended too far posteriorly onto the soft palate. At times, gagging may also be attributed to psychological denial of the denture. Psychological gagging is the most difficult to treat since it is out of the dentist's control. In such cases, an implant-supported palateless denture may have to be constructed. Sometimes there could be a gingivitis infection under the completed dentures, caused by the accumulation of dental plaque. One of the most common problems for wearers of new upper complete denture is a loss of taste sensations.

Bekiroglu conducted a study in the district of Uskudar in Istanbul to observe and determine oral complaints of people aged 55 y or

Harvinder Singh et al., Problems Faced by Complete Denture-Wearing Elderly People Living in Jammu City

Physical Problems Faced by Complete Denture Wearers	Male Respondents N= 50		Female Respondents N=50	
	No.	%	No.	%
Difficulty in chewing	31	62	29	58
Sore spots	29	58	34	68
Painful and swollen gums	21	42	26	52
Longer time taken to complete meal	16	32	21	42
Digestive problems	9	18	27	34
Table/Fig-1]: Physical problems faced by complete denture wearers				

Social Problems Faced by Complete Denture Wearers	Male Respondents N= 50		Female Respondents N=50	
	No.	%	No.	%
Difficulty in speech	32	64	30	60
Conscious while Eating	15	30	29	58
Avoid going to parties	14	28	26	52
Avoid leaving home environment	12	24	25	50
Conscious because of Bad breath	10	20	4	8
[Table/Fig-2]: Social problems faced by complete denture wearers				

*multiple choice; N= 100

Psychological Problems Faced by Complete Denture Wearers	Male Respondents N= 50		Female Respondents N=50	
	No.	%	No.	%
Loss of Confidence	26	52	32	64
Low self esteem	22	44	31	62
Psychological gagging	13	26	18	36
[Table/Fig-3]: Psychological problems faced by complete denture wearers "multiple choice: N= 100				

older, living in two nursing homes. The study revealed that Out of a total of 210 residents, 130 (61.9%) took part in the study, of whom 53% (n=71) of residents were living in the private nursing home and 60% (n=81) were female. One hundred and five (80%) were denture wearers. More than half of the residents (59%, n=79) were over 75 y old. Problems were mostly seen in older ages, especially those over 75 y old, over 60% of who reported problems for all the variables listed in the questionnaire. Women were more aware of halitosis than men. The elderly people with dentures, and particularly complete dentures, frequently complain of a wide range of problems including: eating, social interaction and communication and these problems have a detrimental influence on their quality of life [2].

McNaugher GA surveyed 260 people aged 65 y. All participants were subjected to an oral examination. The results showed that complete denture wearers compared had greater experience of difficulties associated with oral health and psychological functioning. Factor analysis allowed the identification of three dimensions associated with psychological, social and self-perceived physical (oral) health. When these factors were regressed with normative denture treatment need against satisfaction with complete dentures, satisfaction was characterised by high self-perceived physical (oral) health, low social health problems and no identifiable normative need [3].

There is a growing recognition of the need to obtain information of oral health of older population since this information affects the estimation of treatment need and is necessary for the future planning of dental services. As very few surveys are done regarding the oral health status among this section, the prevalence of oral and dental problems in them is under a cloud. The older people especially from rural areas are nervous about seeing a dentist and do not visit the dentists regularly. Factors such as a lack of transport facilities and dependency on somebody to accompany an elderly person to the health care facility impede them from accessing the available health services. This may lead to various problems

Clinical Observations	Male Respondents N= 50		Female Respondents N=50	
	No.	%	No.	%
Oral Stomatitis/ Burning mouth Syndrome/mucosal lesions	28	56	21	42
Superimposed infection	22	44	26	52
Angular cheilitis	16	32	19	28
Denture-related hyperplasia	9	18	15	30
Mandibular dysfunction	6	12	17	24
Accumulation of plaque and calculus	10	20	4	8
[Table/Fig-4]: Clinical observation of complete denture wearers N= 100				

which may have a detrimental influence on their quality of life. The present study was thus conducted to know social, physical and psychological problems faced by complete denture wearers in rural area of Jammu District.

MATERIALS AND METHODS

The study was conducted in the rural area of Jammu district, Bishna. A sample of 100 elderly people (50 males and 50 females), wearing complete dentures, was purposively selected for the study. A questionnaire was used to collect information on age, gender, type of family, family income, physical problems, eating, and communication, social and psychological problems. The questions were asked in person by the investigator. The resulting data was analysed qualitatively and quantitatively.

RESULTS

The data was collected to obtain the background about the respondents regarding age, sex, educational qualification, caste status, type of family, occupation and their monthly income. The sample consisted of 100 respondents who were complete denture wearers. Majority (57%) of the respondents were in the age group of 65-70 y, (28%) were over 75y and (15%) were in the age group of 70-75 y and Most (46%) of respondents belonged to forward caste, (32%) belonged to schedule tribe and (22%) belonged to schedule caste. Majority (68%) of respondents belonged to joint families and the rest (32%) lived in nuclear families. About (38%) respondents were farmers, (33%) were labourers, (19%) were in business and (10%) had retired from Government jobs. The monthly income of the families of (37%) of the respondents ranged from Rs.3000–Rs.6000, (47%) ranged from Rs.5000–Rs.8000 and (16%) ranged from Rs.8000–Rs.11000.

[Table/Fig-1] reveals that majority of men (62%), and women (58%), respondents had "difficulty chewing". The other most prevalent problems are also reported.

[Table/Fig-2] shows that majority of respondents (64%) men and (60%) women had difficulty in speech. Most of respondents (30%) men and (58%) women expressed their inability to eat in public, for this reason, (28%) men and (52%) women avoided going to parties. Some (24%) men and (50%) women rarely left their home environment. as the thought of meeting and talking to their friends while not wearing teeth was embarrassing and unsettling. About (20%) men and (8%) women said that it was not easy to clean the dentures, which led to foul smell/bad breath at times, which led to embarrassment.

Majority of the respondents, (52%) men, and (64%), women revealed that they had lost confidence while (44%) men and (62%) women, reported that they suffered from low self esteem. Psychological gagging was reported by (26%) men and (36%) women as shown in [Table/Fig-3].

[Table/Fig-4] demonstrates the common conditions associated with denture wearing.

DISCUSSION

There has been a great recognition of the need to know about the problems related to oral health of older population since it will help in treatment and future planning of dental services. The study sample was selected from rural area and only those people were included in the study who wore complete dentures.

Majority of men (62%), and women (58%), were not able to adapt to their dentures and had difficulty in chewing. The other most prevalent problems reported were, sore spots, swollen gums and low chewing performance, because of this they did not include salads and fruits in their diet. The low intake of fibre in the diet resulted in constipation and other digestive problems. Many of the respondents were apparently eating nothing because of the discomfort. According to a similar study by Aghdaeea, complete denture wearers experienced difficulties with their dentures and most frequently complained of pain and discomfort, difficulty with eating, and looseness of their dentures [4].

Majority of respondents (64%) men and (60%) women had difficulty in speech. They revealed that it was difficult for them to interact and communicate with their dentures on as many a times their dentures have dropped during social contact. Many had stopped visiting and interacting with their friends and relatives as the thought of meeting and talking to their friends while not wearing teeth was embarrassing and unsettling. Moreover some respondents complained that they could not clean the dentures effectively, which led to foul smell/bad breath at times, which led to embarrassment. Ikebe et al., also found that for complete denture wearers the greatest dissatisfaction was with their speech/articulation (28.5%) [5]. Sheiham in a similar study reported that poorly fitting dentures affect the patient's ability to eat satisfactorily, talk clearly, and smile freely. Such kind of problems also leads to low self esteem and loss of confidence among the respondents [6].

The most common condition associated with denture wearers were, Oral Stomatis/ Burning mouth Syndrome/ mucosal lesions, superimposed infection and Angular cheilitis. Avnu, in his study also revealed that the elderly patients suffered from one or more oral mucosal lesions. The results indicated poor dental health of the elderly residents and most of the respondents were not satisfied with their dentures and wanted them changed [7]. In a similar study by Unluer et al., in Ankara, Turkey, clinical examination of elderly showed similar results [8].

CONCLUSION

The results of the study revealed that the complete denture wearers suffer from various physical, social and psychological problems. These problems have a detrimental effect on their quality of life so in order to increase the confidence and self esteem of the elderly people proper treatment and counseling is needed. Good oral self care and regular dental checkups can lower these problems.

RECOMMENDATIONS

- The government must take account of the needs of older people, and their problems identified in this paper and to promote good oral health and prevent disease must be the focus of care planning for older people.
- Dentists should encourage and support patients in achieving good oral hygiene and give advice on overcoming the obstacles posed by reduced manual dexterity, medication and chronic conditions.
- The older people in hard-to-reach areas are prejudiced against dentists so the dental professionals should see their role as supporting these patients in retaining good oral health rather than as restorers of failing dentition.
- Information on the best ways to encourage self-care amongst older patients should be given through well designed interventions, especially in Rural areas.

REFERENCES

- [1] Editorial-National oral health care programme (NOHCP) implementation strategies. *Indian J Community Med.* 2004;29:1-10.
- [2] Bekiroglu N, Çiftçi A, Bayraktar K, Yavuz A, Kargül B. Oral Complaints of Denture-Wearing Elderly People Living in Two Nursing Homes in Istanbul, Turkey. OHDM. 2012;11(3):107-15.
- [3] McNaugher GA, Benington IC, Freeman R. Assessing expressed need and satisfaction in complete denture wearers. *Gerodontology*. 2001;18(1):51-57.
- [4] Aghdaeea, N.A., Rostamkhanib, F. and Ahmadic, M. Complications of Complete Dentures Made in the Mashhad Dental School. *Journal of Mashhad Dental School, Mashhad University of Medical Sciences*. 2007; Vol.31(Special Issue): 1-3.
- [5] Ikebe K, Nokubi T, Ettinger RL, Namba H, Tanioka N, Iwase K, et al. Dental status and satisfaction with oral function in a sample of community-dwelling elderly people in Japan. Special Care Dentistry. 2002;22:33-40.
- [6] Sheiham A, Croog SH. The psychological impact of dental diseases on individuals and communities. *J Behav Med.* 1981;4:257–72.
- [7] Avcu, N., Ozbek, M, Kurtoglu, D, Kurtoglu, E, Kansu, O, & Kansu, H. Oral findings and health status among hospitalized patients with physical disabilities, aged 60 or above. Archives of Gerontology and Geriatrics. 2005;41(1), 69-79.
- [8] Unluer S, Gökalp S, Doðan BG. Oral health status of the elderly in a residential home in Turkey. *Gerodontology*. 2007;24:22-29.

PARTICULARS OF CONTRIBUTORS:

- 1. Professor, Department of Prosthodontics, Institute of Dental Sciences, Sehora, Jammu, India.
- 2. Reader, Department of Prosthodontics, Institute of Dental Sciences, Sehora, Jammu, India.
- 3. Reader, Department of Oral Medicine & Radiology, Institute of Dental Sciences, Sehora, Jammu, India.
- 4. Professor, Department of Conservative & Endodontic, Institute of Dental Sciences, Sehora, Jammu, India.
- 5. Reader, Department of Prosthodontics, Institute of Dental Sciences, Sehora, Jammu, India.

NAME, ADDRESS, E-MAIL ID OF THE CORRESPONDING AUTHOR: Dr. Harvinder Singh,

Professor, Department of Prosthodontics, Institute of Dental Sciences, Sehora, Jammu-181132, India. Phone : 09622354935, E- mail : harvlobana@yahoo.co.in

FINANCIAL OR OTHER COMPETING INTERESTS: None.

Date of Submission: May 07, 2014 Date of Peer Review: Sep 28, 2014 Date of Acceptance: Oct 13, 2014 Date of Publishing: Dec 05, 2014