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Original Research

Assessment of Problems associated with the complete denture wearing elderly people

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ABSTRACT:

BACKGROUND-The elderly population is continuously increasing and simultaneously the problems faced by these people are increasing. Older age can bring a variety of dental health problems also and when it comes to oral health many physical and psychological problems may develop which include tooth loss due to periodontal breakdown, coronal and root caries, xerostomia, tooth surface loss, cusp fracture and deterioration in the sense of taste. MATERIAL AND METHODS-A sample of 150 elderly people (75 males and 75 females), wearing complete dentures, was purposively selected for the study. A questionnaire was used to collect information related with different variables like age, gender, type of family, family income, physical problems, eating, communication, social and psychological problems. The questions were asked in person by the investigator and the resulting data was analysed qualitatively and quantitatively. RESULTS-majority of respondents men and women had difficulty in speech. Most of respondents men and women expressed their inability to eat in public, for this reason, men and women avoided going to parties. Some men and 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 men and women said that it was not easy to clean the dentures, which led to foul smell/bad breath at times, which led to embarrassment. CONCLUSION-Complete denture wearers suffer from various physical, social and psychological problems. These problems have a effect on their quality of life so in order to increase the confidence of the elderly people, proper treatment and counseling is needed. Good oral self care and regular dental checkups can lower these problems.

KEY WORDS- Periodontal Breakdown, Coronal And Root Caries, Xerostomia, Tooth Surface Loss, Cusp Fracture.

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INTRODUCTION-

Oral health is linked to overall health and general well-being of the individual. In India about 1.19 billion people representing about 17% of the earth's population and over 72% of people live in rural areas. The geriatric population constitutes the major portion of the rural population and about 80% of the elderly resides in rural area and among them 73% are illiterate and 75% are economically dependent. The

elderly population is continuously increasing and simultaneously the problems faced by these people are increasing.² Older age can bring a variety of dental health problems also and when it comes to oral health many physical and psychological problems may develop which include tooth loss due to periodontal breakdown, coronal and root caries, xerostomia, tooth surface loss, cusp fracture and deterioration in the sense of taste.³ To provide quality care, it is important

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to understand the physical, mental, socioeconomic and family background of the elderly patients, their chronic illnesses, drug treatment and age-related disabilities such as hearing loss, poor vision and locomotor control.⁴

Initially patients face the problem of excessive salivation in first 12 to 24 hours of wearing dentures, new dentures can also be the cause of sore spots as they compress the denture bearing mucosa.⁵ Gagging is another problem seen in some of the patients. 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 non-existent. Psychological gagging is the most difficult to treat since it is out of the dentist's control. In such cases, an implantsupported palate less denture should be constructed.⁶ Sometimes there could be a gingivitis under the completed dentures which is 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.

MATERIALS AND METHODS-

The study was conducted in the rural area. A sample of 150 elderly people (75 males and 75 females), wearing complete dentures, was purposively selected for the study. A questionnaire was used to collect information related with different variables like age, gender, type of family, family income, physical problems, eating, communication, social and

psychological problems. The questions were asked in person by the investigator and the resulting data was analysed qualitatively and quantitatively. Informed consent was obtained from the patients before enrolling them and the ethical clearance was also obtained from the ethical committee.

RESULTS-

Table- 1 reveals that majority of men and women respondents had "difficulty chewing". The other most prevalent problems are also reported. Table- 2 shows that majority of respondents men and women had difficulty in speech. Most of respondents men and women expressed their inability to eat in public, for this reason, men and women avoided going to parties. Some men and 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 men and 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, men, and women revealed that they had lost confidence while men and women, reported that they suffered from low self esteem. Psychological gagging was reported by men and women as shown in [Table-3]. Table- 4 demonstrates the common conditions associated with denture wearing.

Table-1 Physical problems faced by complete denture wearers

| Physical Problems | Male | | | Female |
|------------------------------------|-------------|-------|-----|-------------|
| Faced by | Respondents | | | Respondents |
| Complete | N= 75 | | | N=75 |
| Denture Wearers | No. | % | No. | % |
| Difficulty in chewing | 35 | 46.6 | 30 | 40 |
| Sore spots | 25 | 33.3 | 24 | 32 |
| Painful and swollen gums | 14 | 18.66 | 16 | 21.33 |
| Longer time taken to complete meal | 10 | 13.33 | 11 | 14.66 |
| Digestive problems | 6 | 8 | 7 | 9.33 |

Table-2 Social problems faced by complete denture wearers

| Social Problems Faced by Complete | Male Respondents N= 75 | | Female Respondents N=75 | | |
|-----------------------------------|------------------------|-------|-------------------------|-------|--|
| Denture Wearers | No. | % | No. | % | |
| Difficulty in speech | 31 | 41.33 | 30 | 40 | |
| Conscious while Eating | 11 | 14.66 | 19 | 25.33 | |
| Avoid going to parties | 12 | 16 | 16 | 21.33 | |
| Avoid leaving home environment | 11 | 14.66 | 15 | 20 | |
| Conscious because of Bad breath | 8 | 10.66 | 4 | 5.33 | |

Table-3 Psychological problems faced by complete denture wearers

| Psychological Problems Faced by | Male Respondents N= 75 | | Female Respondents N=75 | |
|------------------------------------|---------------------------|-------|----------------------------|-------|
| Complete Denture | No. | % | No. | % |
| Wearers | | | | |
| Loss of Confidence | 29 | 38.66 | 32 | 42.66 |
| Low self esteem | 25 | 33.33 | 25 | 33.33 |
| Psychological gagging | 17 | 22.66 | 17 | 22.66 |

Table-4 Clinical observation of complete denture wearers

| Clinical Observations | Male Respondents N= 75 | | Female R N=7 | espondents |
|--|---------------------------|------|-----------------|------------|
| | No. | % | No. | % |
| Oral Stomatitis/ Burning mouth Syndrome/mucosal lesions | 29 | 56.7 | 22 | 42.4 |
| Superimposed infection | 25 | 44.1 | 27 | 52.5 |
| Angular cheilitis | 17 | 32.2 | 20 | 28.3 |
| Denture-related hyperplasia | 10 | 18.5 | 16 | 30.2 |
| Mandibular dysfunction | 4 | 12.3 | 18 | 24.5 |
| Accumulation of plaque and calculus | 12 | 20.1 | 5 | 8.5 |

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 respondents 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 Majority of men and women 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.

CONCLUSION-

Complete denture wearers suffer from various physical, social and psychological problems. These problems have an effect on their quality of life so in order to increase the confidence of the elderly people, proper treatment and counselling is needed. Good oral self care and regular dental checkups can lower these problems.

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