

A CLINICAL SURVEY TO DETERMINE TREATMENT NEEDS IN PROSTHODONTIC PATIENTS

Isha Rastogi¹

1. MDS, Mayo Institute Of Medical Sciences, Barabanki

ABSTRACT:

Introduction: Knowing treatment needs of the patient is important for the dentist. Loss of teeth results in significant disabilities which profoundly disturbs functions of stomagnathic system, as mastication, phonetics and esthetics.

Aim and objectives: This survey was conducted to determine the treatment needs of the patients in Prosthodontics.

Materials and method: 500 subjects above 20 years in 2 months

Results: These results are as told by patient during questionnaire.

Discussion: Older people make extensive use of medical facilities but they underuse dental facilities. Mastication is the prime concern.

Conclusion: There is a high unmet need of Prosthodontic treatment among populations. The patients' expectations can be sought, suitable treatment planned and executed.

Key Words: syrvey, dental, need



INTRODUCTION

De Van said, "Meet the mind of the patient, before you meet the mouth of the patient." Clinical skills and fulfillment of patient's needs are inseparable so before starting the patient work it is vital to determine what patient has in mind and by knowing this we can truly fulfill our duty by providing successful prosthesis.

The term 'need' is commonly used to describe the type of treatment that dentists judge their patients ought to have, whilst 'demand' refers to the treatment requested by the patients

Themselves ⁽¹⁾. Loose teeth, edentulism or ill-fitting dentures may preclude eating favorite foods as well as limit intake of favorite foods ⁽⁴⁾. Patients' self-

perceived needs, expressed desires and expectation are essential parts of an evidence-based model for prosthodontic treatment planning ⁽⁷⁾.

AIM: To conduct clinical survey using questionnaire and basic diagnostic tools to assess needs and desires of people for treatment of edentulous patients.

OBJECTIVES: To determine expectations of patients. To evaluate reasons for unfulfilment of prosthodontic needs so that adequate measures are taken.

CLINICAL RELEVANCE: Most population do not convey to Prosthodontist about their needs. Once they do so, Prosthodontist can use different treatment options successfully.

MATERIALS AND METHODS

Selection of samples- 250 subjects who were above 20 years and who reported to Prosthodontics dental OPD for prosthesis of missing teeth in 2 months were target of cross-sectional study. These patients were randomly selected. A questionnaire was developed

and patient's consent taken. Diagnostic tools (mouth mirror, straight probe, explorer) were used. Mouth mask and disposable gloves were used for examination. QUESTIONNAIRE and CONSENT FORM

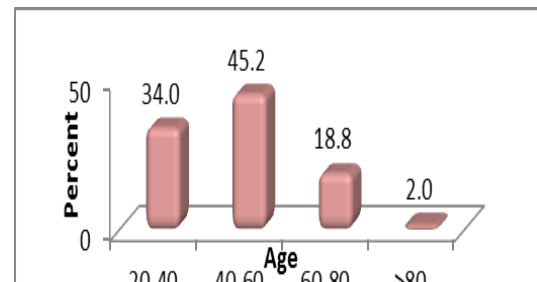
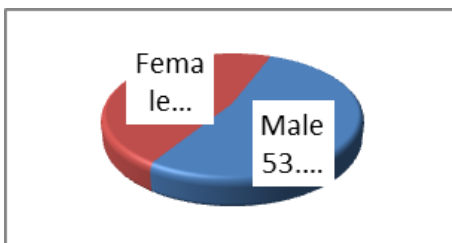
1.GENDER	NUMBER	PERCENTAGE(%)	
MALES	133	53.2	
FEMALES	117	46.8	
2.AGE(YRS)			
20-40	85	34	
40-60	113	45.2	
60-80	47	18.8	
>80	5	2	
3.SOCIOECONOMIC STATUS			
POOR	151	60.4	
MIDDLE	70	28	
HIGH	29	11.6	
4.OCCUPATION			
	<i>Males</i>	<i>Females</i>	<i>Total number</i>
LABOUR CLASS	40	20	60
FARMER	22	28	50
SWEEPER	21	20	41
SMALL GEN.MERCHANT	37		37
HOUSEWIFE		33	33
BUSINESS	7	9	16
SERVICE	6	7	13
5.EDUCATION			
ILLITERATE	50	67	117
TILL PRIMARY	36	21	57
TILL HIGH SCHOOL	21	18	39
INTER AND ABOVE	26	11	37
6.EDENTULISM			
EDENTULOUS			184
PARTIALLY EDENTULOUS			66

7.NEEDS	NUMBER	PERCENTAGE	
MASTICATION	131	52.4	
ESTHETICS AND MASTICATION	68	27.2	
ESTHETICS, MASTICATION AND PHONETICS	28	11.2	
ESTHETICS	12	4.8	
COMFORT	11	4.4	
8.DESIRED TREATMENT			
COMPLETE DENTURE	184	73.6	
REMOVABLE PARTIAL DENTURE	48	19.2	
FIXED PARTIAL DENTURE	18	7.2	
9.TREATMENT EXPLAINED BY CLINICIAN			
IMPLANTS	155	62	
SPECIAL DENTURE	25	10	
FIXED PARTIAL DENTURE	70	28	
10.FINAL TREATMENT OPTED BY PATIENTS			
COMPLETE DENTURE	142	56.8	
REMOVABLE PARTIAL DENTURE	70	28	
FIXED PARTIAL DENTURE	31	12.4	
SPECIAL DENTURES	3	1.2	
IMPLANTS	4	1.6	

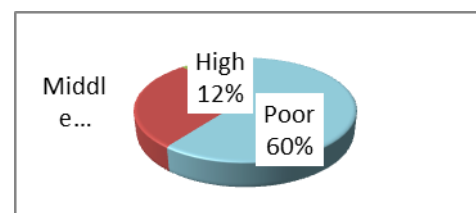
Graph 2: Age wise Distribution of Subjects enrolled in the study

GRAPHS

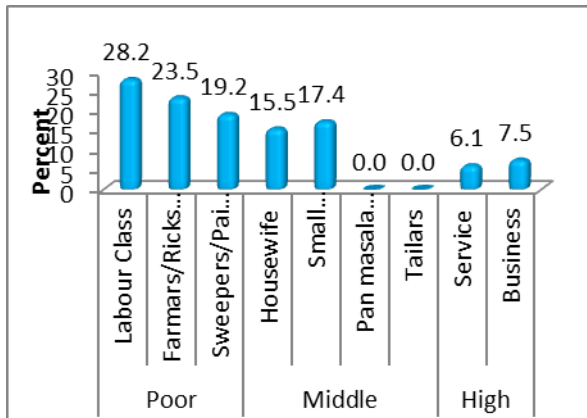
Graph 1: Gender wise Distribution of Subjects enrolled in the study



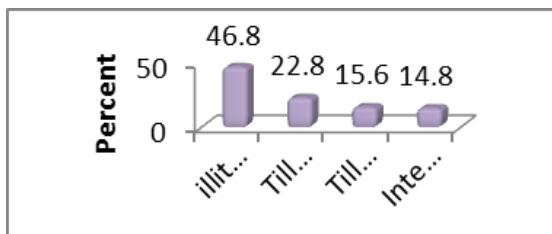
Graph 3: Distribution of subjects according to Socioeconomic status



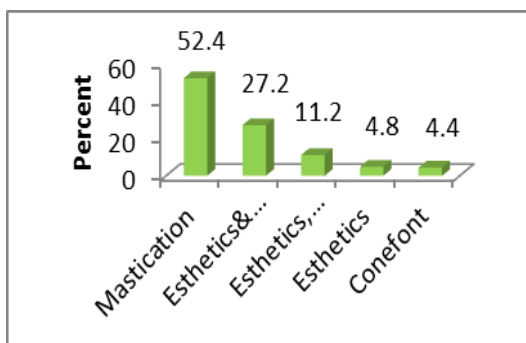
Graph 4: Distribution of subjects according to occupation



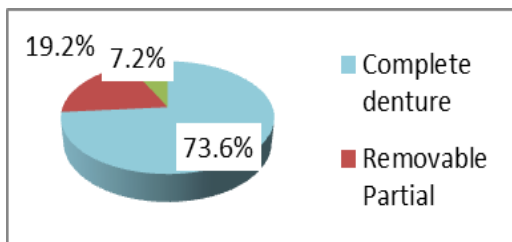
Graph 5: Distribution of subjects according to education



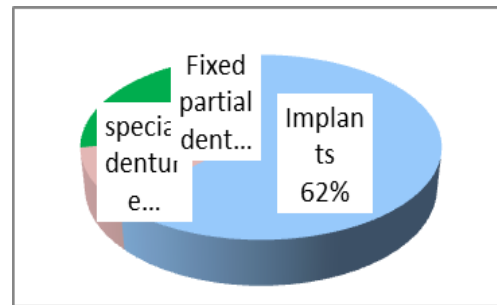
Graph 6: Distribution of subjects according to needs



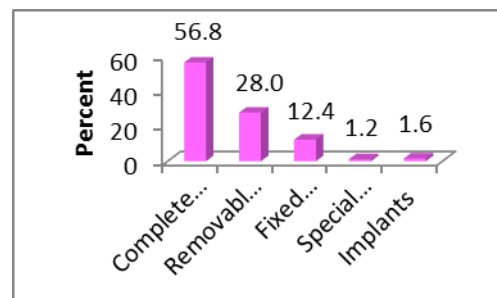
Graph 7: Distribution of subjects according to desired treatment



Graph 8: Distribution of subjects according to treatment explained by clinician



Graph 9: Distribution of subjects according to treatment opted by patients



RESULTS:

Table (1) shows the distribution of the clinical study sample according to retraction technic:

Table(2) and Table (3) show T Student test results which was conducted for the related samples to study the difference reference in the mean of liner and angular dental variables between the two studied periods (before retraction- after retraction) in both study groups.

Regarding to LO-PTV : there was no significant statistical difference between mini-screw retraction method and the SDRS.

Regarding to LA-PTV : there was a significant statistically difference between the two methods, that in the mini-screw method the mean value of apex retraction was larger compared with the SDRS method.

Regarding to U6M-PTV and U6D-PTV and U6-angle U1-angle. there is a statistically significant differences between the two retraction methods.

We notice from the table that U6M-PTV and U6D-PTV moved distally in the mini-screw method and U6-angle decline after the retraction.

Either in SDRS method the movement for the points U6m-PTV and U6d-PTV was mesial. Moreover, it seems from the table that there is a statistical difference between the mini-screw method and the SDRS in maintaining the anchorage for the mini-screws.

DISCUSSION

Oral diseases are progressive and cumulative. These become more complex over time⁽⁸⁾.

Premature loss of permanent teeth leads to stomatognathic system disability, loss of masticatory functions, and alterations in speech and face aesthetics⁽⁹⁾. Oral health is closely related to several aspects of patients' general health and well being⁽¹⁰⁾. Thus tooth loss can lead to substantial impacts on quality of life⁽¹¹⁾.

De Van stated that "The patient's fundamental need is the continued preservation of what remains of his

chewing apparatus rather than the meticulous restoration of what is missing, since what is lost is in a sense irretrievably lost". Planning of treatment is essential for good prognosis. It also helps to prepare the patients psychologically for the type of treatment they will receive without any unrealistic imagination of the treatment⁽⁶⁾.

It was seen in this study that 53.2% were males and females were 46.8%. Of these, 34% were between the age of 20-40 years, between 40-60 years were 45.2%, in between 60-80 years were 18.8% and more than 80 years were 2% subjects. For older people, aging alone is not responsible for the deterioration of their oral health, several other factors such as multiple chronic diseases, socio-economic factors, lack of dental facilities and psychological factors such as depression and isolation, because of gradual loss of spouse and friends and feeling of being unwanted by family members, leading to negligence of personnel and oral hygiene and health are also involved⁽¹⁴⁾. The gerodontist (generally the prosthodontist) is in a strategic position to evaluate, correct and reduce the number of prosthetic failures in aging patients by a thorough understanding of the various oral changes occurring during this period⁽³⁾.

Owing to the monthly income, the socioeconomic status was seen as the poor were 60.4%, the middle were 28% and high were 11.6%. The occupations of the people were that the labour class were 28.3%, farmers were 23.5%,

sweepers were 19.2%, small general merchants were 17.4%, housewives were 15.5%, businessmen were 7.5% and servicemen were 6.1%. According to the education, illiterate people were 46.8%, those educated till primary level were 22.8% , people with education till high school were 15.6% and higher education was seen in 14.8%.The edentulous people were 184 and partially edentulous were 66.The treatment desired by the patient was that complete dentures were desired by 73.6%, acrylic removable partial dentures were wished by 19.2% and fixed partial dentures were demanded by 7.2%.Perceived needs are important determinants in assessing the requirements for prosthetic replacement of missing teeth ⁽¹²⁾.

It was seen that majority patients were poor, labour class and illiterate.These patients had maximum edentulous and partially edentulous state.Therefore they expressed willingness for conventional acrylic complete and removable partial dentures.The study by Eklund S A and Burt and Gilbert G A et al also found the prosthetic status to be better among the subjects in the higher classes ⁽⁵⁾.An inverse relationship was observed between the socioeconomic status and prosthetic need ⁽¹⁵⁾.This is in agreement with study by Marcus et al.Those who have attained higher levels of education are more apt to have greater financial opportunity and place a higher priority on dental health ⁽⁶⁾.

Among the needs, mastication was the chief need in 52.4%, esthetics and

mastication was needed in 27.2%, esthetics, mastication and phonetics was needed in 11.2%, esthetics was desired by 4.8% and comfort in 4.4%.Similar findings have been given as by Annette Thomas – Weintraub, who stated that masticatory difficulty was the most frequently voiced complaint ⁽²⁾.

The clinician explained different treatment options to the patients.Implants were suggested to 62%, fixed partial dentures were told to 28% and special dentures explained to 10%.The final treatment that was opted by the patient after being told about various options by the clinician were that complete denture were opted by 56.8%, acrylic removable partial dentures were agreed to by 28%, fixed partial dentures were the choice of 12.4%, implants were agreeable with 1.6% and special dentures were finalized by 1.2%.It can be seen that though the clinician suggested better options to the patient, majority of them chose to conventional acrylic prosthesis.It could be due to the low economic state, education, awareness, age and ability to afford extra visits to the institution. However demand for prosthetic replacement by patients was much less than their actual need.Also the clinical possibilities to prosthetic replacement for each patient according to the missing teeth were significantly different from patient desire ⁽¹²⁾. It has to be realized that the decision of whether or not to undergo prosthodontic treatment belongs to the patient, who when properly educated about the

dental aspects of the decision can best weigh his or her own priorities ⁽⁶⁾.

CONCLUSION:

Prosthodontists should to be able to understand a patient's motive in seeking Prosthodontic care and identify these before starting the

treatment. Communication with the patient before initiating treatment and devoting time with the patient prior to clinical work will help us attend to the actual need of the patient well. Also the unmet prosthetic treatment need should be met to rehabilitate needy people so that their disability may be limited.

REFERENCES:

1. J C Davenport et al. Need and demand for treatment. British Dental Journal, vol 189, no 7, October 14, 2000, page 364-368.
2. Simhachalam Reddy N. Edentulism- an epidemiological survey of population in Chennai, India. J Orofac Sci, 2(1), 2010, page 14-18.
3. Fahad H. Banasr. Prosthetic status and needs of Saudi Geriatric edentulous patients in Jeddah. Cairo Dental Journal(24), no 3, page 537-543, September 2008.
4. Suresh S et al. A clinical survey to determine the awareness and preference of needs of a complete denture among completely edentulous patients. JIOH, October 2010, vol 2, issue 3.
5. Chandra Shekar. Prosthetic Status and prosthetic needs in relation to socioeconomic factors among the Municipal employees of Mysore city. IJDA, 2(1), 2010, page 83-89.
6. Kamal Shigli et al. Prosthetic status and treatment needs among patients attending the Prosthodontic department in a dental institute in India. Eur J Prosthodont Restor Dent 17(2):85-9(2009).
7. L. Tavares et al. Patients' self-perceived impacts and Prosthodontic needs at the time and after tooth loss. Brazilian Dental Journal 2007, 18(2), page 91-96.
8. Rekha P. Shenoy et al. Dental prosthetic status and prosthetic need of the Institutionalized elderly living in geriatric homes in Mangalore: a pilot study. ISRN Dent 2011.
9. M W Borawska et al. Prosthetic status and treatment needs for lost masticatory function in haemodialysis patients. Arch Med Sci 1, Feb 2012.
10. M B F dos Santos et al. Oral health status, hygiene habits and treatment needs among elderly Brazilians: a cross sectional study. World Journal of Dentistry, Jan-March 2012; 3(1):22-25.
11. Santhosh Kumar et al. Dental Prosthetic status and treatment needs of green marble mine laborers, Udaipur, India. Dent Res J 2011; 8(3):123-127.
12. Gadeer Nimri Mukatesh et al. Needs and demands of prosthetic treatment among two groups of individuals. Indian J Res, 21(4), 2010, page 564-567.
13. Vrinda R. Shah et al. Prosthetic Status and prosthetic need among the patients attending various dental

- institutes of Ahmedabad and Gandhinagar District, Gujarat. Journal Of Indian Prosthodontic Society, September 2012, vol 12, issue 3, pages 161-167.
14. Arpan Shrivastava et al. Dental prosthetic status and needs of the residents of geriatric homes in Madhya Pradesh, India. JIOH, vol 3, issue 4, Aug 2011.
15. V K Bhardwaj et al. Dental prosthetic status, prosthetic needs in relation to socioeconomic status of the state government employees in Shimla city(Himachal Pradesh)-a cross sectional study. Journal of International Society of Preventive and Community Dentistry, July-December 2011, vol 1, no 2.