

**Assessment of Dental Prosthetic Status and Treatment Need sin Public Transport Workers in the City of Maharashtra - A Cross-Sectional Study.**

<sup>1</sup>Dr. Pradnya Jadhav, Assistant Professor, Department of Public Health Dentistry, Government Dental College and Hospital, Aurangabad.

<sup>2</sup>Dr. Jagdish Chandra Vathar, Professor & HOD, Department of Public Health Dentistry, Government Dental College and Hospital, Aurangabad.

<sup>3</sup>Dr. Emmanuel Samson, Professor & HOD, Government Medical College & Hospital, Miraj.

<sup>4</sup>Dr. Harshal Bafna, Associate Professor, Department of Public Health Dentistry, Government Dental College and Hospital, Aurangabad.

<sup>5</sup>Dr. Lata BaluGangurde, Professor & HOD, Department of Dentistry, B.J. Government Medical College, Pune.

<sup>6</sup>Dr. Vishal Patil, Professor & HOD, Department of Prosthodontics, Vasantdada Dental College and Hospital, Sangli.

**Corresponding Author:** Dr. Emmanuel Samson, Professor & HOD, Government Medical College & Hospital, Miraj.

**Citation of this Article:** Dr. Pradnya Jadhav, Dr. Jagdish Chandra Vathar, Dr. Emmanuel Samson, Dr. Harshal Bafna, Dr. Lata BaluGangurde, Dr. Vishal Patil, “Assessment of Dental Prosthetic Status and Treatment Need sin Public Transport Workers in the City of Maharashtra - A Cross-Sectional Study”, IJDSIR- June - 2022, Vol. – 5, Issue - 3, P. No. 286 – 294.

**Copyright:** © 2022, Dr. Emmanuel Samson, et al. This is an open access journal and article distributed under the terms of the creative commons attribution non-commercial License. Which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

**Type of Publication:** Original Research Article

**Conflicts of Interest:** Nil

---

**Abstract**

**Objectives:** The study aimed to assess and compare the dental prosthetic status and treatment needs of public transport workers in Pune city of Maharashtra.

**Materials and Methods:** A total of 1000 male public transport workers (bus conductors and drivers) aged 20-55 years divided into four age groups (20-28, 29-37, 38-46 and 47-55) from all the bus depots of Pune city, were selected through Systematic Random Sampling and surveyed using the WHO surveycriteria1997.

**Statistical Analysis:** The number and percentages were calculated and Univariate analysis was performed using Chi-squaretestat5%levelof significance.

**Results:** It was seen that different forms of prosthesis were present among participants in the Maxillary (41.5%) and Mandibular (51%) arches respectively. The Prosthetic treatment need was recognized in 54%for the Maxillary and 58.1% for the Mandibular arches respectively. The prosthetic status and treatment needs differed statistically with respect to age. The study confirms the linear increasing trend in prosthetic status and prosthetic treatment needs in relation with age.

**Conclusion:** More than half of the surveyed male public transport workers were in need of some or the other forms of prosthesis. This study provides data for an oral health-care provider regarding public transport workers and confirms the relationship between increasing age, Prosthetic status and treatment needs.

**Keywords:** Fixed Prosthesis, Prosthetic Status, Prosthetic Treatment Needs, Public Transport Workers.

### **Introduction**

Dental prosthetic status and treatment needs has been studied by various authors; however, a majority of these studies were conducted in elderly individuals residing at elderly homes, hospital, institutions and population having elderly individuals [1- 8] however this study was conducted among the public transport workers which were bus conductors and bus drivers. It has been suggested by several authors like Kumar S, Tadakamadla J, Tibdewal H, Prabu D, Kulkarni S that the loss of teeth could be a disturbing emotional experience affecting the psychosocial well-being of the patients for many people. Much like the fact that decline in activities of daily living is a final common pathway for a broad range of decrements in general health, tooth loss constitutes a final common pathway for most dental diseases and conditions. This tooth loss can lead to substantial impacts on quality of life. It leads to a decrease in the height and width of the alveolar bone leading to a decrease in the size of denture-bearing area, radical alteration in the facial appearance giving rise to a “dished in” appearance, and reduced masticatory efficiency, leading to diminished nutritional intake. [23] Hence, to prevent or ameliorate decrements in oral health-related quality of life, removable or fixed prosthetic treatment for edentulous patient is often recommended.[7] Studies reporting the dental prosthetic status of people give an indication of the awareness and

percentage of patients toward dental treatment, accessibility to dental services, priorities, and willingness to take treatment. Further, studies assessing the prosthetic treatment needs of the population indicate the burden of unmet treatment needs data are highly useful for planning an oral health promotional program and improvement of prosthetic treatment facilities. [9] The city of Pune in Maharashtra is among the most populous and one of the largest metropolis in India and second largest in the state of Maharashtra.[10]The city has a vast network of public transport service, which has 8610 bus conductor and driver with a total number of 1382 buses in 7 bus depots.[11] The study sample of public transport workers i.e. bus conductors and bus drivers provided a unique opportunity to study a population from diverse socioeconomic and geographic backgrounds. Economic road transport is almost impossible without them. These bus drivers and bus conductors take the responsibility for carrying us safe and sound from one place to another. Therefore, maintenance of not only general health but also oral health of these service sector group is important. [12-13] Literature on the oral health status of government public transport employees in this state specifically in this city is almost non-existent. Hence, the aim of the study was to assess the dental prosthetic status and treatment needs among the 20–55-year-old male public transport workers of all the bus depots in the city with the secondary objective of comparing the prosthetic status and treatment need in relation to age.

### **Materials and methods**

The present study was a Cross-Sectional Study conducted among the male public transport workers (bus conductors and drivers) aged 20-55 years from all 7 bus depots in a city of Western Maharashtra in India, after obtaining the necessary permissions from the

Institutional Research Board (IRB) and Ethical clearance from Institutional Ethical Committee (IEC) of Sinhgad Dental College and Hospital, Pune with the prior permissions from the Chief Executive Officer and Board of members of the Public Transport Organization, Pune. The study was conducted in all 7 bus depots situated at various locations of the city with the objective together systematic in form a tion on dental prosthetic status and treatment needs of public transport workers in this region and the study sample comprise Dall the male public transport workers (bus conductor sand busd rivers) present during that time period and willing to participate in the study. The dental prosthetic status and treatment needs was assessed using WHO Oral Health assessment form (1997). The sample size derived was 1000 (500 bus conductors and 500 bus drivers) using the formula. The study participant swith the age group of 20- 55-year swere included whereas those not willing for the participation were excluded from the study. A total of 100 0participants were examined with prior written consent from each individual. The enrolled participant swere firs tinter viewed toobta in general in formation, socio demographic details, work experience and working shift sand hours. This was followed by oral examination, which was performed Yas ingle calibrated examiner with 87% of diagnostic acceptability with a kappa value of 0.84; who assessed the dental prosthetic status and treatment needs according to the criteria described in the WHO Oral health assessment form 1997. [14] Systematic Random Sampling was carried out in each depot and every 'kth' study participant was selected for the study in each depot. The 'kth' value was different for bus conductor sand bus drivers in each depot. This was

base dupon the total number of bus conductor sand bus driver sin there spective depots.

The formula applied for Systematic Randomized sampling was: Total Population of bus conductors / drivers in the respective bus depotk = after inclusion and exclusion criteria Desired sample size of bus conductors/drivers Where, k=interval at which bus conductor/bus driver were selected. The WHO Code and Criteria are as follows: [14]

ProstheticStatus	ProstheticNeed
<ul style="list-style-type: none"><li>• Code0:Noprosthesis</li><li>• Code1:Bridge</li><li>• Code2:Morethanonebridge</li><li>• Code3:Partialdenture</li><li>• Code4:Bothbridge(s)andpartialde nture(s)</li><li>• Code5:Fullremovabledenture</li><li>• Code9:Notrecorded</li></ul>	<ul style="list-style-type: none"><li>• Code0:Noprosthesisneeded</li><li>• Code1:Needforone-unitprosthesis</li><li>• Code2: Needformulti-unit prosthesis</li><li>• Code3:Needforacombinationofone-and/ormulti-unitprosthesis</li><li>• Code4:Needforfullprosthesis(replacementofallteeth)</li><li>• Code9:Notrecorded</li></ul>

Following the data collection, there sponses were appropriately coded, compiled systematically and entered into Micro soft Excel Spread sheet (2019). Statistical analysis was done using IBM Statistical Package for Social Sciences (SPSS) software (Version 21.0. Armonk, NY: IBM Corp). Univariate analysis was performed using Chi square test at 5% level of significance. The p value less than 0.05 was considered statistically significant at confidence interval of 95%.

## Results

A total of 1000 public transport workers (bus conductors and bus drivers) were examined. The overall mean age of total bus conductors and drivers was 39.61 + 7.87. Out of total 1000 study participants, 427 (42.7%) had their education up to 10<sup>th</sup> Standard, whereas 218 (21.8%) had their education level up to Graduation while 70 (7%) had completed their post - Graduation education. This difference was statistically significant (p<0.05)

Table 1: Comparison of the Prosthetic status of the Maxillary arch according to Age group.

AGE GROUPS(n)	CODE-0 n(%)	CODE-1 n(%)	CODE-2 n(%)	CODE-3 n(%)	CODE-4 n(%)	CODE-5 n(%)
20-28 (250)	204(81.6)	32(12.8)	11(4.4)	3(1.2)	0(0)	0(0)
29-37(250)	178(71.2)	47(18.8)	17(6.8)	5(2)	3(1.2)	0(0)
38-46(250)	139(55.6)	63(25.2)	29(11.6)	11(4.4)	8(3.2)	0(0)
47-55(250)	64(25.6)	97(38.8)	47(18.8)	21(8.4)	17(6.8)	4(1.6)
<b>TOTAL(1000)</b>	<b>585(58.5%)</b>	<b>239(23.9%)</b>	<b>104(10.4%)</b>	<b>40(4%)</b>	<b>28(2.8%)</b>	<b>4(0.4%)</b>

p< 0.001). However, as the age advances, there was decrease in the percentage of participants with (Code 0)

i.e. No prosthesis, but a linear increase was appreciated for Codes 1, 2,3,4 and 5 with regard to increasing age.

Table 2: Comparison of the Prosthetic status of the Mandibular arch according to Age groups.

AGE GROUPS(n)	CODE-0 n(%)	CODE-1 n(%)	CODE-2 n(%)	CODE-3 n(%)	CODE-4 n(%)	CODE-5 n(%)
20-28(250)	182(72.8)	38(15.2)	14(5.6)	07(2.8)	09(3.6)	0(0)
29-37(250)	139(55.6)	65(26)	21(8.4)	14(5.6)	11(4.4)	0(0)
38-46(250)	121(48.4)	69(27.6)	24(9.6)	18(7.2)	17(6.8)	1(0.4)
47-55(250)	48(19.2)	86(34.4)	55(22)	32(12.8)	23(9.2)	6(2.4)
<b>TOTAL(1000)</b>	<b>490(49%)</b>	<b>258(25.8%)</b>	<b>114(11.4%)</b>	<b>71(7.1%)</b>	<b>60(6%)</b>	<b>7(0.7%)</b>

P<0.05

Table 2 Represents the prosthetic status of the Mandibular arch which was free of any prosthesis 49% (Code0) whereas 50.3% (Code 1,2,3,4) had some kind of partial edentulousness for which prosthesis was placed, and only 0.7% had full prosthesis (Code5). The highest

percentage (72.8%) had no prosthesis (Code0) was reported in the age group of 20-28 years.

A statistically significant difference was observed between prosthetic status of the Mandibular arch and the age groups (p,0.05). A linear increase was appreciated for Codes1, 2,3,4 and 5 with regard to increasing age.

Table 3: Comparison of the Prosthetic Treatment Needs of the Maxillary arch according to age groups.

AGE GROUPS (n)	CODE-0 n(%)	CODE-1 n(%)	CODE-2 n(%)	CODE-3 n(%)	CODE-4 n(%)
20-28(250)	169(67.6)	31(12.4)	27(10.8)	23(9.2)	0
29-37(250)	121(48.4)	47(18.8)	40(16)	42(16.8)	0
38-46(250)	98(39.2)	60(24)	45(18)	47(18.8)	0
47-55(250)	72(28.8)	64(25.6)	56(22.4)	55(22)	3(1.2)
<b>TOTAL(1000)</b>	<b>460(46%)</b>	<b>202(20.2%)</b>	<b>168(16.8%)</b>	<b>167(16.7%)</b>	<b>3(0.3%)</b>

P<0.05

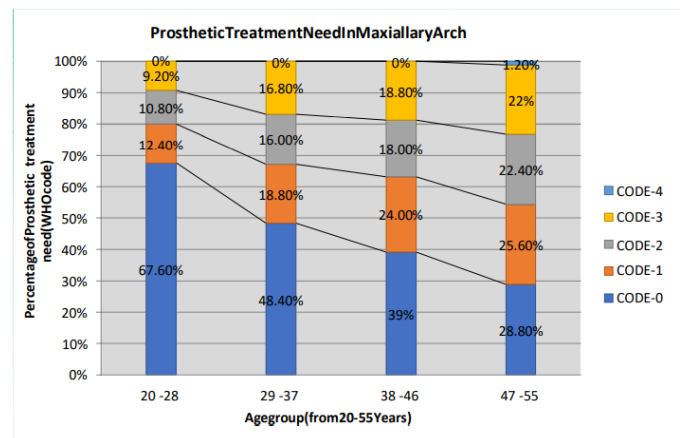
Table 3 Represents the prosthetic treatment need of the Maxillary arch. Overall, 46% did not need any kind of prosthetic treatment (Code 0). On the other hand, 53.7% were in need of some or the other forms of partial prosthesis (Code1,2and3). Only 0.3% needed full prosthesis (Code4). A statistically significant if erence was seen between the WHO codes for Prosthetic Treatment Need codes and different age groups. (p<0.05).

As the age advances, the percentage of participants needing full prosthetic treatment increased and was clearly appreciable from Code1, 2, 3 and 4.

Table 4: Comparison of the Prosthetic Treatment Needs of the Mandibular arch according to age groups.

AGE GROUPS (n)	CODE-0 n(%)	CODE-1 n(%)	CODE-2 n(%)	CODE-3 n(%)	CODE-4 n(%)
20-28(250)	132(52.8)	52(20.8)	37(14.8)	29(11.6)	0
29-37(250)	109(43.6)	58(23.2)	46(18.4)	37(14.8)	0
38-46(250)	100(40)	61(24.4)	48(19.2)	41(16.4)	0
47-55(250)	78(31.2)	66(26.4)	53(21.2)	45(18)	8(3.2)
<b>TOTAL(1000)</b>	<b>419(41.9%)</b>	<b>237(23.7%)</b>	<b>184(18.4%)</b>	<b>152(15.2%)</b>	<b>8(0.8%)</b>

Graph 1: Comparison of the Prosthetic Treatment Need Sof the Maxillary arch according to Age groups.

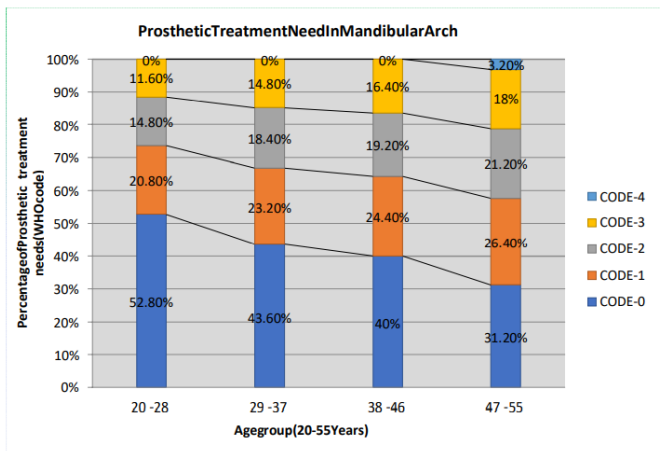


P<0.05

Table 4 Represents the prosthetic treatment need of the Mandibular arch, overall, 41.9% (Code 0) did not need any kind of prosthetic treatment. Nearly, 57.3% (Code 1,2 and 3) were in need of some or the other forms of partial prosthesis and only 0.8% (Code 4) needed a full prosthesis. A statistically significant difference was seen between the treatment need code sand the age. Group (p<0.05)

As the age advanced, the percentage of participants requiring prosthetic treatment also increased and was clearly appreciated for Codes 1,2,3 and 4.

Graph 2: Comparison of the Prosthetic Treatment Needs of the Mandibular arch according to age groups.



From the above results, it was observed that Table 1 to 4 depicts the whole prosthetic status and treatment needs of study population in the Maxillary and Mandibular arch. The overall prosthetic need in study population was 54% Maxillary and 58% Mandibular arch. Prosthetic needs increased as the age increases with the oldest age group presenting greatest prosthetic needs both in the Maxillary and Mandibular arches. Almost 4.4% of the persons belonging to 47-55 years old age group needed full prosthesis (Code-4) for both the arches. Prosthetic need in the Mandibular arch was found to be greater than that of the Maxillary arch. Single unit prosthesis (Code-1) comprised a greater

percentage of the whole prosthetic needs (43.9%). Chi square analysis revealed significant difference between the age groups for various prosthetic needs in both Maxillary and Mandibular arches (p<0.05).

### Discussion

In the present study, it was observed that some or the other kinds of prosthesis (Code 2, 3, 4, and 5) were present in 41.5% of the participants in the Maxillary arch and 51.0% of the participants in the Mandibular arch. The percentage of people in this study with prosthetic rehabilitation appears to be low, in addition, other study reports given by Moutlak MF and Sveikata K et al [8,15] have showed a greater percentage of people requiring prosthesis rehabilitation.

In the present study, the burden of unmet Treatment needs (WHO Treatment need codes 1, 2, 3, and 4) was recognized among 58.1% of the patients for the Mandibular arch and 54% of the patients for the Maxillary arch. Only 1.1% needed full prosthesis, the majority being from the 47-55 years age group (Code4). Overall greater percentage of people needed partial prosthesis as compared to full prosthesis which was similar to the finding Sof the Turkish population,[16] while contrasting to the study report by Slade et al [17]. Partial tooth loss should also be given due importance as total edentulousness and considered for prosthetic rehabilitation.

Literature on partial edentulousness by Idowu AT, Al Shamrani SM indicates that the first mandibular molar is the frequently missing tooth followed by the maxillary anterior teeth.[18] According to the study given by MukatashGN,Al-RousanM,Al-SakarnaB,ithasbeenobservedthatagreaterpercentageof people consider fixed prosthetic dentures (34.3%) over removal prosthetic dentures (7.2%).[19] This was in line

with the present study, in which the percentage of patients with fixed prosthesis (Codes 1 and 2) was more as compared to removable prosthesis (Code 3) (34.3% patients had fixed prosthesis vs only 7.2% having removable prosthesis in the Maxillary arch, 37.2% had fixed prosthesis vs. just 13.8% having removable prosthesis in the Mandibular arch).

People with edentulousness and without prosthetic rehabilitation suggests that they are not aware of the different treatment modalities, have the fear of dental treatment, lack of time for dental treatment, are not motivated to take treatment and cannot bear the finances since the level of education.[20-23] Also influences the treatment-seeking behaviour, this may have had an impact on the prosthetic rehabilitation of the people, as nearly 42.7% of the study population had completed the education up to Secondary School Certificate level.

Even today conventional removable dentures continue to represent the first rehabilitative option offered to the dentate in many places around the world [24]

The unmet treatment needs in the study population may be due to negative attitude towards oral health, lack of time, non-availability and higher cost of treatment leading to poor utilization of dental services which was in consensus with the studies.[16] It was found in the present study that fixed or removable prosthetic need increased with age, the older group requiring more treatment than the younger age group. The prosthetic need was found to be more in public transport workers which was in consensus with the studies. [2,3,15]

Prosthetic needs of our study was 54% (Maxillary arch) and 58.1% (Mandibular arch) which was very low when compared to that of previous studies. In a study done on elderly home residents 82% of the subjects were in need of either fixed, removable or combined prosthodontic treatment. The reason for this great difference in

prosthetic needs between the present and past studies may be due to the reason that our study population comprised of adults from the age group of 20 - 55 years. Only 8% (Maxillary arch) and 1.5% (in Mandibular arch) were in need of complete denture, the reason was that no subject was older than 55 years. This need is very low when compared to the past studies. The reason might be the age factor. Treatment need of single unit prosthesis (23.7%) was the highest need reason being anterior teeth lost due to trauma in many subjects leading trauma to anterior teeth and it was also observed that many subjects most of them belonging to the youngest age group required single unit prosthesis in the Mandibular arch which could be attributable to missing tooth due to caries. Greatest Prosthetic Treatment need was observed in oldest age group followed by youngest age group, the Prosthetic treatment need in 45-55 years old age group was due to teeth missing from periodontal disease, whereas for the 15- 24 years old age group it was due to teeth missing from dental caries.

The current study highlighted the oral health status and treatment needs of the people of this specific population. It is the first study of its kind as no other information is published regarding the oral health status and treatment need of this specific group, which was public transport workers (bus conductors and bus drivers) in this region and state.

**Strength of the study:** The study comprised of the data from all the 7 bus depots of a city situated at various locations and as the total number of Bus conductors and Bus drivers included were uniform.

**Limitations of the study:** It was a Cross-sectional study hence disease status at the same point of time only was recorded and we could not limit the Social Desirability Bias.

## Conclusion

Majority of the bus conductors and bus drivers had not visited the dentists for regular dental check-up due to their long working hours, change in working shift, high treatment costs, fear of dental treatment and lack of motivation. This resulted in poor awareness of oral health, extensive unmet dental treatment needs like prosthetic rehabilitations was required in both bus conductors and bus drivers. Particularly, because of the accumulation of dental needs over a long period of time due to which they were in need of some or the other forms of prosthesis. This study confirms the relationship between increasing age related to Prosthetic Status and Prosthetic treatment needs which showed a linear increasing trend in the percentage for Prosthetic Treatment Needs (WHO Codes 1,2,3 and 4) in relation to the age. Thus, this study provides an alarming need to focus on this service sector group with special emphasis to be given regarding the Oral health care and provides the required data for an oral health-care provider program in relation with public transport workers.

## References

1. Allen PF, Mc Millan AS. Are view of the functional and psychosocial outcomes of edentulousness treated with complete replacement dentures. J Can Dent Assoc 2003; 69:662.
2. Smith JM, Sheiham A. Dental treatment needs and demand of an elderly population in England. Community Dent Oral Epidemiol 1980; 8 (7) :360-4.
3. McEntee MI, Dowell JB, Scully C. Oral health concerns of an elderly population in England. Community Dent Oral Epidemiol 1988; 16 (2):72-4.
4. Mojon P, McEntee MI. Discrepancy between need for prosthodontic treatment and complaints in an elderly edentulous population. Community Dent Oral Epidemiol 1992; 20 (1): 48-52.
5. Locker D. The burden of oral disorder in a population of older adults. Community Dent Health 1992; 9 (2): 109-24.
6. Hoad-Reddick G, Grant AA, Griffiths CS. The dental health of an elderly population in Northwest England: results of a survey undertaken in the Halton Health Authority. J Dent 1987; 15(4):139-46.
7. Kumar S, Tadakamadla J, Tibdewal H, Prabu D, Kulkarni S. Dental prosthetic status and treatment need of Sof green marble mine laborers, Udaipur, India. Dent Res J (Isfahan) 2011; 8:123-7.
8. Moutlak MF. Tooth loss, prosthodontics treatment needs and association factors in a sample of adult attending college of dentistry, AIM ustansiriya university. Jal Rafidain Univ Coll 2013; 31: 125- 36.
9. Syed Peeran, Fuad Al Sana Bani, Bandar AL-Makramani and Elfatih Elam in. Dental prosthetic status and treatment needs of adult population in Jizan, Saudi Arabia: A survey report. Eur. J. Dent. 2016;10(4):459-62.
10. Accessed at: <https://en.wikipedia.org/wiki/Pune> on 25/08/2014 at 11:20 a.m.
11. Accessed at: <https://en.wikipedia.org/wiki/Pune> Mahanagara Parivahan Mahananda Limited on 25/8/2014 at 11:40 am.
12. Soni A, Singh V, Savi GR, Yadav O, Khan M, Agrawal M. Oral Health Related Knowledge, Attitude and Practice Among Bus Conductors and Driver in Jaipur District. Int J Dent Med Res 2014; 1 (4): 25-29.
13. Gambhir R, Sogi GM, Veer Esha KL, Sohi RK, Randhawa A, Kakkar H. Dental health status and treatment needs of transport workers of a northern Indian city: A cross-sectional study. Nat Sci Biol Med. 2013 ;4 (2): 451-6.



14. World Health Organization. Assessment form. In: Oral Health Survey: Basic Methods. 4th ed. Geneva: World Health Organization; 1997. p.21-46.
15. Sveikata K, Balciuniene I, Tutkuvienė J. Needs for prosthetic treatment in Vilnius population at the age over 45 years old. *Stomatol Balt Dent Maxillofac J* 2012; 14:81-4.
16. Pekiner F, Gumru B, Borah an MO, Aytugar E. Evaluation of demands and needs for dental care in a sample of the Turkish population. *Eur J Dent* 2010; 4:143-9.
17. Slade GD, Spencer AJ, Gorkic E, Andrews G. Oral health status and treatment needs of non-institutionalized persons aged 60 in Adelaide, South Australia. *Aust Dent J* 1993; 38:373-80.
18. Idowu AT, Al Shamrani SM. Pattern of tooth loss in a selected population at King Saud university college of dentistry. *Saudi Dent J* 1995; 7:135-40.
19. Mukatash GN, Al-Rous an M, Al-Sakarna B. Needs and demands of prosthetic treatment among two group of individuals. *Indian J Dent Res* 2010; 21:564-7.
20. Erten H, Ak Arslan ZZ, Bodrumlu E. Dental fear and anxiety levels of patients attending a dental clinic. *Quintessence Int* 2006; 37:304-10.
21. Idrees N, Ghani F. Demands, needs, expectations, patterns and reasons among patients for treatment with fixed dental prostheses. *J Postgrad Med Inst* 2008; 22. Available from: <http://www.jpmi.org.pk/index.php/jpmi/article/view/1110>. [ Last accessed on 2014 Sep12].
22. Shigli K, Hebbal M, Angadi GS. Attitudes towards replacement of teeth among patients at the institute of dental sciences, Belgaum, India. *J Dent Educ* 2007; 71:1467-75.
23. Bahannan SA. Knowledge and behaviour of tooth loss and artificial teeth among females residing in Jeddah, Saudi Arabia. *JKAU: MedSci* 2001; 9:47-63
24. Sahoo's, Kumar P, Sethi K, Goel M. Trends and attitude of edentate patients towards conventional and implant rehabilitative therapies: An Indian outlook. *Int J Med Public Health* 2013; 3:126