## Awareness of denture maintenance techniques



A total of 100 patients were recruited in this study. Age was analyzed and it was found that overall mean age of the patient was 60 years, the minimum age was found 30 years and maximum age of 89 years as shown in Table 1. Age was divided in categories and it was found that 6 % of the patients were between the age of 30-40 years, 16 % of the patients were between the age

between the age of 61-70 years, and 14 patients were above 70 years as shown in Table 2.

of 41-50 years, 32 % were between the age of 51-60 years, 32 % were

Gender distribution was evaluated and it was found that out of 100 patients, there were 70 (70%) males and 30 (30%) females as shown in Figure 1.

The other variable; period of edentulousness was determined , the mean of years were 9. 1 years, median was 7 years, Standard deviation was 8. 08 years , the minimum duration was . 1 years and maximum years were 40 years as shown in Table 3.

All the patients had used their dentures for at least 1 month while 6% had used their upper dentures for less than a year, 38% had used them between 1-5 years, 22% had used them between 6-10 years, 19% had used them between 11-15 years, 7% had used them between 16-20 years and 6% were wearing their dentures for more than 21 years as shown in Table 4.

Duration of using lower dentures was assessed, 6% were using their dentures for less than a year, 33% between 1-5 years, 23% between 6-10 years, 17 % between 11-15 years, 8% between 16-20 years and 6% were using their dentures for more than 21 years as shown in Table 5.

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In this study patients were asked whether they have received any instruction about how to clean their dentures from their dentists, 45 (45 %) patients replied affirmatively and 55(55%) said they did not received any instructions as shown in Table 6.

In this study, the cleaning methods of dentures were assessed and it was revealed that 37 subjects (37%) were using water and toothbrush, 33 subjects (33%) were using water, tooth brush and tooth paste. The number of subjects using water, soap, toothbrush and tooth paste were 12 (12%), whereas number of patients using other methods were 18 (18%). In the others 8% used water only, 3% used dentonic (an abrasive dental powder), 3% (washing powder), 2% saline, 1 % manjan (stick from neem tree) and 1% used scotch brite (sponge for washing dishes) for cleaning as shown in Table 7.

Regarding frequency of cleaning their dentures, the number of patients cleaning their dentures once a day were 64 (64 %), patients cleaning twice a day were 23 in number, six patients were cleaning their dentures thrice a day and seven patients were cleaning their dentures at various times as shown in Table 8.

In this study the difficulty encountered by the subjects in cleaning their dentures was assessed and it was found that 93% do not experience any difficulty while 7% feel some difficulty in cleaning various parts of their dentures as shown in Table 9.

In this study question was asked regarding immersion of denture in some substance, it was revealed that 21% do not soak their denture in any https://assignbuster.com/awareness-of-denture-maintenance-techniques/

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substance, while 71% used water for immersion, 5% used peroxide denture cleansers (corega tablets), 2 % used saline and 1 % used hot water for immersion as shown in Table 10.

The number of subjects with habit of brushing of their tongue, gums and roof of mouth were 32 (32%) and those who do not brush their tongue gums and roof of mouth were 68(68%) as shown in Table 11.

The number of subjects with habit of sleeping with denture was 34 (34%) and those who do not sleep with their denture were 66(66%) as shown in Figure 2.

Meticulous daily removal of bacterial bio film present in the oral cavity and on complete dentures is of paramount importance to minimize denture stomatitis and to help contribute to good oral and general health <sup>45, 78</sup>.

All of the patients evaluated were aged from 30 years to 80 years, in which 70% were males and 30% were females. Higher ratio of males can be because of our male dominant society.

In this study 38 % of the complete denture wearers were using their same dentures between 1 to 5 years, 22% were using their dentures between 6 to 10 years, 32 % were using them for more than 11 years. These results agree with other studies <sup>17, 19</sup> but differ from the study of Barbosa LDC <sup>9</sup> in which 78% of the subjects used the same complete dentures for over 5 years.

For the success of the rehabilitative treatment it is important for the patient to be aware and motivated regarding their prosthesis care but previous

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study <sup>22</sup> have shown that majority of the patients do not know how to clean their dentures properly because they have not received instructions from the dentists. In this study 44% of the patients told that they were not given instructions regarding the cleanliness of their dentures. Similar results were obtained by Amanda Peracini <sup>118</sup> who found that 51. 8% of the respondents did not receive proper denture cleaning instructions from their dentists.

When asked about their cleaning regimen it was observed that 82% of the patients used brushing (mechanical methods) for denture cleansing implying that brushing with a toothbrush is the most common and easiest method of cleaning dentures. Similar results were obtained in previous studies who found that 78. 3% <sup>71</sup>, 87% <sup>72</sup>, 93% <sup>17</sup>, 94% <sup>9</sup>, 94. 2% <sup>19</sup>, 98% <sup>21</sup> and 98. 7% <sup>116</sup> of patients brushed their dentures as the cleaning method of choice.

Brushing with water only was used by 37% of patients in the present study which is in agreement with the findings of a previous studies <sup>19</sup> in which 34. 4% of the patients used water and toothbrush for denture cleaning. While this contrasts with Navalainen's study <sup>66</sup> in which 74% of the subjects used water and toothbrush only for denture cleansing. The difference may be because of the large sample size of the Nevalainen's study.

In this study 33% of the patients reported using water , toothbrush and toothpaste. This is in agreement with other studies in which 29%  $^{19}$ , 40%  $^{22}$ , 44. 5%  $^{14}$ , 48%  $^{17}$  used toothpaste, toothbrush and water for denture cleaning. . Toothpaste has an advantage of being easy to use and relatively inexpensive but when used improperly can damage the prosthesis material

Brushing with toothbrush and soap was found in 12% of the patients in this study. While this is similar to other studies in which 11% <sup>22</sup>, 8% <sup>9</sup> and 7% <sup>72</sup> of the patients use soap and toothbrush for cleaning their dentures, it contrasts with another study <sup>19</sup> in which 36% use soap and toothbrush. The difference may be explained by differences in factors such as age.

In this study among the substances used for immersion of the dentures at night, water was the most frequent 71% while 21 % reported no immersion at all.

Only 5% of the participants in this study reported the use of commercial solutions (alkaline peroxides) for immersing the dentures at night. Our results agree with those of Amjad M 2010 who found that 63% of the participants immersed their dentures in water while only 1. 7% immersed them in a chemical solution. Chemical methods of denture cleaning are effective but high cost as well as bleaching of acrylic resin is a disadvantage.

Abelson DC 1985 showed that lack of denture hygiene is one of the main etiological factors for the inflammation of oral mucosa in edentulous. With regard to the frequency of cleaning 93% reported cleaning their dentures daily out of which 64% cleaned their dentures once a day, 23% twice a day , 6% thrice a day and 7% seldom cleaned their dentures. While this is a good figure it does not necessarily imply efficient cleaning. Our results are similar to another study <sup>19</sup> in which 97% cleaned their dentures daily and once a day respectively. Our results also agree with those of Nevalainen et al <sup>66</sup> and Barbosa LDC <sup>9</sup> (96 % and 98% respectively). While Dikbas et al <sup>22</sup> showed that 70% of the sample of 234 patients cleaned their dentures at least once a day. The difference can be explained in terms of difference of patient selection.

In the present study 7% of the subjects experienced some problem in cleaning their dentures while 93% reported no problems in cleaning the dentures. Our results agree those of Peracini A's  $^{118}$ .

The dentist must also teach the patient regarding the cleaning of the soft tissues of the oral cavity. Of the patients interviewed 33% reported to clean their tongue. gums and roof of mouth daily while 67% reported no cleaning of the soft tissues of their oral cavity suggesting that majority of the population is unaware regarding the cleanliness of their oral cavity. Our results are also similar to another study by Marchini L <sup>116</sup> in which 68% of the patients reported no tongue cleaning.

The continuous wearing of dentures predispose patients to denture stomatitis  $^{65}$ . The present study revealed that 34% of the patients slept with their dentures while 66% removed them at night. Our results are in good conformity with those of previous studies in which 41. 5%  $^{22}$ , 36%  $^{19}$  and 33%  $^{87}$  of the participants slept with their dentures. While this contrasts with the study of Barbosa LDC  $^{9}$  in which 64% of the population slept with their dentures, this may be due to the presence of a partner. Limitation of this study is that no attempt was made to relate the cleanliness of complete denture clinically.

Another limitation was that the subjects were not asked to demonstrate the way they clean their dentures to better understand whether instructions given were proper or not.

## CONCLUSION

Within the limitations of this study it is concluded that

1. Majority of the subjects were using their dentures for more than 5 years and the most commonly used method for cleaning dentures is with toothbrush and water.

2. Patients are not properly informed regarding the maintenance of their dentures by their dentists

3. The most commonly used method of cleaning dentures in this study is with the help of water and toothbrush.

4. Majority of patients clean their dentures once a day.

5. The most commonly used method of immersion of dentures is water.

6. Majority of the patients do not include cleaning their tongue, gums and roof of mouth in their daily oral hygiene regime.

7. One third of the patients evaluated slept wearing their dentures.

## RECOMMENDATIONS

Patients tend to remember what they see rather than what they hear so it is helpful to provide written instructions to the patients regarding their denture cleaning regimes.

Clinical education programmes regarding the oral and denture hygiene for dentists and patients must be employed.