Knowledge About Esthetic Veneer Treatment For Enhancing Smile In Undergraduate Dental Students

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Abstract: Background: The most important feature in maintaining and improving a person's esthetic appearance and self-esteem is only by an attractive smile. Smiling is the best method to influence people. The dynamic part of the face is the oral region, with tooth and gingival display during functional lip movement which is unique to an individual, people with ugly smiles develop a high risk of psychological problems. Esthetic dentistry was motivated by the growing accessibility of media and online information has been highly demanded by the patients and tooth color is also used for veneers. Aim: The main aim of this study is to assess the awareness about the esthetic veneer treatment for enhancing smiles in undergraduate dental students. Materials and method: A survey based questionnaire was done to assess the knowledge about the veneer treatment. A self designed 16 questions were framed and the responses were collected through google form app.Thedatas were statistically analysed by SPSS software. Results: Results were represented in the form of bar diagrams and 71% of the respondents are aware of veneer treatment. This study shows a high-level self-consciousness about the veneer treatment 76% of the students agreed that they can brush veneer, 63% were answered for porcelain veneer. Conclusion: The present study concluded that the undergraduate dental students are highly aware of the esthetic veneer treatment for enhancing smile.

Key words: Awareness, Esthetic veneer, Enhancing smile, Knowledge, Treatment.

1. INTRODUCTION:

Esthetic veneer plays a crucial role in one's life in enhancing smile and their self-confidence. Esthetic dentistry is a back bone to mankind, where a beast can also turn into beauty[1]. An attractive smile is a key feature in maintaining and improving a person's esthetic appearance, the principles of beauty,scientific measurements, dental research, diagnostic models and patients. Even Though smile is the factor which influences society and dedicates analysis of smiling was repeatable[2]. The beauty of a smile is the creation of teeth, gingiva and lips[3]. In facial features the important impact for the attractiveness of the smile are facial height, shape, profile, shape and inter pupillary plane. Lips are the part which has the boundary for

smile which include morphology, curvature, position of upper lip, relationship between maxillary anteriors and lower lips amount of teeth displayed in teeth[2].

Esthetic also involves facial profile and jaw correction[1]. The aim of this treatment is to control carries, restore esthetics, restore the occlusion and stability and also motivates the patients to improve and maintain proper oral hygiene and diet[4]. Technique sensitivity refers to some of the delicate processes such as bonding and adjustments of the very thin fragile veneers with bonding protocols[5]. In affiliation to treatment of anteriors, the maxillary central incisors are the visual focal point for the smile[3]. The dental composition includes the position, size, proportions and shape of the teeth, midline symmetry, gingival tissue and alveolar bone. The esthetic conditions can be improved only by oral and maxillofacial regions of the different aspects of the dental structures will have the ability to harmonize the teeth in a correct correlation[2].

Attractive smile is one of the better ways to introduce yourself to people, a friendly smile is one of the unique elements in creating a good impression[5]. The physical, social and psychological aspects play a vital role in a person's life[1]. The poor oral hygiene makes the people weak and decreases their self esteem will lead to depression[4]. Esthetic veneers are to lighten up the whiteness in our teeth, the best materials are ceramic and porcelain veneers, the longevity of the excellent esthetics is made with the resin composite materials. Nano composition for restoration was good planning to provide a better result in future treatment[6]. The aim of this study is to provide the knowledge about the esthetic veneer treatment for enhancing smiles in undergraduate dental students.

2. MATERIALS AND METHODS:

This study was conducted through an online survey among 100 dental students in chennai and was carried out to investigate the knowledge about the esthetic veneer treatments. The approval for the conducting survey by the scientist research team of saveetha dental college via..SRB [SELF ADMINISTERED QUESTIONNAIRE]. A set of 16 questions were framed and distributed to undergraduates in chennai through online google forms link, these questions assess the knowledge about the esthetic veneer treatment. The participants are allowed to take 15 minutes to understand the questions and give responses.

The responses were collected and entered in the google sheets, then the datas were statistically analysedby using SPSS version 22 software. Correlation analysis was done by chi square test using SPSS version 22 software. The results were represented in the form of bar diagrams [17], [18], [19], [20], [27].

3. **RESULTS**:

A total of 100 Participants in the study and the results are at a high level and they were represented in the bar diagrams. This figure shows the age group of the respondents from 14 to 57[FIGURE 1]. This figure shows that 63% of the students are female and 36% were males[FIGURE 2]. This figure shows that 71% of the respondents are aware of veneer treatment and 28% are not aware [FIGURE 3]. This figure shows that 33% of the students accept that veneer can ruin our teeth and 66% do not agree[FIGURE 4].

Thisfigure shows the materials used for veneers, 15% of respondents answered for porcelain, 19% were answered for resin composite, 20% were answered for glass ceramics and 46% were answered for all the above[FIGURE 5]. This figure shows 76% of the students agreed that veneers need high maintenance and 23% are denied[FIGURE 6]. This figure shows that 45% of the respondents accept that veneers have side effects and 55% are denied[FIGURE 7]. This figure shows that 70% agreed that paste is best for veneers and 29.4% agreed for floss is best for veneers[FIGURE 8]. This figure shows that 74.5% of the students agreed that they can brush veneers and 25.4% are not agreed[FIGURE 9].

This figure shows the type of paste used for veneers, 67.6% of the respondents used nonabrasive fluoride toothpaste, 20.5% used fluoride toothpaste and 11.7% used non-fluoride toothpaste[FIGURE 10]. This figure shows the best method to keep veneers white, 21% agreed to avoid cigarettes and tobacco, 16.6% agreed for brushing and flossing, 11.7% agreed to rinse with water and 50% agreed for all the above[FIGURE 11]. This figure shows that 31.3% of the students agreed that baking soda is safe for veneers and 68.6% disagreed[FIGURE 12]. This figure shows that 24.5% of the respondents agreed that veneers look natural and 75.4% are denied[FIGURE 13]. This figure shows that 29.4% of the respondents agreed that it is painful to get veneers and 70.5% degrees[FIGURE 14]. This figure shows the best veneers, 62.7% were answered for porcelain and 37.2% were answered for composite resin veneers are the best[FIGURE 15]. This figure shows that 74.5% of the students are aware that they can use mouthwashes for veneers and 25.4% are not aware[FIGURE 16]. Chi square analysis was done to the correlate gender of the respondents with the various parameters regarding the knowledge and awareness of esthetic veneer treatment[Figure 17-21].

4. **DISCUSSION:**

From the analysed data, the author observed that undergraduates students are highly aware of esthetic veneer treatment and they are also aware of the veneer maintenance and veneers don't ruin our teeth. The students have the adequate knowledge that veneers look natural.

In the present study 76% of the students agreed that veneers need high maintenance and 23% are denied, the study done by mashaan et al also reported that 82% of the people are aware of veneer high treatment and also tells about the color changes of veneers[7]. In the present study the students were accepted that porcelain and composite resin materials are majorly using materials for veneers comparing with our study, the study done by miller had concluded that porcelain and composite resin are the best materials for veneers and reported has 60% were chose porcelain materials[8]. In one of the results statistics done by Hassan had self-reported that 74% of the participants used composite resin veneers which was similar to our study[9].

The study done by Suhanaya, the participants responded that 95% were aware of esthetic treatments which were similar to our study [10]. The study done by flavio explained that veneers can be cleaned by using brushing and flossing were supported by our study[11]. In the present study 74% were answered that mouthwashes are also used for veneers this was supported by halwany reported that 25-30% agreed with the fact[9]. The study done by Daniel has mentioned that the veneers have no side effects, the present study agreed the fact by 54%.[12].

The present research study has been initiated by reviewing from previous studies, where investigates were done based on clinical reports, interventional studies [13], [14], [15], [16], In vitro studies [17], [18], [19], [20] and systemic reviews [21], [22], [23], [24], [25], [26], [27].

LIMITATIONS: The limitations for the present study are not much quantitative data, lesser sample size, only through online surveys, simple questionnaires, among only dental students in one institute and lack of intense knowledge.

FUTURE SCOPE: The future scope for the present study is to increase the sample sizes, introducing new technology in veneer treatment, get deep knowledge about the veneer and spread awareness about veneers among the common population.

5. CONCLUSION:

The study concluded that the knowledge regarding esthetic veneer treatment is high among undergraduate students. This study shows a high-level self-consciousness and findings of the studies have greater impact on the psychological functional and physical aspects.

6. ACKNOWLEDGEMENT:

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AUTHOR CONTRIBUTION: Author 1(Madhumitha B), carried out the study by collecting data and drafted the manuscript after performing the necessary statistical analysis. Author 2(Dr. L. Keerthisasanka) aided in conception of the topic, has participated in the study design, statistical analysis and has supervised in preparation of the manuscript. Author 3(Dr. R. abilasha) has participated in the study design and has coordinated in developing the manuscript. All the authors have discussed the results among themselves and contributed to the final manuscript.

CONFLICT OF INTEREST: The author has none to declare.

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GRAPH LEGENDS :

- **FIGURE 1:** Bar charts showing Age wise distribution of the study populations from 14 to 57.
- **FIGURE 2:** Pie charts showing Gender wise distribution of the study population with 63% of female and 36% of male.
- **FIGURE 3:** Pie charts show that 71% of the respondents are aware of veneer treatment and 28% are not aware.
- **FIGURE 4:** Pie charts show that 33% of the students accept that veneer can ruin our teeth and 66% are not agreed.
- **FIGURE 5:** Pie charts show the materials used for veneers,15% of respondents answered for porcelain, 19% were answered for resin composite,20% were answered for glass ceramics and 50% were answered for all the above.
- **FIGURE 6:** Pie charts show 76% of the students agreed that veneers need high maintenance and 23% are denied.
- **FIGURE 7:** Pie charts show 45% of the respondents accept that veneers have side effects and 55% are denied.
- **FIGURE 8:** Pie charts show 70% agreed that paste is best for veneers and 29.4% agreed for floss is best for veneers
- **FIGURE 9:** Pie charts show 74.5% of the students agreed that they can brush veneers and 25.4% are not agreed.
- **FIGURE 10:** Pie charts show the type of paste used for veneers,67.6% of the respondents used non-abrasive fluoride toothpaste, 20.5% used fluoride toothpaste and 11.7% used non-fluoride toothpaste.

- **FIGURE 11:** Pie charts show the best method to keep veneers white, 21% agreed to avoid cigarettes and tobacco, 16.6% agreed for brushing and flossing, 11.7% agreed to rinse with water and 50% agreed for all the above.
- **FIGURE 12:** Pie charts show that 31.3% of the students agreed that baking soda is safe for veneers and 68.6% disagreed.
- **FIGURE 13:** Pie charts show that 67.6% of the respondents agreed that veneers look natural and 32.3% are denied.
- **FIGURE 14:** Pie charts show that 29.4% of the respondents agreed that it is painful to get veneers and 70.5% diagreed.
- **FIGURE 15:** Pie charts show the best veneers,62.7% are answered for porcelain and 37.3% were answered for composite resin veneers are the best.
- **FIGURE 16:** Pie charts show that 74.5% of the students are aware that they can use mouthwashes for veneers and 25.% are not aware.



FIGURE 1: Bar charts showing Age wise distribution of the study populations from 14 to 57. X axis represents age and Y axis represents percentage distribution of age.



FIGURE 2: This Pie chart represents the percentage distribution of gender of the respondents(63%) were female(blue) and (36%) were male(green).



FIGURE 3: This Pie chart represents the percentage distribution of awareness among students about the veneer treatment . Majority of participants (71%) were aware (Blue) and (28%) were not aware (green)



FIGURE 4: This Pie chart represents the percentage distribution of awareness of students about veneer treatments that can ruin our teeth . Majority of participants (33%) were accepted (Blue) and (66%) were denied (green)



FIGURE 5: This Pie chart represents the percentage distribution of awareness of students about materials used for veneers. Majority of participants (46%)were answered for all the above (Blue), (15%) were answered for porcelain (green), (19%) were answered for resin composite (brown), (20%) were answered for glass ceramics(violet).



FIGURE 6:This Pie chart represents the percentage distribution of awareness of students about veneer requires high maintenance. Majority of participants (76%) were answered yes (Blue) and (23%) were answered no (green)



FIGURE 7: This Pie chart represents the percentage distribution of awareness of students about the side effects of veneer. Majority of participants (45%) were answered yes (Blue) and (54%) wereanswered no (green)



FIGURE 8: This Pie chart represents the percentage distribution of awareness of students about the best way to maintain veneers. Majority of participants (70%) were answered paste is best for veneers (Blue) and (29.4%) were answered floss is best for veneers (green)



FIGURE 9: This Pie chart represents the percentage distribution of awareness of students about usage of brush on veneers. Majority of participants (74.5%) were answered yes (Blue) and (25.4%) were answered no (green)



FIGURE 10: This Pie chart represents the percentage distribution of awareness of students about the type of paste used for veneers. Majority of participants (67.6%) answered non abrasive fluoride toothpaste (Blue) and (20.5%) answered fluoride toothpaste (green) and (11.7%) answered non fluoride toothpaste(brown).



FIGURE 11: This Pie chart represents the percentage distribution of awareness of students about the best method to keep veneers white without staining. Majority of participants (46%)were answered for all the above (Blue), (15%) were answered for avoiding cigarettes and tobacco (green), (19%) were answered for brushing and flossing (brown), (20%) were answered for rinse with water(violet).



FIGURE 12: This Pie chart represents the percentage distribution of awareness of students about baking soda is safe for veneers. Majority of participants (31.3%) were answered yes (Blue) and (68.6%) were answered no (green)



FIGURE 13: This Pie chart represents the percentage distribution of awareness of students about the veneers can give a natural look. Majority of participants (75.4%) were answered yes (Blue) and (24.5%) were answered no (green)



FIGURE 14: This Pie chart represents the percentage distribution of awareness of students about veneers treatment will be painful. Majority of participants (29.4%) were answered yes (Blue) and (70.5%) were no (green)



FIGURE 15: This Pie chart represents the percentage distribution of awareness of students about the best material for veneers. Majority of participants (62.7%) were answered porcelain veneers is the best veneer (Blue) and (37%) were answered composite is the best veneer (green)



FIGURE 16: This Pie chart represents the percentage distribution of awareness of students about mouthwashes used for veneers. Majority of participants (74.5%) were answered yes (Blue) and (25.4%) were answered no (green)



Figure 17: The bar graph represents the association between gender and knowledge of people about the awareness of veneer treatment . X axis represents the gender and Y axis represents the number of responses. Blue denotes who are aware, green denotes who are not. [Pearson's Chi Square test value: 0.457, DF value: 1 and p value is 0.499(>0.05)]. Hence it is statistically not significant. This proves the knowledge about esthetic veneers was similar in both the genders.



Figure 18: The bar graph represents the association between gender and knowledge of people about the awareness of materials used for veneer treatment. X axis represents the gender and Y axis represents the number of responses. Blue denotes all the above, green denotes porcelain, brown denotes resin composite, violet denotes glass ceramics. [Pearson's Chi Square test value: 1.272, DF value: 3 and p value is 0.736(>0.05)]. Hence it is statistically not significant. This proves the knowledge about materials used for veneers was similar in both the genders.



Figure 19: The bar graph represents the association between gender and knowledge of people about the awareness of veneers needing high maintenance . X axis represents the gender and Y axis represents the number of responses. Blue denotesYes, green No. [Pearson's Chi Square test value: 1.241, DF value: 1 and p value is 0.265(>0.05)]. Hence it is statistically not significant. This proves the knowledge about veneers high maintenance was similar in both the genders.



Figure 20: The bar graph represents the association between gender and knowledge of people about the awareness of veneers look natural. X axis represents the gender and Y axis represents the number of responses. Blue denotes Yes, green No. [Pearson's Chi Square test value: 0.205, DF value: 1 and p value is 0.654(>0.05)]. Hence it is statistically not significant. This proves the knowledge about veneers look natural was similar in both the genders.



Figure 21: The bar graph represents the association between gender and knowledge of people about the awareness about the best veneers. X axis represents the gender and Y axis represents the number of responses. Blue denotes porcelain veneers, green denotes resin composite veneers. [Pearson's Chi Square test value: 0.891, DF value: 1 and p value is 0.345(>0.05)]. Hence it is statistically not significant. This proves the knowledge about the best veneers was similar in both the genders.