

Elucidating Saudi Societal Awareness about the Veneer

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Abstract

Veneer is broadly used in the aesthetic dentistry to create a beautiful smile by covering the surface of the teeth. Veneer can be customized and is made of ceramic or composite. Veneer is not a good choice for people with unhealthy teeth. The main aim of this study is to elucidate the societal awareness about Veneer in Saudi Arabia. A total of 817 people residing in Saudi Arabia participated in this study. The Elucidation of Societal Awareness about Veneer among the adult Saudi Population was done using a questionnaire. This questionnaire included 20 questions related to both demographic data and awareness about Veneer. The Saudi population depend on the social media and the information that is available online for all the information related to veneer. A moderate percentage (53.1%) of the participants have knowledge about Veneer, its advantages and disadvantages over other aesthetic dentistry, its care and ways to enhance its lifetime.

Keywords: Veneer, aesthetic dentistry, cosmetic dentistry, ceramic veneer, composite veneer, social media, Saudi Arabia dentistry.

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INTRODUCTION

In the field of Dentistry, Veneer is a material that covers part or parts of the tooth. The Veneer is wafer thin, customized and tooth-coloured. The Veneer is made up of ceramic or composite material. It is placed over the facial surface of the tooth, in order to correct the dental problems such as worn-out tooth enamel, crooked or mis-shaped teeth, unequal alignment of the teeth, spaces between the teeth, discolouration, and chips and cracks in the teeth [1].

Veneer is widely used in the cosmetic dentistry. To create a symmetrical smile, 6-8 veneers have been used. They are commonly used with the maxillary anterior eight teeth to make an esthetic smile. They can be made of ceramic material such as lithium disilicate or composite. Each of these two have its own benefits and the dentist will help the patient chose the type of veneer that is best suited for him/her. Both ceramic and composite veneer serve the same purpose for the teeth, however there are few basic differences listed below [2].

Ceramic Veneer

The Ceramic veneer is manufactured in the laboratory. It needs at-least 2 appointments (1: prepare teeth and take impression to prepare in lab and 2: to

cement veneer on the tooth) with the dentists. It preserves the bright, negligibly translucent outlook of the teeth [2]. Less amount of tooth is removed compared to that of applying crown or cap. Ceramic veneer doesn't easily gets stained. Ceramic veneer is strong and long lasting when compared with composite veneer. Lithium disilicate is a glass ceramic, that provides a flexural structure and promotes propagation of cracks through the material and gives high strength and is known to give dental restorations.

Composite Veneer

The composite veneer is manufactured at the dental clinic by the dentist, and is applied directly to the teeth. Unlike the ceramic veneer, the composite veneer needs only 1 appointment. Thus fixing the composite veneer on the teeth to hide imperfections is made more easily [2]. It has an advantage that, many veneers can be applied in a single visit; it is less costly when compared with the ceramic veneer and is easy to repair if needed. For composite veneer, the tooth enamel is removed to a small extent when compared to the ceramic veneer. The composite veneer is not as strong and durable like that of the ceramic veneer but it is easy and quick to repair and fix.

Before getting the veneer, the patient should have healthy periodontal tissue and caries free teeth[3].

If the patient has para-functional habit like bruxism, then veneers are not the right choice for them as they might break or chip. In the process of applying Veneer, the enamel removal is irreversible. It should be noted to the patient that over a period of time the veneer can loosen up and need to be changed. The patient should regularly visit the dentist to avoid any dental problems [4].

Biting nails or hard objects could create pressure on Veneer and allow it to chip or break. Any difficulty over biting after the application of veneer should be immediately reported to the dentist. For the long life of veneer, patient need to follow good oral hygiene (brushing, flossing) and cementation of veneer on regular basis [5].

Three major steps are involved in order to treat a patient with veneers;

Step 1: Diagnosis and planning of the treatment.

In this step, x-rays and impressions of the teeth are made by the dentist.

Step 2: Preparation of tooth/teeth for Veneer.

In this step the dentist will prepare the teeth and the impression of the teeth is made by the dentist to be sent to the laboratory for veneer fabrication.

Step 3: The Veneer is cemented on the teeth by applying special beam of light. After cementing, the excess cement is removed and the occlusion is evaluated [6].

Despite all the advantages, Veneers has a few disadvantages as well . Application of Veneer is an irreversible process, Veneers are more expensive when compared to the composite resin bonding, as the enamel is removed partially, the teeth is more sensitive to hot or cold [7]. Veneer colour may not exactly match the colour of other teeth, and hence the teeth should be whitened before applying veneer, to match its colour. Veneer could dislodge and fall off very rarely. Veneer is not a good choice for people with periodontal disease. Individuals who clench and brux are poor candidates for veneer.

Veneer generally lasts between 7 to 15 years; beyond this time it need to be replaced. As such Veneer do not require any special care but the patient should continue to follow a good oral hygiene with dental flossing and rinsing oral cavity with a mouthwash. Although the veneer resist the stains, but the dentist may still recommend to avoid stain causing food and drinks. The other alternatives of veneers include treatment with crowns [3].

The main purpose of this study is to help the general population of Saudi Arabia to take into consideration the advantages of veneer over its disadvantages. The residents of Saudi Arabia are evaluated for their knowledge about Veneer and are made aware with all the pro's and con's of using

veneer. Therefore by carrying out this survey we can elucidate the societal awareness about Veneer among the Saudi population.

AIM & OBJECTIVES

The main aim of this study is to elucidate the social awareness about Veneer in Saudi Arabia. This can be attained by:

- Conducting the survey to elucidate the knowledge of the adult population residing in Saudi Arabia about Veneer.
- To evaluate the awareness of the adult Saudi population related to Veneer.

METHODOLOGY

Research Instrument

This survey is a cross-sectional study that was conducted in Saudi Arabia, which is the 13th largest country in the world. Saudi Arabia has around 34.8 million population of the world as reported in July 2020. A total of 817 people residing in Saudi Arabia participated in this study. After reviewing the literature regarding the awareness about Veneer, questionnaire was selected from one of the previous studies and the modification were done in order to meet the requirement of the present study [5]. A pre-designed, pre-tested and self-administered questionnaire was circulated online due to the current pandemic situation of COVID-19 via Google Forms to various participants residing in Saudi Arabia.

Questionnaire consisted of the basic demographic information about the participants and also single answer multiple-choices type of questions related to the elucidation of societal awareness about Veneer among the Saudi population.

STATISTICAL METHODS

The data that was collected from the questionnaire related to elucidation of societal awareness about Veneer was analysed using the computer software Statistical package for social sciences that is SPSS 16. The frequencies and percentages of the responses from the adult population in Saudi Arabia was done using the P value equal to or less than 0.05. The descriptive statistics was attained and the mean, standard deviation and frequency distribution was calculated.

RESULTS

The Elucidation of Societal Awareness about Veneer among the adult Saudi Population was done using a questionnaire. This questionnaire included 20 questions related to both demographic data and awareness about Veneer.

Demographic Data

A total of 817 people participated in this study. Among all the 817 participants, 104 (12.6%) were

under 20 years of age; 226 (27.4%) were between 21-30 years; 139 (16.9%) were between 31-40 years of age; 165 (20%) were between 41-50 years and 190 (23.1%) were above 51 years of age.

About 446 (54.1%) participants were females and 373 (45.2%) were males. Among 817 participants 4

(0.5%) had only primary education; 143 (17.3%) had secondary level of education; 55 (6.7%) had Diploma level of education and 623 (75.5%) had university level of education. 741 (90.7%) of the participants of this survey were Saudi and 76 (9.3%) are Non-Saudi participants.

Demographic Characters	Frequency	Percentage
<20 years	104	12.6
21-30 years	226	27.4
31-40 years	139	16.9
41-50 years	165	20
>51 years	190	23.1
Gender		
Female	446	54.1
Male	373	45.2
Education		
Primary	4	0.5
Secondary	143	17.3
Diploma	55	6.7
University	623	75.5
Nationality		
Saudi	741	90.7
Non-Saudi	76	9.3

Knowledge about Veneer

436 (53.1%) participants think that Veneer is indicated for badly stained teeth; 68 (8.3%) participants think its crowded teeth, 187 (22.8%) indicated for replacing the missing teeth; 374 (45.6%) think its cover up fractured teeth; 142 (17.3%) indicated for multiple stained restorations; 350 (42.6%) indicated by treating dental flourosis.

About 269 (32.8%) thinks that the merit for choosing Veneer is to resist the staining; 394 (48%) to change the tooth colour; 391 (47.7%) to change tooth shape; 218 (26.6%) to correct maligned teeth; 292 (35.6%) to fill up spaces between the teeth; 60 (7.3%) to prevent tooth decay; and 42 (5.1%) to prevent tooth cleaning or dental flossing.

Knowledge About Veneer	Frequency	Percentage (%)
When do you think Veneer is indicated?		
Badly stained teeth	436	53.1
Crowded teeth	68	8.3
Replace missing teeth	187	22.8
Cover-up fractured teeth	374	45.6
Multiple stained restorations	142	17.3
Treat dental flourosis	350	42.6
What are the merits of using Veneer		
Resist the staining	269	32.8
Changes tooth color	394	48
Changes tooth shape	391	47.7
Corrects maligned teeth	218	26.6
Fills up spaces between the teeth	292	35.6
Prevents tooth decay	60	7.3
Prevents tooth cleaning or dental flossing	42	5.1
What are the demerits of using Veneer?		
Removal of tooth surface	520	64.4
Unpleasant odor	270	33.5
Over-contouring of gums	191	23.7
Requires exclusive hygiene	226	28
Changes voice	34	4.2
It changes the originality of teeth	316	39.2

Around 520 (64.4%) participants think that the merits of using Veneer as removal of tooth surface; 270 (33.5%) as unpleasant odour; 191 (23.7%) as over-contouring of gums; 226 (28%) as requires exclusive hygiene; 34 (4.2%) as it changes voice; 316 (39.2%) as change in the originality of teeth.

Awareness about Veneer

Nearly half of the participants (45.7%) that answered the questionnaire knew about Veneer, whereas 54.3% of them didn't had any knowledge about Veneer. Only 6.9% of the people are the current users of Veneer, while 93.1% don't use Veneer. 60.1%

thinks that Veneer could cause dental colour changes, while 39.9% feels that Veneer couldn't cause any dental changes. 58.7% of the participants feel that Veneer could cause gingival infections, whereas 41.3% thinks that Veneer couldn't cause any gingival infection. 54.7% thinks that Veneer causes accumulation of food and 45.3% thinks that Veneer couldn't cause accumulation of food. 39.1% answered that Veneer could cause wear and tear of teeth, while 60.9% thinks that Veneer couldn't cause wear and tear of the teeth. 51.3% follows the normal cleaning of Veneer like that of the natural teeth, whereas 48.7% don't follow the normal cleaning of Veneer like that of natural teeth.

Awareness About Veneer	Yes (%)	No (%)
Do you know about Veneer?	45.7	54.3
Are you a current user of Veneer?	6.9	93.1
Do you think Veneer could cause dental color changes?	60.1	39.9
Do you think Veneer could cause gingival infections?	58.7	41.3
Do you think that the Veneer causes the accumulation of food?	54.7	45.3
Do you think Veneer could cause wear and tear of teeth?	39.1	60.9
Do you follow the normal cleaning of the Veneer like that of a natural teeth?	51.3	48.7
Do you follow any special way to clean Veneer?	45.3	54.7
The lifetime of Veneer could be increased by proper cleaning?	84.9	15.1
The life of Veneer depends on the type of material used in its making?	91.2	8.8
The life of Veneer could be increased by avoiding use of teeth to bite hard objects?	80.2	19.8
The life of Veneer could be increased by having regular checkups with the dentist?	90.5	9.5
The life of Veneer could be increased by regular cleaning of Veneer?	90.1	9.9

45.3% of the participants use a special technique to clean Veneer while 54.7% don't follow any special way to clean Veneer. 84.9% answered that lifetime of Veneer could be increased by proper cleaning, while 15.1% feels that lifetime of Veneer couldn't be increased by proper cleaning. 91.2% thinks that life of Veneer depends on type of material used in the making of Veneer, whereas 8.8% thinks that it doesn't depend. 80.2%, 90.5%, 90.1% thinks that the life of Veneer could be increased by avoiding use of teeth to bite hard objects, having regular check ups, by regular cleaning of Veneer respectively.

DISCUSSION

The aesthetic dentistry has gained a lot of significance due to the growing accessibility of social media and online information [1]. The use of Tiktok, Instagram and You-tube as well as watching television programs have increased the interest of Saudi people in aesthetic dentistry particularly in case of teeth whitening and veneers [5]. In Saudi Arabia there is an increase in teeth whitening, in recent times in the age group between 20 to 50 years [8]. Veneer is used to treat discoloured teeth, cracked or chipped teeth, Diastema closure, teeth reshaping, minor misalignment of the teeth, and large cervical lesions in the teeth. The various advantages of veneer are to provide excellent aesthetic and high resistance to any type of permanent stains with less suitability for accumulation of food and more lifetime when compared to the resin

composites. Veneer is also supposed to be a safe and conservative option to use for the aesthetic dentistry

Reid et al in his research reported that if the teeth are unprepared, gingival tissue have high chance of developing a gingivitis after the cementation of the veneer [9]. The placement of Veneer is a successful job, which mainly relies on the tooth reduction of the natural teeth to accommodate the veneer.

Most of the Saudi population depend on the social media and the information that is available online for all the information related to veneer [10]. It was reported that the Dutch population use the dental veneer to have beautiful smiles. In developed countries such as the United States of America, the use of dental veneer has increased by triple times [1]. The results of previous research by Farsi *et al.*, [11] reported that the population of Saudi Arabia have very less or insufficient information about veneer, its uses, advantages, disadvantages, and its care similar to this study.

In the present study, majority of the people that use veneer are females, the same as the research reported by Assad *et al.*, [5] and villuttu *et al.*, [13]. Both male and female have very little information regarding advantages, disadvantages, use and also the care needed to increase lifetime of the veneer. Mostly the Saudis and the other Arabs depend on the social

media, magazines, television, friends and relatives as a significant source of knowledge for the dental health and aesthetic dental procedures [14, 15].

In the current study mostly the participants belonged to the age group between 21 - 30 years followed by more than 50 years age group. Majority of the participants were females, having university level of education. Almost 91% of the people were Saudi nationals and 9% were Non-Saudi residents of Saudi Arabia. Most of them think that veneer should be indicated in case of badly stained teeth.

Approximately 50% of the Saudi residents are aware of the merits and demerits of having veneer. Less than 10% of the participants use veneer at present time of answering the questionnaire of the survey. A moderate percentage of the participants have knowledge about Veneer, its advantages and disadvantages over other aesthetic dentistry, its care and ways to enhance its lifetime.

CONCLUSION

The results of this study show that the population of Saudi Arabia have a moderate level of knowledge and awareness about veneer, its use, merits & demerits and maintenance. The participants using veneer have comparatively insufficient knowledge about veneer, its merits, demerits, uses, lifetime and care when compared to the non-users of veneer. Hence the population of Saudi Arabia should be made aware about veneer. Majority of the participants who had knowledge about veneer was through the social media and had less knowledge than those who gained the knowledge through an authentic source like books, research articles and survey. Social media can be used as a platform by the dental practitioners to share basic knowledge about veneer, its uses, its side effects, its lifetime, and care needed to create awareness among the Saudi population. The awareness made should be both in Arabic and English language to cover up the non-English speakers as well.

LIMITATIONS

This survey is conducted only for a small group of Saudi population with Saudi nationals in majority and needed to be elaborated to give more accurate results for elucidating the societal awareness about Veneer in Saudi Arabia.

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Ethical Considerations: Compliance with ethical standards.

Ethical Approval: This article contains survey with human participants performed by all the participants of this research.

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REFERENCES

1. Morley, J. (1999). The role of cosmetic dentistry in restoring a youthful appearance. *The Journal of the American Dental Association*, 130(8), 1166-1172.
2. Nalbandian, S., & Millar, B. J. (2009). The effect of veneers on cosmetic improvement. *British Dental Journal*, 207(2), E3-E3.
3. Aristidis, G. A., & Dimitra, B. (2002). Five-year clinical performance of porcelain laminate veneers. *Quintessence international*, 33(3):185-189.
4. Strassler, H. E. (2007). Minimally invasive porcelain veneers: indications for a conservative esthetic dentistry treatment modality. *General Dentistry*, 55(7), 686-694.
5. Asaad, R. S., Alshwaer, A. A., Alahmadi, S. A., Alyamani, M. H., & Alshaeri, R. M. (2019). Awareness of the population about ceramic laminate veneers in Saudi Arabia. *Curr Sci Int*, 8(1), 42-6.
6. Morimoto, S., Albanesi, R. B., Sesma, N., Agra, C. M., & Braga, M. M. (2016). Main Clinical Outcomes of Feldspathic Porcelain and Glass-Ceramic Laminate Veneers: A Systematic Review and Meta-Analysis of Survival and Complication Rates. *International Journal of Prosthodontics*, 29(1):38-49.
7. Walls, A. W. G., Steele, J. G., & Wassell, R. W. (2002). Crowns and other extra-coronal restorations: porcelain laminate veneers. *British dental journal*, 193(2), 73-82.
8. Peumans, B., Van Meerbeek, B., Lambrechts, P., & Vanherle, G. (2000). Ceramic veneers: a review of the literature. *J Dent*. 28:163-77.
9. Al-Sadhan, S. (2003). Dental health knowledge, dental visits and source of information among intermediate school children in Riyadh, Saudi Arabia. *Egypt Dent Assoc*, 49: 835-841.
10. Reid, J. S., Kinane, D. F., & Adonogianaki, E. (1991). Gingival health associated with porcelain veneers on maxillary incisors. *International journal of paediatric dentistry*, 1(3), 137-141.
11. Farsi, J. M. A., Farghaly, M. M., & Farsi, N. (2004). Oral health knowledge, attitude and behaviour among Saudi school students in Jeddah city. *Journal of dentistry*, 32(1), 47-53.
12. Mariño, R., Hopcraft, M., Ghanim, A., Tham, R., Khew, C. W., & Stevenson, C. (2016). Oral health-related knowledge, attitudes and self-

- efficacy of Australian rural older adults. *Gerodontology*, 33(4), 530-538.
13. Vallittu, P. K., Vallittu, A. S. J., & Lassila, V. P. (1996). Dental aesthetics—a survey of attitudes in different groups of patients. *Journal of dentistry*, 24(5), 335-338.
14. Koivusilta, L., Honkala, S., Honkala, E., & Rimpelä, A. (2003). Toothbrushing as part of the adolescent lifestyle predicts education level. *Journal of dental research*, 82(5), 361-366.
15. Theobald, A. H., Wong, B. K., Quick, A. M., & Thomson, W. (2006). The impact of the popular media on cosmetic dentistry. *New Zealand Dental Journal*, 102(3), 58.