CAHIERS MAGELLANES-NS
Volume 07 Issue 1
2025

ISSN:1624-1940
http://magellanes.com/

KNOWLEDGE AND AWARENESS ABOUT DENTAL VENEERS AMONG SAUDI POPULATIONS

Abdulrahman J. Alhaddad[1], Lama A. Alnami[*2], Hadeel A. Alashram[2], Ziyad N. Alqahtani [3], Abdulaziz N. Almutairi [4], Wijdan N. Hadi [5], Sami J. Alqahtani [3], Abdulaziz A. Alshumaym[4], Mohammed I. AL Farhan[2], Dalia T. Baamer[6], Samar H. Abuzinadah[7], Khames T. Alzahrani [8]

[1]Associate Professor and Consultant of Prosthodontics, Oral and Maxillofacial Prosthodontics Department, King Abdulaziz University, Faculty of Dentistry, Jeddah, Saudi Arabia.
[2]Dental student, King Khalid University, Abha, Saudi Arabia.
[3]Dental Intern, King Khalid University, Abha, Saudi Arabia.
[4]Dental Intern, Qassim University, AlQassim, Saudi Arabia.
[5]General Dentist, ibn sina national college, Jeddah, Saudi Arabia.
[6]Collage of Dentistry, King Abdul-Aziz University, Jeddah, Saudi Arabia.
[7]Associate Professor and Consultant of Restorative and Digital Dentistry, Restorative Dentistry Department, King Abdul-Aziz University, Faculty of Dentistry, Jeddah, Saudi Arabia.
[8]BDS, PGD Endo from Stanford University, Saudi Board of Endodontic SR, King Faisal Specialist Hospital & Research Centre, Riyadh, Saudi Arabia.

***Corresponding author**: Khames T. Alzahrani; **Email**: Dr.khames.Alzahrani@gmail.com

Abstract

Background: Veneer is broadly used in aesthetic dentistry to create a beautiful smile by covering the surface of the teeth. The Hollywood smile was first introduced to the idea of veneering anterior teeth with laminates in 1928. In the modern world, patients are more conscious about their teeth appearance due to improving living standards and greater knowledge of oral health care. In addition to this, Saudi Arabia surveys reveal that 46% of respondents are unaware of ceramic veneers, with differences based on gender, education, marital status, and family income. Younger individuals and graduates are more aware of dental aesthetics, promoting better dental care. **Objectives:** To measure the knowledge and awareness level about dental veneers among the Saudi population**. Methodology:** A cross-sectional study in both English and Arabic languages was conducted using an online survey of the adult Saudi population between the ages of 18 and 60 in the period from July to December 2024. The questionnaire consisted of 20 questions. The questionnaire was divided into three sections; the first section asked about the participants' personal information, the second section was about general knowledge of dental veneers, and the third section was about awareness of dental veneers. All the data was analyzed by using the statistical analysis software (SPSS) program, version 20 (IBM SPSS Statistics for Windows, Version 20.0. Armonk, NY: IBM Corp.)**. Results:** The study included 498 Saudi participants aged between 27-45, primarily married and single adults. The majority used veneers to cover fractured teeth and improve tooth aesthetics. The majority valued color and shape over the procedure. Most were aware of dental veneers, but only 13.1% were current users. Some believed they could cause color changes or gingival infections. A large percentage agreed that veneers could live longer if cleaned properly. **Conclusion:** The results of our study revealed that the Saudi population is highly aware of dental veneers, where

ISSN:1624-1940
http://magellanes.com/

67.3% of respondents reported a high knowledge level, and there was mostly moderate awareness. Despite that, only 13.1% of participants are current users, which indicates a gap between knowledge and adoption. Furthermore, our results show that in both knowledge and awareness levels, there was a statistically insignificant relation to gender, age, marital status, educational level, occupational status, monthly income, nationality, and residential area.

Keywords: Dental veneers, Saudi population, Awareness, Knowledge.

Introduction:

In the modern world, patients are more conscious about their appearance due to improved living standards and greater knowledge of oral health care [1]. Indeed, Many people have heard about aesthetic dentistry, or the aesthetic smile, thanks to social media, television, and fashion magazines [2]. Veneers are introduced as a more conservative treatment [3]. The dental veneers are extremely thin shells made of ceramic, porcelain, or composite resin that are placed on the front surface of teeth to improve their appearance [4].

The Hollywood smile was first introduced to the idea of veneering anterior teeth with laminates in 1928 by Dr. Charles L. Pincus [5]. The dental veneers are classified based on techniques such as a direct technique with composite resins and an indirect technique with porcelain veneers [6]. Additionally, Porcelain laminate veneers PLVs are used in clinical settings for a wide range of esthetic reconstructive indications, including discolorations, wear, fractures, diastemas, and malalignment [7]. Such thin restorations with a thickness of 0.3 - 0.7 mm could be created almost perfectly with the help of computer design [8].

In 2019, a study conducted in Saudi Arabia identified significant gaps in the populations' knowledge about ceramic veneers. It showed that 46% of the Saudi Arabian population were unaware of the composition of ceramic veneers, 74% did not know their effects on gingival health, 58% were uncertain whether veneers are classified as definitive restorations, 77% were unfamiliar with the number of the required appointments, and 60% were unsure if veneers facilitate plaque removal compared to natural teeth. These findings underscore the need for enhanced public education on ceramic laminate veneers in Saudi Arabia [9]. Another study reported a mean dental veneer knowledge score of 13.58 in participants at King Abdulaziz University, Jeddah, in 2020, with significant differences based on gender, education, marital status, and income [10]. Additionally, it found that individuals aged 18–30 exhibited significantly greater awareness of veneers and an increased demand for dental aesthetic procedures. Male participants were more likely than female participants to seek corrective treatments for Hollywood smiles, and higher educational attainment was significantly associated with enhanced awareness of dental aesthetics [11]. However, in the literature, the studies regarding public awareness of dental veneers in Saudi Arabia are limited. Also, patients often seek veneers primarily for aesthetic purposes, with limited awareness of their additional applications, such as correcting tooth shape, repairing fractured teeth, and restoring teeth affected by abrasion or erosion. Therefore, the aim of this study is to assess the level of understanding among residents of Saudi Arabia regarding veneers. By conducting this survey, we aim to highlight the extent of public awareness about veneers within the Saudi population.

Objectives: This study aimed to measure the knowledge and **awareness** about dental veneers among Saudi populations**.**

ISSN:1624-1940
http://magellanes.com/

Methodology:

Study design and setting:

This cross-sectional study was conducted in Saudi Arabia between July 2024 to December 2024. Participants in the study were Saudi adults, both male and female, between the ages of 18 and 60 who were receiving dental veneers. Participants were chosen in 2024 from those who received the questionnaire.

Sample size:

Data collection was conducted from July 2024 to December 2024 and involved a target sample of 384 patients, calculated with a 95% confidence level and a 5% margin of error. The sample size was estimated using the formula:

n = P(1-P) * Zα 2 / d 2 with a 95% confidence level.

Therefore, the calculated minimum sample size was: n = (1.96)2 X 0.50 X 0.50/(0.05) 2 = 384**.**

Inclusion and exclusion criteria:

The inclusion criteria were the Saudi population, males and females, ages ranging from 18 to 60 years old, The KSA general population subjects who have or do not have knowledge and awareness about dental veneers, and subjects who would agree to participate in this study and complete questionnaires. Exclusion criteria were dental practitioners, non-Arabic speakers, and both genders of Saudi citizens under 18 years old.

Method for data collection, instrument, and score system:

A structured questionnaire was utilized as the primary study tool, developed based on a review of relevant studies conducted in Saudi Arabia. The questionnaire comprised 20 questions divided into three sections. The first section included eight demographic questions regarding gender, age, nationality, and level of education. The second section asked general knowledge questions regarding dental veneers, such as the indication for veneers and their pros and cons, with multiple choice answers. Correct answers were added to the total score regarding general dental veneer knowledge and were derived from previous literature [10,12]. The third section asked about the participants' awareness of dental veneers.

Scoring system:

The questionnaire included 24 statements designed to evaluate participants' awareness and knowledge levels: 8 statements for demographics, 3 for knowledge, and 13 for awareness. One point is given for correct answers, and zero point is given for incorrect answers. Likert scales (Dichotomous, Three-Point, and Quality Scales) were employed for scoring**.** The maximum score was 19 and divided as follows: The original Bloom's cut-off points were 80-100%, 60-79%, and 59.0%, and the participants were divided based on their scores into three groups.

Knowledge scores varied from 0 to 6 points and were classified into three levels as follows; those with a score of 3 or below were classified as having a low level of knowledge, those with scores between 4 as having a moderate level of knowledge, and those with scores between 5 and 6 as having a high level of knowledge.

Awareness scores varied from 0 to 13 points and were classified into three levels as follows; those with a score of 7 or below were classified as having a low level of awareness, those with scores 8-10 as

ISSN:1624-1940
http://magellanes.com/

having a moderate level of awareness, and those with scores 11 or above as having a high level of awareness.

Pilot test:

The questionnaire was distributed to 20 participants for completion in order to evaluate its simplicity and the study's practicality. The data from the pilot study was omitted from the study's final results.

Analyzes and entry method:

Data were entered into a computer using "Microsoft Office Excel Software" software (2023) for Windows and subsequently analyzed using the Statistical Package of Social Science Software (SPSS) program, version 20 (IBM SPSS Statistics for Windows, Version 20.0. Armonk, NY: IBM Corp.).

Results:

Table (1) displays various demographic parameters of the participants, with a total number of (498). The age distribution shows a mean of 34.3 years with a standard deviation of 12.3, indicating a relatively young population with a substantial proportion (34.9%) falling within the 27-45-year age range. The data collected represent a balanced viewpoint with 50.2% male and 49.8% female participants, representing an almost equal amount of represented gender in data. Married individuals dominate–51.0% and single adults–46.0%. A well-educated cohort, as 62.7% have a bachelor's degree or higher in their educational background. An overwhelming majority (43.4%) is employed, and a sizeable amount (26.7%) is a student. Income data also reveals a large number (41.4%) earning less than 5,000 Saudi riyals, suggesting potential economic challenges for some participants. Moreover, most respondents are geographically located in the southern region, which accounts for 56.2%.

Table (1): Sociodemographic characteristics of participants (n=498)

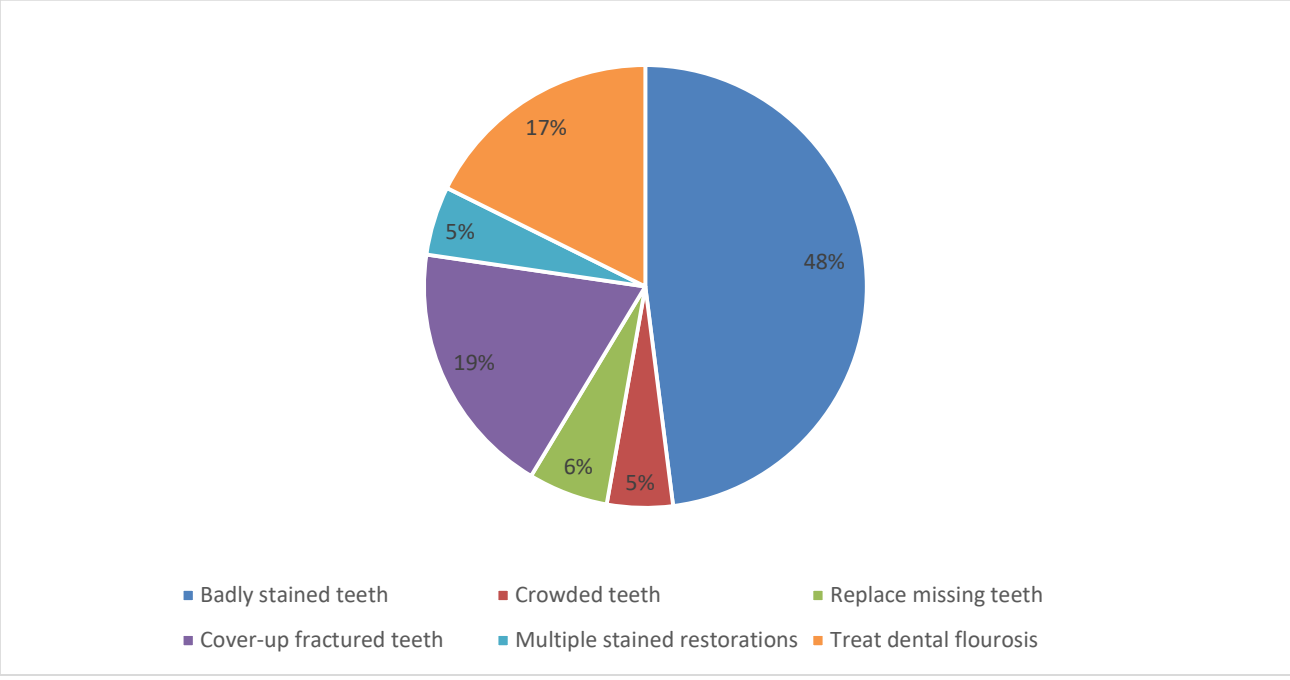
Parameter		***No.***	***Percent (%)***
Age (Mean:34.3, STD:12.3)	23 or less	106	21.3
	24 to 26	102	20.5
	27 to 45	174	34.9
	More than 45	116	23.3
Gender	Female	248	49.8
	Male	250	50.2
Marital status	Single	229	46.0
	Married	254	51.0
	Divorced	13	2.6
	Widowed	2	.4
Educational level	Primary school	4	.8
	Middle school	3	.6
	High school	64	12.9
	Diploma	83	16.7
	Bachelor's degree	312	62.7
	Postgraduate degree	30	6.0
	Uneducated	2	.4
Employment status	• Student	133	26.7

ISSN:1624-1940
http://magellanes.com/

	• Employee	216	43.4
	• Retired	45	9.0
	• Not employed	85	17.1
	• Freelance work	19	3.8
Income in Saudi riyals	Less than 5000	206	41.4
	5001 to 10000	126	25.3
	10,001 to 15,000	88	17.7
	More than 15,000	78	15.7
Nationality	Saudi	494	99.2
	Non-Saudi	4	.8
Residential area	Northern region	6	1.2
	Southern region	280	56.2
	Central region	107	21.5
	Eastern region	18	3.6
	Western region	87	17.5

As shown in Figure 1, the data from a total sample size of 498 participants reveal insightful trends regarding the indications for dental veneers. On a particularly important note, a huge 47.96% (239 people) reported poorly stained teeth as a main reason for veneer application, indicating large disarray for aesthetic refreshment in that region. Furthermore, 18.87% (93 respondents) were using veneers to cover fractured teeth, indicating the importance of both restoring function and appearance. Active treatment of fluorosis (17.66%, 88 participants) indicated its effect on the aesthetics of the teeth. In contrast, the least common indications were the replacement of missing teeth (5.81%) and the management of crowded teeth (4.82%), which implies a more selective use of these conditions.

Figure (1): Illustrates the indications of veneers among participants.



ISSN:1624-1940
http://magellanes.com/

Table 2 presents data on parameters related to the dental veneer knowledge of a sample population of 498 respondents. The most notable finding is that 48.0% of participants regarded veneers as primarily indicated to correct badly stained teeth. It demonstrates that people consider veneers to be a cosmetic fix, but they may not know that veneers are used for dental fluorosis treatment or to correct crowding. Furthermore, the benefits of veneers are most commonly valued in regard to color (34.5%) and shape (29.7%) and not in regard to improvement in resistance to staining (19.3%). Interestingly, 40.2% of the respondents were aware of the removal of the tooth surface as a great drawback of the procedure, indicating vivid awareness about the process being invasive.

Table (2): Parameters related to knowledge about dental veneer (n=498).

Parameter		***No.***	***Percent (%)***
When do you think Veneer is indicated?	Badly stained teeth	239	48.0
	Crowded teeth	24	4.8
	Replace missing teeth	29	5.8
	Cover-up fractured teeth	93	18.7
	Multiple stained restorations	25	5.0
	Treat dental flourosis	88	17.7
What are the merits of using Veneer?	Resist the staining	96	19.3
	Changes tooth color	172	34.5
	Changes tooth shape	148	29.7
	Fills up spaces between the teeth	53	10.6
	Prevents tooth decay	19	3.8
	Prevents tooth cleaning or dental flossing	10	2.0
What are the demerits of using Veneer?	Removal of tooth surface	200	40.2
	Unpleasant odor	109	21.9
	Over-contouring of gums	33	6.6
	Requires exclusive hygiene	111	22.3
	Changes voice	4	.8
	It changes the originality of teeth	41	8.2

As shown in Figure (2), On the question of whether veneers could change the color of the teeth, the presented data on the overall sample of 498 participants shows a significant disparity of responses in this group. In particular, 135 participants, about 27.1% of respondents, were unsure that veneers had the ability to generate color changes in teeth. On the other hand, 363 participants, or nearly (72.9 %), agreed that the veneers would truly lead to such modifications.

Figure (2): Illustrates if veneers cause dental color changes among participants.

ISSN:1624-1940
http://magellanes.com/

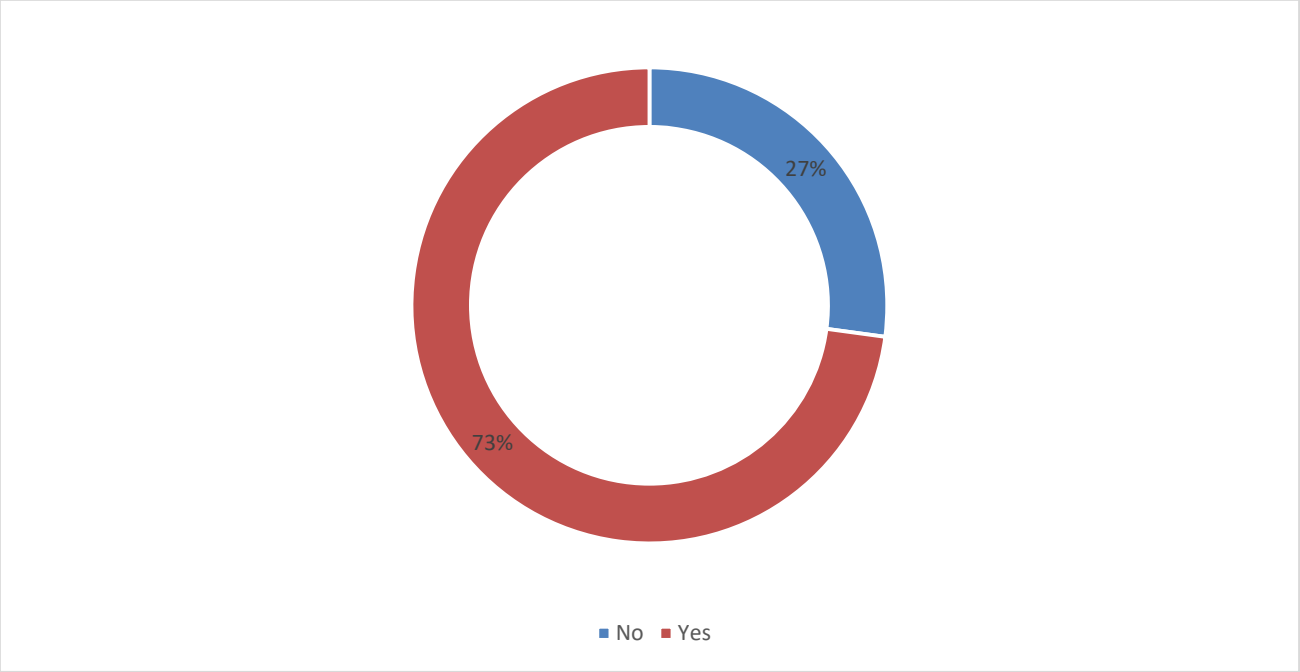


Table 3 presents data regarding participants' awareness and perception regarding dental veneers in a sample of 498 participants. Notably, the majority of the participants (59.4 %) were familiar with the option of veneers, however, only 13.1% were current users, highlighting a gap between knowledge and adoption. Results indicate that 72.9% of respondents think dental veneers could cause color changes, and 70.9% think that they might result in gingival infections. Furthermore, 59.0 percent of participants recognized the possibility of food accumulating over veneers and needed to be educated better regarding maintenance. Curiously, a large quantity (83.9%) agree that veneers can live longer if cleaned properly, yet only 45.6% follow cleaning routines comparable to natural teeth, and 54.6% practice particular cleaning methods.

Table (3): Participants' awareness about dental veneer (n=498).

Parameter		***No.***	***Percent (%)***
Do you know about Veneer?	No	202	40.6
	Yes	296	59.4
Are you a current user of Veneer?	No	433	86.9
	Yes	65	13.1
Do you think Veneer could cause dental color changes?	No	135	27.1
	Yes	363	72.9
Do you think Veneer could cause gingival infections?	No	145	29.1
	Yes	353	70.9
Do you think that the Veneer causes the accumulation of food?	No	204	41.0
	Yes	294	59.0
	No	251	50.4

ISSN:1624-1940
http://magellanes.com/

Do you think Veneer could cause wear and tear of teeth?	Yes	247	49.6
Do you follow the normal cleaning of the Veneer like that of a natural tooth?	No	271	54.4
	Yes	227	45.6
Do you follow any special way to clean Veneer?	No	226	45.4
	Yes	272	54.6
The lifetime of Veneer could be increased by proper cleaning?	No	80	16.1
	Yes	418	83.9
The life of Veneer depends on the type of material used in its making?	No	65	13.1
	Yes	433	86.9
The life of Veneer could be increased by avoiding use of teeth to bite hard objects?	No	67	13.5
	Yes	431	86.5
The life of Veneer could be increased by having regular checkups with the dentist?	No	53	10.6
	Yes	445	89.4
The life of Veneer could be increased by regular cleaning of Veneer?	No	43	8.6
	Yes	455	91.4

Table 4 shows a high level of awareness about dental veneers among the Saudi population, with 67.3% of respondents demonstrating significant knowledge on the topic. This finding indicates that a large section of the community has responded well to significant educational efforts designed to inform about dental aesthetics and restorative options. On the other hand, 26.7 and 6.0 percent demonstrated moderate and low knowledge levels, respectively. This may point to areas that require improvement in public education efforts.

Table (4): Shows knowledge of dental veneers among Saudi populations score results.

	Frequency	**Percent**
High knowledge level	335	67.3
Moderate Knowledge level	133	26.7
Low knowledge level	30	6.0
Total	498	100.0

The data presented in Table 5 illustrate the awareness of the Saudi population regarding the dental veneer, which is mostly moderate awareness. Nearly 64.3% of respondents were considered to have moderate awareness, which means there is a definite understanding of dental veneers, but not enough. On the contrary, the high awareness group (defined here as individuals who share 14.5% of the awareness) shows a possible target group of the population who are already conscious of the utility and benefits of dental veneers so that they can disseminate awareness to a broader population. Of interest, 21.3% of respondents claimed low awareness.

Table (5): Shows awareness of dental veneers among Saudi populations score results.

	Frequency	**Percent**
High level of awareness	72	14.5
Moderate awareness level	320	64.3
Low awareness level	106	21.3

ISSN:1624-1940
http://magellanes.com/

Total	498	100.0

Table (6) shows that knowledge of dental veneers among Saudi populations has a statistically insignificant relation to gender, age, marital status, educational level, occupational status, monthly income, nationality, and residential area.

Table (6): Relation between knowledge of dental veneers among Saudi populations and sociodemographic characteristics.

Parameters		***Knowledge level***		***Total (N=498)***	***P value****
		High knowledge level	**Moderate or low knowledge level**		
Gender	Female	175	73	248	0.119
		52.2%	44.8%	49.8%	
	Male	160	90	250	
		47.8%	55.2%	50.2%	
Age	23 or less	67	39	106	0.740
		20.0%	23.9%	21.3%	
	24 to 26	68	34	102	
		20.3%	20.9%	20.5%	
	27 to 45	119	55	174	
		35.5%	33.7%	34.9%	
	More than 45	81	35	116	
		24.2%	21.5%	23.3%	
Marital status	Single	148	81	229	0.466
		44.2%	49.7%	46.0%	
	Married	175	79	254	
		52.2%	48.5%	51.0%	
	Divorced	10	3	13	
		3.0%	1.8%	2.6%	
	Widowed	2	0	2	
		0.6%	0.0%	0.4%	
Educational level	Primary school	3	1	4	0.827
		0.9%	0.6%	0.8%	
	Middle school	2	1	3	
		0.6%	0.6%	0.6%	
	High school	39	25	64	
		11.6%	15.3%	12.9%	
	Diploma	55	28	83	
		16.4%	17.2%	16.7%	
	Bachelor's degree	212	100	312	
		63.3%	61.3%	62.7%	
	Postgraduate degree	22	8	30	
		6.6%	4.9%	6.0%	

ISSN:1624-1940
http://magellanes.com/

	Uneducated	2	0	2	
		0.6%	0.0%	0.4%	
Occupational status	Student	84	49	133	0.571
		25.1%	30.1%	26.7%	
	Employee	147	69	216	
		43.9%	42.3%	43.4%	
	Retired	32	13	45	
		9.6%	8.0%	9.0%	
	Not employed	61	24	85	
		18.2%	14.7%	17.1%	
	Freelance work	11	8	19	
		3.3%	4.9%	3.8%	
Monthly income in SAR	Less than 5000	134	72	206	0.136
		40.0%	44.2%	41.4%	
	5001 to 10000	80	46	126	
		23.9%	28.2%	25.3%	
	10,001 to 15,000	60	28	88	
		17.9%	17.2%	17.7%	
	More than 15,000	61	17	78	
		18.2%	10.4%	15.7%	
Nationality	Saudi	332	162	494	0.741
		99.1%	99.4%	99.2%	
	Non-Saudi	3	1	4	
		0.9%	0.6%	0.8%	
Residential area	Northern region	5	1	6	0.149
		1.5%	0.6%	1.2%	
	Southern region	198	82	280	
		59.1%	50.3%	56.2%	
	Central region	62	45	107	
		18.5%	27.6%	21.5%	
	Eastern region	13	5	18	
		3.9%	3.1%	3.6%	
	Western region	57	30	87	
		17.0%	18.4%	17.5%	

****P value was considered significant if ≤ 0.05.***

Table (7) shows that awareness of dental veneers among Saudi populations has a statistically insignificant relation to gender, age, marital status, educational level, occupational status, monthly income, nationality, and residential area.

Table (7): Awareness of dental veneers among Saudi populations in association with sociodemographic characteristics.

Parameters	***Awareness level***		

ISSN:1624-1940
http://magellanes.com/

		High or moderate awareness	**Low awareness level**	***Total (N=498)***	***P value****
Gender	Female	201	47	248	0.205
		51.3%	44.3%	49.8%	
	Male	191	59	250	
		48.7%	55.7%	50.2%	
Age	23 or less	81	25	106	0.536
		20.7%	23.6%	21.3%	
	24 to 26	82	20	102	
		20.9%	18.9%	20.5%	
	27 to 45	133	41	174	
		33.9%	38.7%	34.9%	
	More than 45	96	20	116	
		24.5%	18.9%	23.3%	
Marital status	Single	181	48	229	0.740
		46.2%	45.3%	46.0%	
	Married	200	54	254	
		51.0%	50.9%	51.0%	
	Divorced	9	4	13	
		2.3%	3.8%	2.6%	
	Widowed	2	0	2	
		0.5%	0.0%	0.4%	
Educational level	Primary school	3	1	4	0.763
		0.8%	0.9%	0.8%	
	Middle school	3	0	3	
		0.8%	0.0%	0.6%	
	High school	52	12	64	
		13.3%	11.3%	12.9%	
	Diploma	68	15	83	
		17.3%	14.2%	16.7%	
	Bachelor's degree	239	73	312	
		61.0%	68.9%	62.7%	
	Postgraduate degree	25	5	30	
		6.4%	4.7%	6.0%	
	Uneducated	2	0	2	
		0.5%	0.0%	0.4%	
Occupational status	Student	106	27	133	0.949
		27.0%	25.5%	26.7%	
	Employee	167	49	216	
		42.6%	46.2%	43.4%	
	Retired	36	9	45	
		9.2%	8.5%	9.0%	
	Not employed	67	18	85	

ISSN:1624-1940
http://magellanes.com/

		17.1%	17.0%	17.1%	
	Freelance work	16	3	19	
		4.1%	2.8%	3.8%	
Monthly income in SAR	Less than 5000	163	43	206	0.958
		41.6%	40.6%	41.4%	
	5001 to 10000	97	29	126	
		24.7%	27.4%	25.3%	
	10,001 to 15,000	70	18	88	
		17.9%	17.0%	17.7%	
	More than 15,000	62	16	78	
		15.8%	15.1%	15.7%	
Nationality	Saudi	389	105	494	0.855
		99.2%	99.1%	99.2%	
	Non-Saudi	3	1	4	
		0.8%	0.9%	0.8%	
Residential area	Northern region	5	1	6	0.282
		1.3%	0.9%	1.2%	
	Southern region	215	65	280	
		54.8%	61.3%	56.2%	
	Central region	89	18	107	
		22.7%	17.0%	21.5%	
	Eastern region	17	1	18	
		4.3%	0.9%	3.6%	
	Western region	66	21	87	
		16.8%	19.8%	17.5%	

****P value was considered significant if ≤ 0.05.***

Discussion:

The dental veneer is an indirect restoration that covers one or more surfaces of the tooth. It is made of directly applied composite, processed composite, porcelain, or pressed ceramic materials. It is placed over the facial surface of the tooth [13]. Veneers are a minimally invasive procedure that assists in producing excellent esthetic results in case of discolorations, mild rotation, and space closure in anterior teeth [14]. This study aimed to measure the knowledge and awareness about dental veneers among Saudi populations**.** In regard to indications of dental veneers, our results show that 47.96% of participants reported poorly stained teeth as a main reason for veneer application, followed by 18.87% used veneers to cover fractured teeth, 17.66% reported active treatment of fluorosis, and the least common indications were the replacement of missing teeth (5.81%) and the management of crowded teeth (4.82%). In Jeddah, another study found that the majority of participants (82.1%) reported receiving veneers as an aesthetic restoration for severely stained teeth unresponsive to bleaching. Additionally, 68.7% cited veneers for anterior fractured teeth and 65.9% for managing dental fluorosis [10]. Another study reported that more than half the participants (63%) stated that the veneer is used to solve both aesthetic and functional problems, and the majority (71%) said that veneers can be used to correct broken teeth, mal-aligned teeth and diastema closure, mask tooth discoloration and for aesthetic purpose [9]. A previous study conducted in Riyadh, Saudi Arabia, found that nearly half (53.1%) of the

ISSN:1624-1940
http://magellanes.com/

population said that veneer is used for severely stained teeth, (45.6%) thought veneers are used to cover up fractured teeth, (42.6%) for treating dental fluorosis, (22.8%) for replacing the missing teeth, and (17.3%) for addressing multiple stained restorations [12].

Regarding knowledge and awareness of dental veneers, the results showed that 34.5% and 29.7% of participants recognized their benefit in changing tooth color and tooth shape, respectively, and 19.3% identified their ability to resist staining. Furthermore, 40.2% of the respondents knew that the removal of the tooth surface was a great drawback of the procedure. Additionally, results revealed that 72.9% of respondents think dental veneers could cause color changes, 70.9% said that they might result in gingival infections, 59% of participants recognize the possibility of food accumulating over veneers, the majority (83.9%) agree that veneers can live longer if cleaned properly, only 45.6% follow cleaning routines comparable to natural teeth and 54.6% practices particular cleaning methods. These findings are consistent with a previous study in which participants identified the most common benefits of dental veneers are changing tooth color (82.9%), resisting coffee/tea/smoking stains (70.3%), changing the tooth shape (66.8%) and (69.2%) closure of slight spaces between teeth as a benefit of veneers [10]. Additionally, 73.2% of cases said that veneer requires removal of the tooth structure, and 72.4% thought that it requires extensive care and hygiene. In the same study, 16.6% of the participants knew about preparation-less veneers (commercially known as Lumineers), and 14.7% knew about clip-on veneers (commercially known as Snap-On Smile). Furthermore, 64.1% of participants stated that the major reason to get dental veneers was to have a beautiful smile. In contrast, 49.9% indicated that the main barrier to opting for dental veneers was the compensation of their own smile [10]. In contrast, a study conducted in Riyadh reported that 48% of participants considered changing tooth color, 47.7% changing tooth shape, and 32.8% resisting staining as advantages of dental veneers. Additionally, 64.4% of participants identified the removal of tooth surface as a primary disadvantage of veneers [12].

Results from another study prove that 32% of participants use the veneer to solve aesthetic problems, and only 5% use it to solve functional problems. Additionally, 74% of respondents were unaware of whether the veneers affect gum health, 19% believed veneers have a negative effect on gum health, and 7% reported a positive effect. Furthermore, 61% of participants thought that teeth become sensitive to both hot and cold drinks following veneer cementation. However, the majority were uncertain about whether ceramic veneers contribute to bad odor [9].

In general, knowledge and awareness scores indicate that the Saudi population demonstrates a high level of awareness regarding dental veneers, with 67.3% of respondents exhibiting a high level of knowledge. Conversely, 26.7% displayed moderate knowledge levels, while 6% showed low knowledge levels Nearly 64.3% of participants demonstrated moderate awareness, 14.5% reported a high awareness level, and 21.3% of respondents claimed low awareness. In contrast to our results, another study conducted in Jeddah, Saudi Arabia found that the overall total dental veneers knowledge was just higher than the midpoint, indicating a moderate level of knowledge [10]. Also, in the Al-Qassim region, another study that included 301 individuals using an online survey reported that the total knowledge score referred to insufficient knowledge of the Saudi population about laminate veneers, their care, their side effects, and their lifespan [15].

Another study, which included 573 persons from Saudi Arabia, reported that the highest percentage of the population (48%) had little knowledge about dental veneers, only 6% had full knowledge, and 46% had no knowledge [9]. In Riyadh, results from another study revealed that the population of Saudi Arabia has a moderate level of knowledge and awareness about veneer [12]. A cross-sectional study was carried out among 1,332 subjects from different Middle Eastern nationalities, mainly Saudis,

ISSN:1624-1940
http://magellanes.com/

Kuwaitis, and Emiratis, and reported that the participants' general knowledge regarding dental veneers was considered unsatisfactory [16].

According to the association between knowledge, awareness of dental veneers, and sociodemographic characteristics, our results show that in both, there was a statistically insignificant relation to gender, age, marital status, educational level, occupational status, monthly income, nationality, and residential area. In contrast to our results, another study found that the participants' knowledge of dental veneers significantly differed in relation to gender, level of education, family income, and marital status [10]. Where the females had higher total knowledge scores than males $p=0.003$, participants who work in dentistry had higher total knowledge scores than those who did not $p<0.001$, and participants of higher family income had higher levels of knowledge about dental veneers [10]. Also, another study carried out among the Arab population from different Middle Eastern nationalities reported that there was a significant association between knowledge level about dental veneers and age, gender, and educational level. However, when counting the nationality and occupation of the participants, no significant difference in knowledge level between groups was found [16].

Conclusion:

The results of our study revealed that the Saudi population is highly aware of dental veneers, where 67.3% of respondents reported a high knowledge level, and there was mostly moderate awareness. Despite that, only 13.1% of participants are current users, which indicates a gap between knowledge and adoption. Furthermore, our results show that in both knowledge and awareness levels, there was a statistically insignificant relation to gender, age, marital status, educational level, occupational status, monthly income, nationality, and residential area.

Acknowledgement:

Special thanks to the Deanship of Scientific Research (DSR) and the Faculty of Dentistry at King Abdulaziz University, Jeddah, for supporting this project.

Ethical approval

An informed consent was obtained from each participant after explaining the study in full and clarifying that participation is voluntary. Data collected were securely saved and used for research purposes only.

Funding

There was no external funding for this study.

Conflict of interests

The authors declare no conflict of interest.

Informed consent:

Written informed consent was acquired from each individual study participant.

ISSN:1624-1940
http://magellanes.com/

Data and materials availability

All data associated with this study are present in the paper.

Reference:

1. Ye Z, Jiang J, Yang L, Xu T, Lin Y, Luo F. Research Progress and Clinical Application of All-Ceramic Micro-Veneer. Materials (Basel). 2023;16(8):1–16.
2. Alanazi DLM, Alkhashrami DAA, Albader DRA, Alasiri DSA, Althumairy DAF, Alghamdi DWM, et al. Snap on Smile: A Systematic Review. Saudi J Oral Dent Res. 2020;5(11):522–7.
3. Arif R, Dennison JB, Garcia D, Yaman P. Gingival health of porcelain laminate veneered teeth: A retrospective assessment. Oper Dent. 2019;44(5):452–8.
4. Al-Shorman HM, Abu-Naba'a LA, Sghaireen MG, Alam MK. The Effect of Various Preparation and Cementation Techniques of Dental Veneers on Periodontal Status: A Systematic Review and Meta-Analysis. Eur J Dent. 2024;18(2):458–67.
5. Rizk SK. Types of Dental Veneers and Bonding of Veneers to Tooth Structure. Biomater J [Internet]. 2023;2(6):31–47. Available from: http://www.biomatj.com
6. Imad R, Tahir S, Alidrissi H, Varma S, Annamma LM, Abdelmagied M, et al. Evaluation of E-max Porcelain Veneer Failures: A Retrospective Study. Cureus. 2024;16(4).
7. Assaf A, Azer SS, Sfeir A, Al-Haj Husain N, Özcan M. Risk Factors with Porcelain Laminate Veneers Experienced during Cementation: A Review. Materials (Basel). 2023;16(14):1–22.
8. Bayazıt EÖ, Karabıyık M. Chairside restorations of maxillary anterior teeth with CAD/CAM porcelain laminate veneers produced by digital workflow: A case report with a step to facilitate restoration design. Case Rep Dent. 2019;2019.
9. Asaad R, Alshwaer A, Alahmadi S, Alyamani M, Alshaeri R. Awareness of the population about ceramic laminate veneers in Saudi Arabia. Curr Sci Int. 2019;8(1):42–6.
10. Alghamdi D, Aboalshamat K, Salem A, Binmahfouz S, Alghamdi A, Hassan S, et al. Level of Awareness of the Population about Dental Veneers in Jeddah, Saudi Arabia. J Res Med Dent Sci. 2020;8(3):253–60.
11. Alsurayyi MA, Almutairi W, Binsaeed AI, Aldhuwayhi S, Shaikh SA, Mustafa MZ. A Cross-Sectional Online Survey on Knowledge, Awareness, and Perceptions of Hollywood Smile Among the Saudi Arabia Population. Open Dent J. 2022;16(1):1–7.
12. Alsayed DH, Alnajres AR, Solimanie AH, Almuammar KS, Alsayegh HM, Sultana F. Elucidating Saudi Societal Awareness about the Veneer. Saudi J Oral Dent Res. 2020;5(9):492–7.
13. Morley, J. (1999). The role of cosmetic dentistry in restoring a youthful appearance. The Journal of the American Dental Association, 130(8), 1166- 1172.
14. Cardoso, J. A. et al. (2012) 'Clinical Decisions for Anterior Restorations: The Concept of Restorative Volume', Journal of Esthetic and Restorative Dentistry, pp. 367–383. doi: 10.1111/j.1708-8240.2012.00503.x.

ISSN:1624-1940
http://magellanes.com/

15. Alharbi AA, Alharbi AT, Abdullah A, et al. Measuring the awareness, knowledge, and practice of the patients using veneer and lumineers and its effect on periodontium: A cross sectional study in Al-Qassim region. Int J Med Dev Ctries 2020; 4:347-351.
16. Alfouzan, Afnan, Aisha A. Al-Sanie, and Reem A. Al-Dhafiri. "Arab Societal Awareness of Dental Veneers." The journal of contemporary dental practice 19.3 (2018): 257-261.