

A Study To Assess Awareness Of Prosthodontic Treatment And Edentulism In Populations Of Saudi Arabia

Dr Rajesh Vyas¹, Abdulkhalig Ali F Alshadidi², Lujain Ibrahim N Aldosari³, Dr. Sunil Kumar vaddamanu⁴

¹Associate Professor Dental Technology Department College of Applied medical Sciences King Khalid University Abha, Saudi Arabia ryas@kku.edu.sa

²Assistant Professor Department of Dental Technology College of Applied Medical Sciences King Khalid University Abha, Saudi Arabia aalshadidi@kku.edu.sa

³Assistant professor Prosthodontics Department College of dentistry King Khalid university Abha, Saudi Arabia Lualdosari@kku.edu.sa

⁴Assistant Professor Department of Dental Technology College of Applied medical Sciences King Khalid University Abha, Saudi Arabia snu@kku.edu.sa

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Abstract

Objectives:

The current study examined the widespread use of whole and limited Edentulism concerning gender, age, and educational attainment among adults and older residents of Saudi Arabia. We can encourage oral hygiene with the help of baseline knowledge about Edentulism.

Methods:

In 2018–2019, several dental care facilities located throughout Saudi Arabia participated in a cross-sectional stratified cluster study. A total of 618 subjects between the ages of 35 and 74 were chosen through practical sampling, and after collecting data on edentulism, a clinical examination was conducted.

Results:

Males made up 350 (56%), and females made up 262 (43%) of the sample as a whole. According to the analysis of edentulism, most of the 427 subjects (69 per cent) had one or more missing teeth. A total of 2.6 points, 6 per cent of these subjects were denuded entirely, making up 1.8 points, 8 per cent of the sample as a whole.

Conclusion:

Grown-up patients commonly have one or more teeth absent, and elderly patients are more likely to be completely edentulous. Edentulism had a negative correlation with visiting a dental office.

Keywords: Completely edentulous, edentulous, edentulous condition, partially edentulous.

Introduction

Edentulism is the condition of being edentulous; without natural teeth.[1] Oral health does not mean only having healthy teeth. Good oral hygiene is significant in lucrative, personal, and individual development. [2] Teeth are crucial for elegance, chewing, diction, structural support, and the total comfort of an individual. Edentulism

lowers these vitals; as a result, there can be physical, physiological, and psychological disbalance for the individual.[3] These harmful effects can hamper everyday functions. The previous study exposed that extraction is one of the most used treatment procedures provided in the public sector in Saudi Arabia[4], which has eventually led to Edentulism within this region.] More documentation of dental prevalence must be documented among people living in Saudi Arabia. This examination aims to investigate the majority of wholly and partially edentulous patients in Saudi Arabia.

Materials and Methods

The study proposal was suggested to the Ethics Committee of Saudi Arabia. The motive and goals of the study were described to the participants, and full consent was acquired before data assemblage. They were also told that the data would remain unnamed and private. Information was provided to the governing bodies of selected private health centres.

Research design

In order to study tooth loss among adults in Saudi Arabia, an observational study layered a clinical investigation into clusters and a questionnaire-based analysis.

The data was gathered from a number of private dental healthcare facilities in Saudi Arabia between August 2018 and February 2019. Patients were chosen using a simple sampling method. Saudi Arabia was divided into four clusters (North, East, West, and South), and haphazard software was used to select two primary healthcare facilities for each group. [13] A sample size calculator with a confidence interval of 95.4 percent and a significance level of P 0.06 was used to determine the sample size, which was 618 candidates who were Saudi adult citizens (35 years and older).

The age of 35 was chosen as the lower cutoff because, according to the most recent oral health analysis standard methods manual, this is the age group that is considered to be the most authoritative for adult oral hygiene examinations. Integration and disqualification standards. Any Saudi adult who was 35 years of age or older and visited the selected dental health care facilities qualified for inclusion. Non-Saudis and Saudis younger than 35 years old were prohibited. Candidates were informed of the study's objectives before the analysis began, and prior to data collection, their full and signed consent was obtained.

Method of examination The examiner conducted interviews and completed the questionnaire. According to the 2013 WHO Oral Health Survey, Basic Methods, the verbal test of the participants was conducted. [14].The examination and recording of the data for each patient took, on average, 15 minutes. Three sections made up the questionnaire: the first part collected demographic data (patients' gender, age, profession, and level of education); the second part gathered data on the use of oral hygiene services; and the third part organized information on the investigation for tooth loss.

Data analysis And Results: Data was analyzed on basis of Chi-square and cross-sectional analysis. The results of the Chi-square analysis were used to ascertain the relationship between age groups and tooth loss, and they are displayed in Table 1. Statistics showed a significant relationship between age and edentulism. It was also found that 82.1% of the participants were completely edentulous and older than 55. This showed a positive relationship between total edentulism and age.

Table 1							
Socio-demographic components related to lack of teeth							
Missing teeth							
Socio-demographic variables		Missing teeth			Chi-square	df	P
		Yes	No				
		n	n	Percentage			
Age (Years)	35-44	178	142	73.2	60.736	4	0.000*
	45-54	133	40	21.6			
	55-64	74	6	3.8			
	65-74	41	4	1.4			
	Total	426	192	100			
Education	No formal education	18	2	1.7	30.575	3	0.000*
	Primary	2	6	3.6			
	Intermediate	32	3	0.3			
	Secondary	122	37	20			
	University	252	144	74.4			
	Total	426	192	100			

Discussion.

Undoubtedly, one of the major problems that the global population is currently facing is edentulism. This study summarizes the prevalence of whole and partial edentulism in relation to sex, age, education, and oral hygiene practices. Though few studies have attempted it, some have looked at how common edentulism is [6,7,8,9,10,11,12]. Few studies have examined the prevalence of edentulism in Saudi Arabia.

The overall edentulism assessment revealed that 426 subjects, or 69% of the sample, had at least one missing tooth. A study conducted in the Saudi Arabian section of Qassim that was similar to that of Almutairy and Mohan found that the rate of missing teeth was 62.45 percent. [15] Heidar i et al. carried out one more investigation. 94 percent of the study population had at least one missing tooth, indicating a higher prevalence of edentulism [6]. In contrast, a study by Kim et al. only 25.6% of the participants had one missing tooth, the study's results showed. [7] The participants' age range may be to blame for this discrepancy; Kim et al. While

the age groups in the current study were dispersed between 35 and 74, [7] studied participants between the ages of 18 and 39.

Age demonstrated a statistically significant positive correlation with tooth loss in the current study. The findings revealed that 91.125% of participants aged 65 to 74 had some form of edentulousness, compared to 55.9% of participants in the 35 to 44-year-old group who had lost teeth. Other studies with similar results have also been reported. [8,11].

This analysis discovered that the level of tooth loss was marginally higher in male candidates (71%) compared to female candidates (66%) in terms of edentulism, with no discernible effect of gender on tooth loss. As per Kim et al., this was the case. They discovered no connection in relation to gender and tooth loss. [7].

A significant relationship existed between oral hygiene issues and missing teeth, including the participants' most recent visit and the cause of that visit. 41.3% of people with missing teeth were found to have forgotten their last dental appointment by more than a year. Additionally, it was observed that patients who regularly and routinely visit the dental office for checkups have the fewest missing teeth. Even though this finding does not fully account for the situation, other dental health-related habits, such as maintaining good oral hygiene, using fluoride products, and drinking fluoridated water, can affect edentulism. This was consistent with research done by Gilbert et al. in a related field. They concluded that individuals who had lost teeth exhibited irregular dental hygiene practices, less frequent visits to dental care facilities, and financial difficulty paying for care. [16].

The current study also revealed that only 21.4 per cent of the candidates had some form of edentulism and were smokers. Like Peltzer et al., this was similar. When they discovered that smokers today have less tooth loss than smokers in the past, these variations were often, and the length of the habit and the brands of cigarettes utilized by the various citizens can be explained [11] in one way or another.

A dental expert should handle the clinical management of tooth loss and be evaluated by primary care clinicians. To avoid some situations, immediate restoration is preferred. The prevalence of oral disease can be decreased with the help of primary care clinicians. They can incorporate oral health into their regular practice by giving advice on diet, quitting smoking, taking fluoride supplements, and screening for dental disease.

The study's short duration and the fact that it only took place in private dental offices, which prevents a comprehensive view of some demographics, such as socioeconomic status, were its limitations. To investigate edentulism more thoroughly, more study is required.

Conclusions.

According to the discovery of the recent study, which has its limitations, a significant portion of adult patients have missing teeth, and elderly adults are more likely than younger adults to have complete edentulism. In terms of tooth loss, gender had no bearing. Edentulism and the number of trips made to a dental office were positively correlated.

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