

The Role of Technicians and Dentists in Treating Caries for Patients in Health Facilities

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Abstracts

Person with oral health is enjoying an elixir of life, we all may have suffered one or the other tooth decay in our life time and also have prevented to visit a dentist; generally people try to avoid dentist to save their privacy and money and use to take general medicine or home remedies to cure the dental ailments. But this can be dangerous, not only to the oral health of a person but the overall health can be affected by the same. this present study will try to assess the role of dentist in the popular cases of DMFT. The study is based in Riyadh, Saudi Arabia. It is a primary data-based study and uses descriptive statistics to evaluate the data.

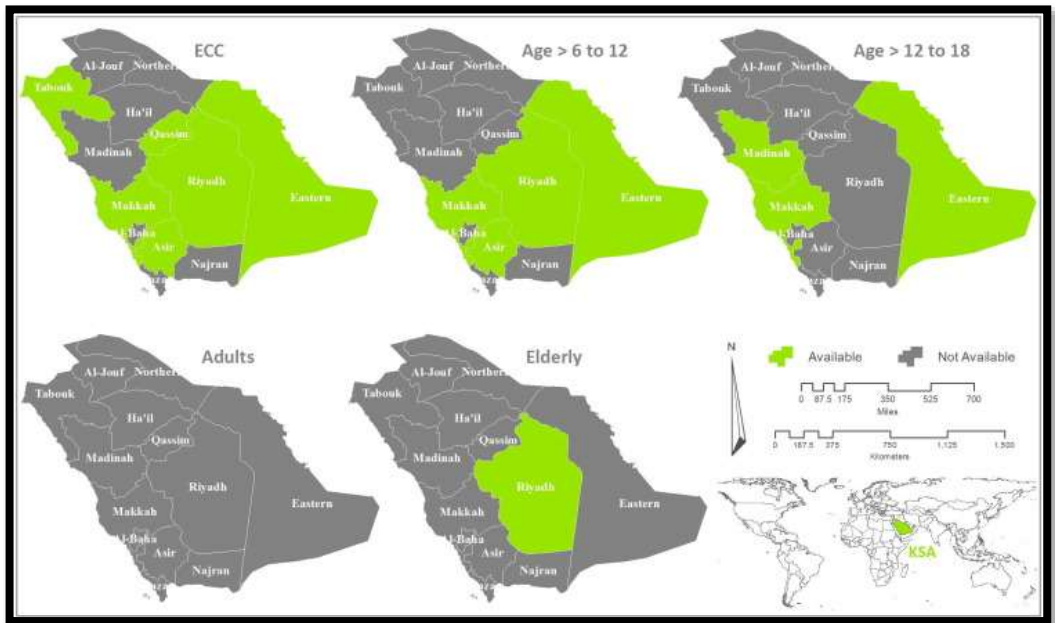
Key words: dental care, DMFT, Role of Dentist, Riyadh, Saudi Arabia.

1. Introduction

The healthy human body also includes excellent oral health as it is very closely related to the capability of a person to speak, eat, and drink, well-being, general health, and social relation. Oral ailments are, therefore, big in terms of personal struggling, exceptional of existence, and the financial burden no longer best for the person but for society as well, not simplest in phrases of treatment value but also productivity inside the hard work market. Dental caries or enamel decay is one of the most normal continual illnesses in adults and children global, as it affects 60%–75% of school-going kids and the substantial majority of adults, and it's miles the number one reason of ache and enamel loss in the oral cavities.

several elements, such as social, behavioral, and scientific, have major role to play within the development of oral diseases, which include dental caries. evidence confirmed that using fluoride (particularly in toothpaste) has a big impact at the decrease prevalence of dental caries. other

measures might be powerful, along with public health rules, healthful dietary behavior, use of dental health offerings, better living situations, advanced oral hygiene behaviors, and expanded know-how and stage of education through promoting oral health in faculties and public health clinics. In a developing country like Saudi Arabia, there are more than 42% youngsters which have not crossed their teen age i.e., under the age of 18 years.

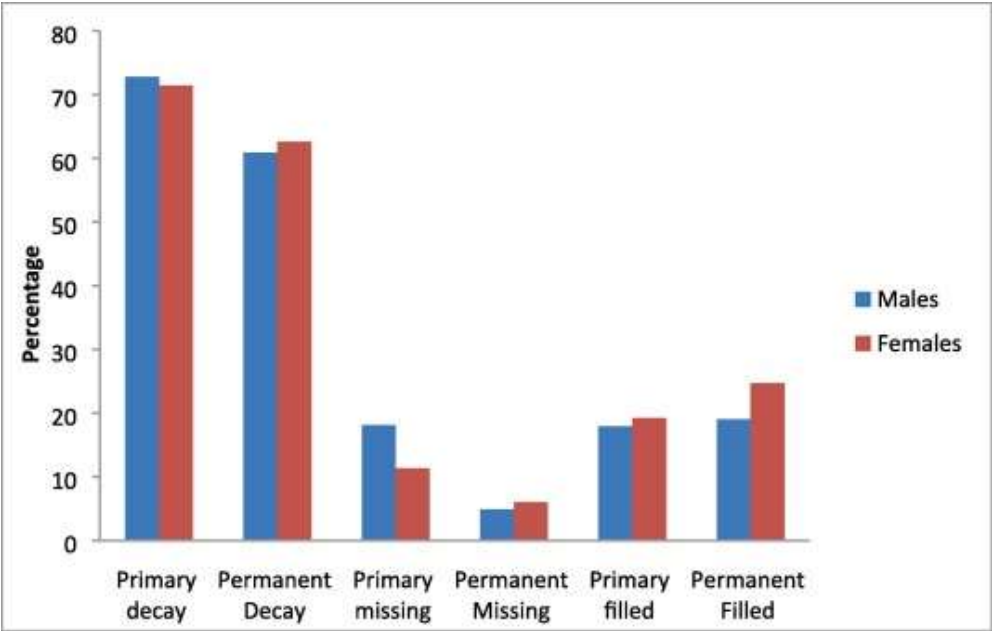


Source: Asim et al (2019)

Figure 1: regional Caries data of Saudi Arabia

As one of the AGR (Arabian Gulf Region) has the best per capita income inside the Eastern Mediterranean area of the WHO. notwithstanding this, the location has had terrible oral health with excessive caries rates and bad oral hygiene. Saudi Arabia provided a relative hazard of three times better than the nearby common, accompanied by means of Yemen. numerous countrywide populace-based caries incidence studies were performed formerly. the first observe changed into performed through Al-Shammery in 1999 and the most current with the aid of AIDosari et al in 2020. Dental caries stages in Saudi Arabia ranged from 5% to 99% in permanent teeth and from 21% to a 100% throughout primary tooth. In Riyadh town, the dental caries incidence among 6, 12, and 15 years of children that counts to around 80% population of the respective age group. While in Al-Jouf metropolis, the superiority rate of dental caries turned into 87%, with a mean decayed, missing, and filled teeth (DMFT) of 6.82 (popular deviation [SD] \pm 3.7). amongst secondary faculty students in Hai'l city, the general occurrence of dental caries become 78.9%, with a mean DMFT of 3.8 tooth (SD \pm 2.78). the first study within the eastern region conducted by Maghbool in 2017 in Al-Khobar town amongst preschool kids and reported a caries

prevalence of 87.7%. the second have a look at in Al-Ahsa was amongst 6–7 years of youngsters in 2019 by Khan et al (2019).; the superiority of dental caries approached 82%. Then another survey conducted in 2020 at Amin and Al-Abad and assessed 10–14-12 months old boys in public number one facilities and 69% of the respondents were suffering from dental ailments.



Source: Orfali et al (2023)

Figure 2: Registered Cases of DMFT in Saudi Arabia (2020 to 2022)

Trust Issues with Dental Patients:

The meeting or an interaction of a Dentist and a patient plays an important role in imparting the exceptional services provided to the patients suffering from dental issues. The importance of this bond cannot be overemphasized. patients expect their dentist to behave in great empathy. They believe dentists to provide unbiased attention regarding their analysis, exceptional treatment to be given, aspect effects of the treatment, and lengthy-term effects of the remedy. It acts because the standard basis on which knowledgeable consent is based. numerous codes of behavior from the Hippocratic Oath to present day biomedical codes of ethics had been followed to protect the sacredness of the patients suffering dental ailments. In general, the dental patient has a myth that while going to a dentist they will lose their money as they are least aware about the process and the respective dentist may charge high fees by creating a false evaluation. Once cured, the confidence of the patient increases and may be his relation with his dentist become great. If not satisfied then poor relationships occur that show reduced coherence, fewer adherences to recommendations, negative self-mentioned health issues, and in appropriation of health services.

A sense of trust alleviates a patient's interactions with the dentist, gives a better feeling of contentment with the provided dental services. Also, trust increases patient's oral health awareness. A small variety of research have unswervingly evaluated consider, elements that embody the perception had been reviewed so as to advocate strategies to reinforce believe in affected person care supplying professional facts in comprehensible terms, lay language facilitates in constructing trust. It empowers sufferers to meaningful involvement in selections relating to the care. Professionalism and communicate abilities are critical components in building up a successful dental career.

As one of the most important strategies of the Ministry of Health (MOH), the country has adjusted the health care system according to the declaration of alma data at the international conference on PHC. Yet, basic oral health care still falls short of patient prospect in the country. The most observed dental problem is dental caries in primary and permanent teeth. There is a rising need for better oral health care in Saudi Arabia. People are seeking routine oral health checkups as a result of increasing awareness. According to health statistics annual book, there are 2,408 dental clinics located in primary health centers, hospitals and some individual dental clinics providing dental care services in the country. There are also portable dental clinics that provide similar services.

Considering the public health in major countries like Germany, The Netherlands, and England and Wales found out that respondents from England and Wales depended on their dentists greater but Germans had been substantially much less trusting. human beings with decrease degrees of accept as true with or who've an unsatisfactory dental go to can be inclined to change dentists until they locate one with whom they experience comfy. A study by Graham et al (2021) found that US adults with low believe in physicians and dentists are 54% much less in all likelihood to have a regular dentist. Similarly, an Australian study found that approximately one-third of people surveyed had changed dentists in the last 2 years, but only 15% had changed because of dissatisfaction with the care provided by the previous dentist. Lack of patient trust is associated with the less doctor-patient interaction, poor clinical relationships that exhibit less continuity, reduced adherence to recommendations, worse self-reported health, and reduced utilization of health care services.

The main objective of this study was to assess the dental caries level and its possible correlated factors among patients attending the dental clinics in the Riyadh region of the country.

Research Process:

- This present study was conducted on primary data and the respondents of the study were the patients visiting health care facilities in the city of Riyadh.
- The researcher selected 10 dental clinics in the region and contacted the dental patients.
- The total sample size of the study was 250 respondents and in most of the cases patients were interacted only if they are visiting the facility for second or third time.
- Some amount of secondary data was assessed for the sake of knowing about the till date development in the said area of study and reaching the current research question.

- Most of the respondents were explained about the survey and they have been contacted with due permission of the respective dentists.
- As this was a cross-sectional study hence the efforts were made to touch all the qualitative and quantitative aspects of the study area i.e., quantitative in terms of using authentic statistical platforms and maintaining consistency of data. Qualitative in terms of questionnaire preparation, maintaining non-disclosure of patients and process of study.
- The duration of the study was September to November 2024.
- The researcher has used the formulation of DMFT (decayed, missing, and filled teeth) as these are the most common types of dental ailments.

Statistical Tools:

Some of the descriptive statistical tools were used in the study i.e., Mean, Standard deviation, and correlation.

Data Analysis Platform used :

SPSS Ver. 24.0

Data Analysis and Interpretation:

Results of Descriptive Statistics

Age group	Mean difference	SE	P	95% CI
21-30	0.252	0.823	0.760	-1.37-1.87
31-40	-2.780	1.127	0.014	-5.00--0.56
41-50	-1.453	1.154	0.209	-3.73-0.82
51-60	-4.032	1.620	0.013	-7.22--0.84
61-70	-3.186	2.505	0.205	-8.12-1.75
71-80	-1.705	1.149	0.139	-3.97-0.56
81-90	-4.284	1.616	0.009	-7.47--1.10
91 or above	-3.438	2.502	0.171	-8.37-1.49

	Self-care evaluation	Dietary risk indicators	Diet practices	Hyposalivation indicators
Pearson correlation	-0.28	0.06	0.14	0.03
P	0.00	0.39	0.03	0.64
Covariance	-5.03	0.930	1.89	0.49

Interpretation:

This medical facility-based study is totally retrospective and states the primary report of the extent of dental caries from the selected dental clinics at Riyadh city. The results can be viewed as the variation in the patients of Saudi Arabia and related Eastern region, which includes one-of-a-kind dental treatment system, as there may be a loss of representative information on the prevalence of dental caries among the entire Saudi Arabian population. the very best level of dental caries was among the age institution of 30-50 years, that's according with a preceding observe among Saudi adults aged 30 and 45 years, who had a most caries incidence of 96% and DMFT imply of 15.32%. This makes clear that within the level of dental caries, when it comes

to age as the younger group had a decrease degree of dental caries as compared to the older ones, and this can be related directly to the other set of population with same parameters. The biggest element of the DMFT become the D-element, accompanied by means of the F-component and the least changed into the M-factor. The consequences of the existing observe found a strong relationship among health training and the extent of dental caries, which became additionally observed with the aid of preceding studies, as 72% of the patients who did not belong to the groups of people who maintain dental hygiene had dental caries. health education is an critical component that promotes proximal modifiable chance behaviors consisting of oral hygiene practices and nutritional behavior.

2. Conclusion:

It is to conclude that the high level of dental caries experience reported by this study is in accordance with the level of dental caries in Saudi Arabia. The study also presented the relationship of the level of dental caries with the level of calculus as well as behavioral aspects such as health education received, self-care evaluation, and weekly dietary practices. Recommendations: The study recommends that health education is an important measure in building the behavioral aspects; therefore, should be considered in any preventive and promotive activities. Health education on oral health-related behaviors is a vital factor that is considered in planning and policy development, especially concerning oral hygiene practices and dietary habits. The adoption of a population-based strategy is to be considered in the preventive strategy, as it is radical and decisive according to the preventive paradox

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