



"DENTAL THERAPEUTIC SERVICES IN HEALTHCARE CENTERS IN SAUDI ARABIA".

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Abstract

This paper review aimed This research paper aimed to identify the dental therapeutic services provided by dental health centers in the city of Riyadh. The descriptive approach was used by reviewing some previous local literature and studies that were interested in researching this topic from its various aspects through multiple databases, including Google Scholar, Chat, and Consensus. App plugin. To achieve the objectives of this paper, the search strategy was designed to identify articles reviewed by some researchers and retrospective studies published within the past ten years. The main search terms included dental health care centers in Riyadh, such as dental health services, and the challenges of providing dental treatment services. The results showed that dental health centers in Riyadh provide many dental therapeutic services, but below the required level, and that these centers face some difficulties in providing appropriate dental care, which requires expanding the scope of dental care in dental health centers in Riyadh.

Keywords: Dental Therpeutic, Healthcare Centers, Saudu Arabia.

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1.1 Introduction & Background

Many countries, including Saudi Arabia, face challenges related to providing high-quality health care services, and providing patients with access to health care centers in their regions. The Saudi Ministry of Health has worked to expand health centers and has included providing certain treatment services to dental patients, which are provided free of charge to citizens, as health care centers consist of a mix between the government and private health sectors. Although the government provides free dental care services to Saudis, the majority of citizens choose treatment at private dental centers (Almalki & Fitzgerald, 2018).

Dental diseases are considered as a worldwide prominent problem [1]. They are multifactorial and preventable, thus prevention and early detection with management are critical keys toward tackling them. Access to dental health care services is one important approach for the prevention and therapy (Alshahrani & Raheel, 2016). The access to dental care includes both the availability of services and the desire of the patient to seek the care. Access to and utilization of dental care services are multidimensional principles which are affected by many factors (El Bcheraoui & Tuffaha, 2018).

1.2 Local Studies

In few studies were conducted that dealt with therapeutic services in dental health centers in the Kingdom of Saudi Arabia. These studies showed a variation in the degree of use of dental services in health centers and hospitals from the point of view of different targeted participants. A review by (Barakah, 2016) identified several barriers to dental treatment, including distance, lack of trained specialists, and costs of treatment, underscoring the need for nationwide surveys to fully understand the extent of dental health inequities among individuals with disabilities.

A health information survey conducted by (El Bcheraoui C, & Tuffaha, 2018). found that only 11.5% of participants over the age of 15 years visited dental centers for routine check-ups, and nearly (48%) visited dentists while having major dental problems. A study by (Althumairy, 2022) discussed highlights the role of Vision 2030 in aiming to improve the quality of healthcare while maintaining the efficacy of spending, underscoring its potential impact on the dental healthcare sector.

A study by (Alfaraj & Halawany, 2021) conducted in Qatif, Saudi Arabia, concentrated on persons with disabilities and reported significant difficulties in accessing dental care as perceived

by caregivers. The primary barriers included limited availability of caregivers' time, clinic environments that are not accommodating, transportation challenges, the medical or health status of the individual, and geographically remote dental clinics. This study emphasizes the urgent need for more accessible and accommodating dental services for people with disabilities.

Another investigation in Jeddah by (Zahran & Bhadila, 2023) explored dental care access among CSHCN. It was discovered that only a minor fraction of caregivers routinely visited the dentist for their CSHCN. The most frequently cited barriers were fear of the dentist, child uncooperativeness, and the costs associated with treatment. This study highlights the critical need for dentists to undergo additional training and education to enhance access to dental care for Cshcn.

Moreover, a comprehensive review by (Asiri & Tennant, 2022). synthesized evidence regarding the current status, trends in dental health behaviors, and oral healthcare utilization among persons with disabilities in Saudi Arabia, it concluded that individuals with disabilities have limited access to dental health care, poor oral health status, and a general lack of awareness regarding dental health.

Public education campaigns have been shown to significantly impact dental health awareness and practices among schoolchildren. For instance, a study conducted by (Halawany et al, 2022). demonstrated the effectiveness of dental health education interventions in improving dental hygiene knowledge and practices among female primary school children in Riyadh, Saudi Arabia. This underscores the importance of integrating dental health education into school curricula to foster better dental hygiene practices from a young age (Halawany, H, & Al Badr, 2018).

A comprehensive review by (Almajed & Aljouie, 2024) examined the dental healthcare system in Saudi Arabia, tracing its evolution, current status, and persisting challenges, the showed that the integration of technology faces resistance, and specialized care for people with disabilities requires targeted strategies. Cultural and social factors influence oral health, and the system's response to the COVID-19 pandemic showcases adaptability and patient-centered approaches. Addressing these challenges is crucial for ensuring equitable and effective oral health service delivery in Saudi Arabia.

1.3 Structure of Health Services in Saudi Arabia

In recent ten years, Saudi Arabia has seen significant transformations in its dental healthcare landscape, driven by government prioritization and strategic health service development. However, this progress has not been without its challenges. The dental healthcare system, characterized by a blend of government and private sector involvement, has improved health outcomes but continues to grapple with issues such as professional shortages, financial constraints, and high demand due to free services (Almaiman A, & Bahkali). Accessibility to dental services remains a critical concern, with many citizens preferring private dental services over government-provided care, often perceived as superior (Alshahrani, & Raheel, 2016).

Providing health care is considered as a priority in Saudi Arabia, therefore, health care had great developments during the past ten years. Healthcare services provided for all citizens and residents have the right for complete and free accessibility to the health, there are 20 regional directorates of health covering various parts of the KSA, connected administratively to the MOH, offices in the capital Riyadh, with each directorate supervising and supporting the health services in that area.⁵ There are three categories of health services provided by the MOH: Primary, secondary, and tertiary (AlHammad & Aldhalaan, 2020). In the primary category, health services are provided by primary health centers, covering all cities, towns, and villages. It is mainly focusing on preventing sources of illness, enhancing and maintaining health, and educating people about their health issues. Simple treatment can be provided by the primary health centers, but when the patients require more advanced medical intervention (Alfallaj & Afrashtehfar, 2022).

Primary healthcare centers, pivotal in providing dental healthcare, encounter challenges like high costs in private clinics and dentist unavailability, impacting service delivery [3]. Furthermore, oral hygiene practices among the Saudi population are not widespread, and the utilization of healthcare for oral disease prevention is limited, underscoring the need for enhanced dental health promotion (El Bcheraoui & Tuffaha, 2016).

The integration of technology, such as electronic dental record (EDR) systems, has faced resistance due to factors like staff reluctance, a lack of technical skills, and usability issues, specialized care groups, face unique challenges in accessing dental care, highlighting the need for targeted strategies to overcome barriers like physical

accessibility, affordability, and provider knowledge gaps (Alfaraj & Halawany, 2021).

The dental healthcare centers in Saudi Arabia has experienced a significant transformation over recent decades, evolving from a focus on basic dental needs to providing comprehensive and specialized services. This evolution has been driven by various factors, including government initiatives, economic growth, and an increased emphasis on healthcare education and promotion (Almajed & Aljouie, 2024). A key development in this transformation has been the integration of technology, particularly the adoption of EDR. This move towards digitalization aims to enhance the efficiency and quality of dental services, although it has faced challenges such as staff resistance, a lack of technical skills, and usability issues (Almaiman & Bahkali, 2014).

Another important aspect of the system's evolution is the increased focus on providing dental care to individuals with special healthcare needs. Efforts have been made to understand and address barriers faced by these groups, including issues related to physical accessibility, affordability, and provider knowledge gaps (AlHammad & Aldhalaan, 2020). Amid these advancements, Vision 2030 emerges as a pivotal government initiative aiming to further revolutionize the healthcare sector, including dental care. Launched by the Saudi government, Vision 2030 seeks to diversify the nation's economy and improve the quality of life for its citizens by setting ambitious healthcare goals. These include expanding access to care, enhancing the quality of healthcare services, and promoting preventive health measures. Vision 2030's emphasis on healthcare innovation and technology integration aligns with the ongoing efforts to modernize the dental healthcare system, promising a future where dental care is more accessible, efficient, and patient-centered (Health sector transformation program, 2023).

Despite these advancements, the Saudi dental healthcare system continues to grapple with challenges like professional shortages, financial constraints, and high demand due to free services, additionally, there is a pressing need for enhanced dental health promotion, as practices like regular brushing and flossing are not widespread among the population (Asiri & Tennant, 2022). In summary, the evolution of the dental healthcare system in Saudi Arabia reflects a journey toward modernization and inclusivity, significantly influenced by Vision 2030. Significant progress has been made, but ongoing efforts are essential to overcome existing challenges and ensure effective and equitable oral health service delivery for the entire population.

While the expansion of dental centers has undoubtedly improved access to dental services in Saudi Arabia, challenges related to accessibility persist. Many citizens still prefer private dental services over government-provided care, viewing them as superior, this preference for private care can create disparities in access to dental services, particularly for those who cannot afford private healthcare (Alshahrani & Raheel, 2016).

Additionally, the distribution of dental healthcare centers and across the country is not uniform. Urban areas tend to have better access to dental services, while rural and remote regions may still face challenges in accessing quality oral healthcare, this geographic disparity in access needs to be addressed through strategic planning and the establishment of dental clinics in underserved areas (Al-Jaber & Da'ar, 2018). To improve accessibility, the ministry of health could consider initiatives such as mobile dental clinics to reach remote communities. Telehealth and tele-dentistry solutions can also be explored to provide consultations and follow-up care for patients in areas with limited access to dental facilities, these technological advancements can bridge the gap in dental service availability.

Furthermore, healthcare centers, including individuals with special healthcare needs and autistic children, face unique challenges in accessing dental care. These challenges highlight the need for targeted strategies to overcome barriers like physical accessibility, affordability, and provider knowledge gaps (AlHamma & Aldhalaan, 2020).

While there have been improvements in the dental healthcare centers significant efforts are still needed to ensure equitable and effective access to dental services for all citizens, particularly in rural areas and for special needs populations. One of the critical aspects of a robust dental healthcare system is the promotion of oral health and the prevention of dental diseases. However, in Saudi Arabia, dental hygiene practices among the population are not widespread, and the utilization of healthcare for oral disease prevention is limited (Bcheraoui C, & Tuffaha, 2016). This highlights the need for comprehensive dental health promotion strategies.

Public education healthcare campaigns can play a pivotal role in raising awareness about the importance of dental hygiene and regular dental check-ups. Schools, community centers, and healthcare facilities can serve as platforms for disseminating information about proper dental care practices. Collaborative efforts between healthcare authorities and educational institutions can facilitate the integration of oral health education into the curriculum. Furthermore, preventive programs, such as community water fluoridation and dental sealant programs, can be implemented to reduce the incidence of dental caries. These initiatives have proven effective in preventing dental diseases, especially among children. Studies have shown that the prevalence and severity of dental caries among schoolchildren in the Gulf Cooperation Council area, including Saudi Arabia, are significant, indicating the need for systematic approaches to preventive oral care programs (Alayyan & Al Halabi, 2017).

Additionally, the effectiveness of different modes of school dental health education, such as drama, games, and flashcards, has been explored, with findings suggesting that child-friendly modes of delivery are more impactful in improving oral health status. Moreover, there is evidence that school-based oral health promotion programs involving teachers and parents can lead to improved oral health knowledge and behavior (Gulzar & Wyne, 2021). In conclusion, to address the limited utilization of healthcare for dental disease prevention in Saudi Arabia, a multi-faceted approach involving public education campaigns, school-based programs, and community preventive initiatives is essential. These strategies should aim to improve oral hygiene practices and increase awareness of the importance of regular dental care.

The integration of technology, particularly electronic dental record systems, has the potential to enhance the efficiency and quality of dental care in healthcare centers; however, as evidenced by the findings in Table 1, this adoption has encountered notable resistance stemming from factors such as staff reluctance, insufficient technical skills, and usability challenges (Almaiman & Bahkali, 2014).

Table 1: Challenges and solutions for technology integration in dental care

Challenge	Potential Solutions
Staff resistance	Training and education programs for staff
Lack of technical skills	Skill development workshops and courses
Usability issues	User-friendly software and interface design
Cost barriers	Government subsidies or incentives for technology

2.1 Results

The results of this paper review showed, through studies of a number of local studies, that dental health centers in the Kingdom of Saudi Arabia provide dental health services with varying capabilities, depending on the nature of the geographical region. They are provided with better quality in cities than in rural areas, due to the availability of experienced doctors. In dental treatment, in addition to the availability of devices, tools, and materials necessary for dental treatment, the majority of dental patients prefer to visit private dental clinics, and this may be due to many reasons and issues related to dental care in the government and private sectors, and may be due to the availability of higher quality care in private health centers.

In addition, the implants, dentures, cosmetic dentistry, and other complicated procedures are not available in primary governmental dental care. When patients need more than just simple treatment, patients will be referred to higher governmental dental centers which have long waiting lists. On other hand, the patient can receive the needed treatment and desired procedures in private dental sector in one place and in less time. Patients believe that, with paid care they can get enough time with doctors, better care and expect an enhancement in the way they look and not just treating a dental problem. As mentioned previously, it is requisite for non-Saudi workers to be covered by health insurance.

The results also showed that MOH supported dental care services in KSA, the Saudi population faces difficulties to meet the proper dental care. These difficulties are a result of incompatibility between the dental care provided and the increasing population with lifestyle changes, creating deficiencies in the quantity and quality of the presented care. Extending and promoting the dental care in primary governmental health institutions and increasing the number of advanced referral dental care centers can help to meet the demand of services between Saudis. Furthermore, it can reduce the waiting lists and pressure in referral centers. For non-Saudis, evaluating the present regulations and implementing new regulations is needed regarding the foreigners' health insurance to insure their right to receive proper dental care services, as stated in the law of KSA

2.2 Conclusions

The dental healthcare centers in Saudi Arabia, while evolving with technological advancements in dental centers care, still faces challenges such as professional shortages, financial constraints,

and access disparities, especially in rural areas and among persons with disabilities. Despite improvements, issues like limited dental health promotion and the impact of cultural and social factors on dental health persist. a pressing need for expanding dental health promotion, while progress has been made, significant efforts are required to ensure all individuals receive equitable and effective dental care in Saudi Arabia. Dental health services assessment is an ongoing global challenge for improvement of services, quality enhancement and preventing oral diseases. One strategy is to investigate the utilization and access to dental care, and exploring the underlying factors. In Saudi Arabia, only few published studies explored the utilization of dental care services. Hence, this paper attempt focusing on the findings of utilization, including manner of use and the associated factors. Only certain possible causes have been studied, and there is limited evidence of the utilization of dental care centers in Saudi Arabia.

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