

The public healthcare system and primary care services in Saudi Arabia: a system in transition

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Abstract

Background: Saudi Arabia has invested heavily in the healthcare system by establishing healthcare infrastructures to improve health of the nation. However, it remains to be seen whether it is efficient and effective in providing healthcare services needed. Primary Health Care (PHC), which forms the basis of Universal Coverage, needs to be assessed in terms of performance, challenges and future opportunities to serve a population scattered throughout the vast landscape of the country.

Aims: This review aimed to identify challenges within the Saudi healthcare system focusing on PHC services, and to analyse the interrelated factors in order to suggest remedial reforms to further strengthen and improve the healthcare system.

Methods: A narrative review for previous studies and governmental reports was undertaken to extract, analyse, synthesize and report the findings.

Results: The review findings revealed a number of key areas for improvement in the PHC system. These areas include the scope, structure, infrastructure, finance, increased demand, increased costs, and workforce capacity. Other critical challenges include inequitable access to the services, concern regarding the quality and safety of services, a growing burden of chronic diseases, information system, management and leadership issues, as well as gaps in the current referral system.

Conclusion: The Saudi healthcare system needs a comprehensive reform with a focus on PHC.

Keywords: Healthcare, primary healthcare, finance, workforce, Saudi Arabia,

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Introduction

In spite of significant improvements achieved in the Saudi healthcare services sector during the past decades, Saudi Arabia is facing critical challenges in its primary healthcare system. These challenges include increased demand from a rapid population growth, high cost of healthcare services, inequitable access, concerns regarding the quality and safety of care, a growing burden of chronic diseases, less effective electronic health system (eHealth), poor cooperation and coordination between other sectors of care, and a highly centralised structure (1–5). The Government has developed and implemented a number of initiatives which include the Strategic Plan for Ministry of Health (MoH) 2010–2020 to effectively counter these challenges (6). These initiatives witnessed a replacement of seven ministers of health in a short span of one year, which indicate and reflect the gravity and complexity of the administrative and practical difficulties experienced to counter these challenges in the healthcare sector.

Most of previous review papers focused on the hospital-based medical care services, neglecting Primary Health Care (PHC) services, which represent the first access level of care in the Saudi healthcare system. The PHC sector provides essential healthcare services for Saudi citizens and expatriates working in the public sector (7). No reform of the Saudi healthcare system can be completed without first considering the PHC services at the heart of the healthcare system.

This review aims to explore the challenges facing the Saudi healthcare system with primary focus on PHC services. It further discusses and analyses the barriers and drivers of health sector reforms including impact of demographic and economic factors affecting the healthcare system. The review also recommends various mechanisms for effective reform of PHC services as the nucleus of overall healthcare system.

Methods

Data relating to the Saudi healthcare system were extracted from published literature in a number of databases including: PubMed, Medline, CINAHL, Saudi Medical Journal, Eastern Mediterranean Health Journal, and the Portal of Ministry of Health in Saudi Arabia. A further search using Google Scholar search engine was carried out to identify other relevant papers and texts, government reports, and information published in Arabic. All the studies and texts were analysed for their contents and the relevant information were synthesized and reported.

Results and discussion

Saudi Arabia is the largest country in the Arabian Peninsula. It is located in South-Western Asia, extending from the Red Sea in the West to the Arabian Gulf in the East (7). Saudi Arabia is a country with a culture and traditions rooted in Islamic teachings and Arab customs (8). Muslims show high respect to Saudi Arabia as the centre of the Muslim world as it has the two holiest Islamic places: Mecca and Medina (8).

Politically, Saudi Arabia is a Kingdom with an integrated system of government based on the principles of justice, consultation and equality, in accordance with the Islamic law (9). Therefore, to some extent, the principles of Islam and Saudi traditions influence and constitute the culture of organisations within the country. This centralised tradition of Saudi society is also embodied within the health care service (10–11). In other words, the structure and functioning of the healthcare organisations, including PHC, are strongly influenced by the society's norms and traditions.

Demographic impacts

The population of Saudi Arabia was estimated to be around 30 million in 2014 with expatriates comprising approximately 31% of the total population (7). The population growth rate is 2.81% from 2010 to 2015 (12), driving demand for more healthcare. Although the increased financial resources have been allocated to the health sector during the past decades, the population is growing faster than the health services made available. This indicates an urgent need for addressing this major challenge (Table 1) (13–17).

Economic impacts

Saudi Arabia is a leading country in terms of producing and exporting oil, which accounts for almost 72% of the country's exports (18). According to the World Bank, Saudi Arabia is classified as a high-income country (19). The strong oil-based economy has facilitated the major development of local public and private organisations, creating new jobs and raised the socio-economic status of the citizens (20). The Saudi government provides free public services including healthcare for its population (21). However, global instability of oil prices during the last few years has reflected on the public and private services and forced to explore alternate sources for revenue. Saudi Arabia announced the 2030 National Vision to seek long-term sustainability of living standards by diversifying its income sources in the future, rather than relying solely on oil revenue (22).

Saudi healthcare system

The Ministry of Health is responsible for public healthcare services (23). A number of semi-independent bodies, the private sector, non-governmental voluntary organizations also provide healthcare services in addition to government sectors. The MoH provides 60% while the private sector and the other governmental health sector provide the remaining healthcare services, 23% and 17% of health services, respectively (17).

Lines of care in the Saudi healthcare system

There are three levels of healthcare services in Saudi Arabia, namely, primary, secondary and tertiary. However, in reality, there are four 'lines of care' as shown in Figure 1. The PHC services are the focus of the following discussion.

Primary healthcare in Saudi Arabia

Primary healthcare (PHC) is the first line of healthcare services (6) provided by the MoH through a network of primary health centres. However, primary healthcare services face many challenges in terms of the patterns of disease, workforce, information systems, financial support, and accessibility.

Historical issues of PHC

In accordance with the Alma-Ata declaration, Saudi Arabia has committed to develop its PHC services (24). The MoH integrated both preventive and basic curative healthcare services in 1984. These services targeted individuals, families and community, and provided a range of healthcare services including maternal and child health, immunization for communicable diseases, follow-up for patients with chronic diseases, dental care services, health education and essential drugs (24,25).

The PHC services have witnessed major improvements during the last four decades resulting in better health outcomes with lowered infant mortality rate, a lowered incidence of communicable diseases rate, and an increase in average life expectancy (6). According to the MoH, there are now 2281 public PHC centres (17).

Saudi Arabia has now witnessed changes in disease patterns from communicable to chronic diseases (6), becoming more prevalent and are a challenge to the Saudi population as well as increased burden to existing healthcare services (1,6,26–28). This change in disease pattern indicates insufficient PHC services, including patient follow-up strategies and health education activities. Recent data from the Saudi Health Information Survey (SHIS) show high rates of diabetes, 14.8% for males and 11.7% for females. Diabetes prevalence was 19.9%, almost double among those who were obese in comparison to non-obese (28). There is a crucial need for the development of PHC services directed to patients with chronic diseases and people who are most at high risk.

Health system finance and expenditure

Saudi citizens have free access to all levels of public healthcare services available in the country, which is funded by the central government. The MoH expenditure per capita has increased substantially by 0.41% (17), equivalent to US\$ 299 (13–17,29–32). However, Saudi Arabia still spends less on a per-capita basis in comparison to a number of industrialised nations (Figure 2) (33).

Ministry of Health planners and leaders focus primarily on hospitals rather than primary health centres, therefore available funds are not utilized in an allocative efficiency way. According to Alrabiyah and Alfaleh (21) more than 90% of the MoH budget allocated for infrastructure and development projects was spent on hospitals. Low expenditure on PHC centres has resulted in 80% of PHC buildings being rented and as such not specifically designed to provide PHC services. Thus, they lack the necessary structures to provided primary care (21,34).

According to the regulations of the Saudi government, the budget for the MoH is released by the Ministry of Finance after its approval. This practice may influence the performance and efficiency of the MoH and delay its achievements in all sectors including the PHC services.

A comparison of the PHC systems in Saudi Arabia and Cuba showed that health leaders and the government in Cuba saw PHC as the cornerstone of successful healthcare along with a focus on social determinants, which contributed to making the Cuban PHC one of the best in the world (35). The Saudi MoH should shift the focus of the health system from the hospital-based healthcare services to the primary preventive and promotive healthcare services to deal effectively and efficiently with an increasing load of chronic diseases.

Workforce of PHC

Shortage of healthcare professionals is a global concern (36). The Saudi healthcare system is not immune to this challenge, and most healthcare professionals in Saudi Arabia are expatriates (1). In 2014, the PHC workforce included 9304 physicians (3 per 10 000 inhabitants), 18 136 nurses (5.9 per 10 000 inhabitants), and 9 690 allied health workers (17). The healthcare workforce for PHC services has increased with nurses outnumbering physicians and allied health workers between 2010 and 2014 (Figure 3) (13–17).

Many healthcare professionals, particularly nurses, become engaged in management or other non-nursing departments within their organizations (37). This trend is also observed among physicians. A Ministerial Committee review found that the number of PHC physicians was less than the required number by 40% (21). The 2013 rate of total physicians (excluding dentists) per 10 000 population in Saudi Arabia was 2.3 (16). The scarcity of physicians in Saudi Arabia is pronounced when compared to other nations (Figure 4) (16,38).

Although there is a shortage of physicians, they continue to dominate by holding the healthcare system positions (39–41). Physicians occupy a number of management and leadership positions at the central and regional levels of health authorities, exaggerating the issue of shortages and hidden turnover among PHC physicians.

Human resource development

The MoH has invested in training its employees and to develop their skills. However, the large number of workers, diversity of their educational and cultural background as well as the limited resources allocated for training have affected the number, type, and the quality of available training programmes. The MoH has granted local and international study scholarships for many employees. Additionally, many training courses in different specialities have been launched in collaboration with the Saudi Commission for Health Specialties.

Despite these efforts, the MoH lags behind international practices in terms of training funds for its workforce. For example, the MoH in both the United Kingdom (UK) and Malaysia allocate 5% of the total budget to training; in contrast, Saudi Arabia allocates only 0.4 percent (6,42).

The Ministry of Civil Service and the Ministry of Finance strictly control healthcare jobs recruitment activities, which adversely affects the available healthcare workforce. These ministries must approve and supervise the creation of new jobs and the recruitment of new employees or professionals to the MoH. Such policies limit the flexibility and autonomy of the MoH updating its workforce.

Acceptability and accessibility to PHC

Acceptability of, and accessibility to the primary healthcare services are central to the performance and evaluation of healthcare systems. Acceptability is the willingness of people to seek services (43). Acceptability is reduced when people perceive health services to be ineffective or when cultural and social factors (e.g. language, age, sex, ethnicity, or religion) of the healthcare provider discourage the consumer from utilizing services (43). Patient satisfaction studies have been used to determine the acceptability among populations as well as the effectiveness of the service provided (44–47). Findings from patient satisfaction surveys have been found to play a key role in reforming healthcare systems (46–47).

A number of studies of local health services conclude that patients in Saudi Arabia are not satisfied with PHC services (48–52). The main reasons for dissatisfaction included the physical environment, waiting times, confidentiality measures, the location of centres, working hours, absence of speciality clinics, language and communication barriers and the waiting area structures. Despite these findings, the past decade has seen a growing acceptance of PHC services by the Saudi population. This acceptance is reflected in the total number of visits to the PHC centres during 2014, which was approximately 51.26 million. The average number of visits per PHC centre was 22 473, while the average number of daily visits per PHC centre was 90 (17). Non-availability of alternative services may lead the Saudi population to accept primary care services despite their dissatisfaction. However, recent

studies indicate an increased level of satisfaction with primary care services compared to previous studies (53–56).

Access to health services was defined by Levesque, Harris and Russell as “the opportunity to identify healthcare needs, to seek healthcare services, to reach, to obtain or use health care services and to actually have the need for services fulfilled” (57). The MoH identified the barriers to accessing healthcare services as environmental, social and economic conditions (e.g. geographical location, education level, income level, and nutrition) (6). A recent study in Hail city, Saudi Arabia, found that the lowest level of satisfaction among PHC users was accessing medical care and the availability of doctors (54). Another structural barrier for sufficient access to healthcare services is the absence of an efficient referral system among the various levels of healthcare (58). While general, central and specialized public hospitals accept only referred cases, private hospitals are free to accept patients without referral. Additionally, there is no system for sending patients back to PHC services from general, central or specialized hospitals. More efforts are needed to reform this gap (34) and to ensure a better continuity of primary care.

A recent study in Riyadh, Saudi Arabia, examined the factors influencing the access to and utilisation of PHC centres in urban and rural areas. The findings highlighted important differences between urban and rural populations with factors for rural patients including the distance to reach PHC centre, cleanliness of the PHC centre, and receiving health prevention and promotion services (56).

According to the World Health Organization (WHO), “The role of government with regard to sustainable health systems is to guarantee equity of access and to ensure that essential health system functions are maintained.” (59). As a first level of contact between people and the healthcare system, the quality PHC services should be accessible and available to the whole population.

PHC and health information system

The MoH in Saudi Arabia has developed a four-year (2008–2011) project to improve eHealth in healthcare organizations and facilities (60,61). However, the eHealth strategy was first implemented during 2011 in the hospitals of major cities (61). Alghanim (62) conducted a study to identify the information needs and information seeking behaviour of primary care physicians in Saudi Arabia. The findings indicated that the absence of an electronic healthcare system was a major contributor to the weaknesses of PHC service and infrastructure. Primary healthcare physicians did not have up-to-date patient information. High-quality computing services including electronic health records and clinical decision-making support tools are essential to quality healthcare service (63). Such initiatives can assist in delivering effective patient-centred care (64). Therefore, implementing eHealth to the current PHC facilities is crucial to serve patients’ needs and to enhance the knowledge base of physicians and other health care professionals.

The New PHC reform

To improve the quality of PHC services and its environment, it is important to find gaps in existing systems by proper literature review, observations, reviewing existing healthcare policies, and how to fill gaps by developing and implementing proper reforms. This means the focus should be on PHC structure, infrastructure, finance, management, and leadership. The MoH has strived to reform the health system including the PHC services through a new reform strategy 2010–2020 (6). The new strategy calls for the establishment of more PHC centres to meet the growing need for health services. Additionally it calls for the establishment of institutional work and strengthening the measurement and monitoring practices in terms of quality and performance.

Another objective of the strategy is to develop an accurate database to integrate PHC centres. The strategy also includes the decentralisation of management, empowerment of administrative, technical, and finance sectors within each level of healthcare. The implementation of an effective referral system from PHC to the next level and back to the PHC is also a critical objective in the proposed strategy. The development of the PHC workforce through extra education, training and new recruitment, and retention strategies to address the workforce shortage is also part of the reform strategy.

Although it is almost six years since the strategy was publicly announced, few changes have been introduced. To ensure the success of this strategy, the MoH in collaboration with regional directorates must set operational plans for its implementation. Additionally, a significant portion of the Ministry of Health budget should be directed to the PHC services in order to promote population health in Saudi Arabia. The importance of such changes increases as the MoH has recently decided to provide paid PHC services to expatriates who work in the private sector, thus potentially placing even greater strain on the PHC system. To support this trend and promote population health, upcoming programmes and initiatives of the Saudi Vision 2030 for health may focus more on the public health and PHC services.

Conclusion

The Saudi healthcare system is going through a period of evolution. This is enforced by the new vision of the MoH and the development of a national health strategy to meet the challenges. There is an urgent need to take newer initiatives to improve the healthcare services in Saudi Arabia with a high focus on PHC services reforms. Such reforms require fixing the challenges including scope, structure, infrastructure, finance, increased demand, increased costs, workforce, inequitable access to the services, concern regarding the quality and safety of services, a growing burden of chronic diseases, information system, management and leadership issues, as well as gaps in the current referral system.

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Figure 1. Lines of care in the Saudi health care system

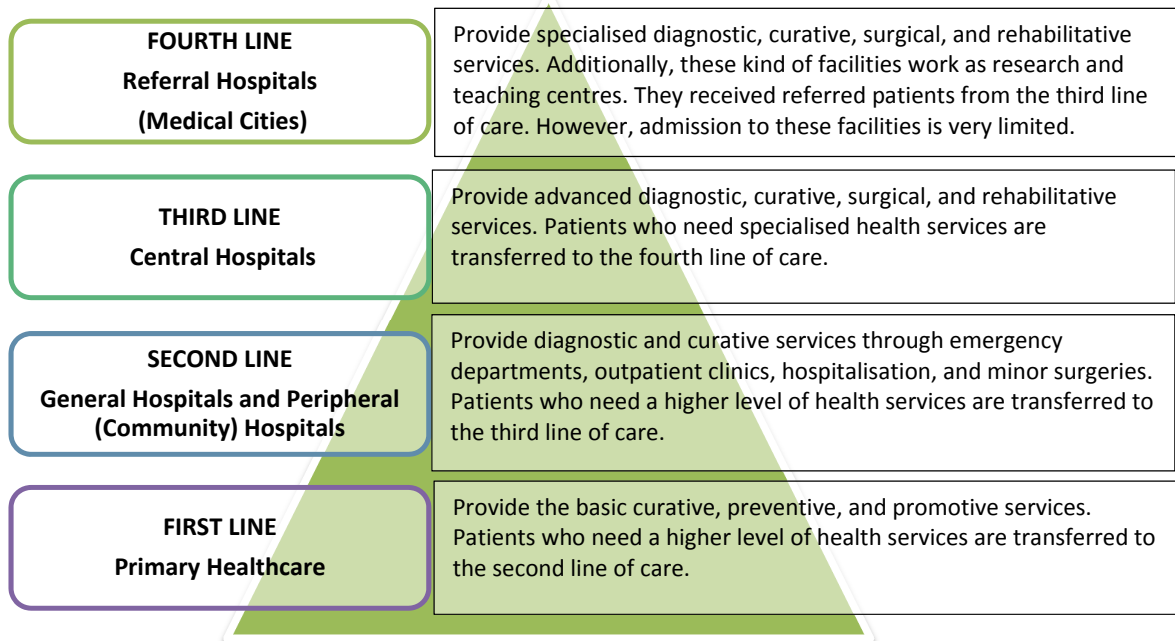


Figure 2. Health expenditure per capita (current US\$) 2014 (33)

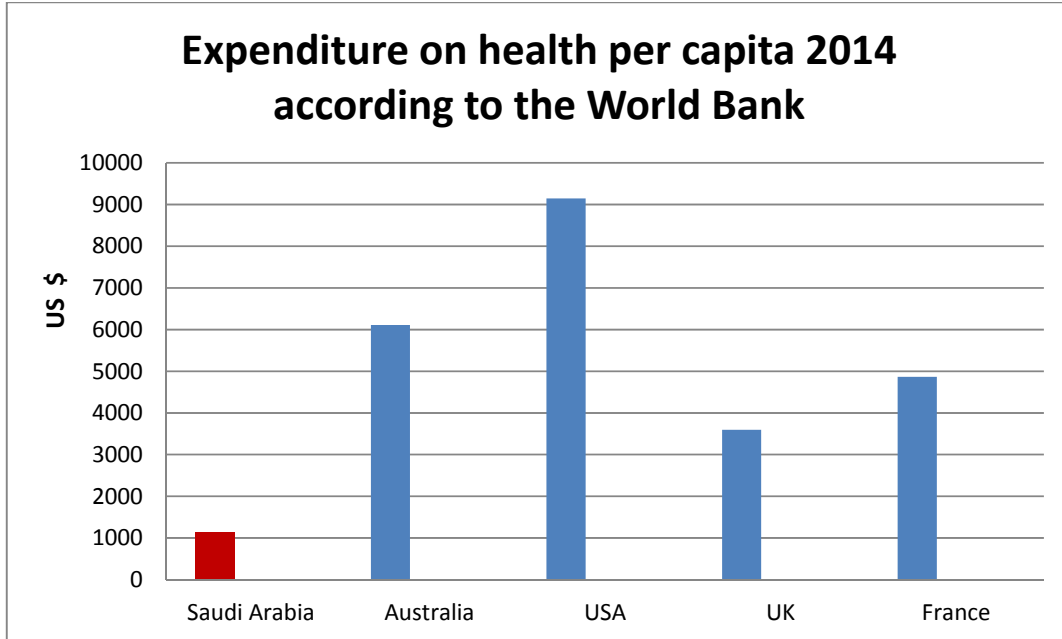


Figure 3. Total number of primary healthcare professionals over five years (13–17)

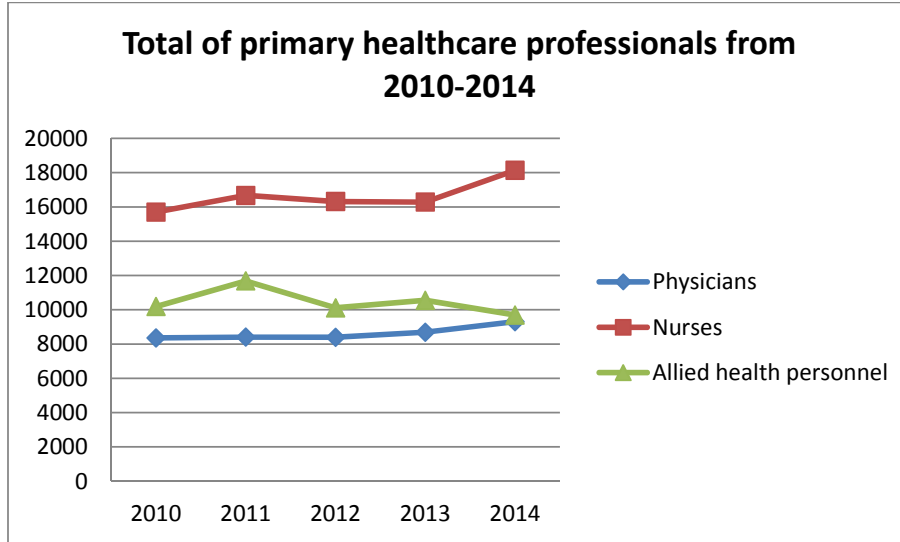


Figure 4. Practicing physicians in 2013 per 1000 of population (16,38)

