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Healthcare System in Saudi Arabia: An Analysis of Structure, Total Quality Management and Future Challenges

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1. Introduction

This article discusses the healthcare system in the Kingdom of Saudi Arabia with emphasis on its level of development, structure, implementation of total quality management (TQM) and the future challenges. Saudi Arabia is the largest state in the Middle East and, due to its oil wealth, the country is a major force in the Arab world (Walston, Al-Harbi and Al-Omar, 2008). Occupying about four-fifths of the Arabian Peninsula (i.e. about 850,000 square miles), Saudi Arabia shares borders with: Jordan, Kuwait and Iraq in the north; Bahrain, Qatar and the United Arab Emirates (UAE) and the Gulf on the eastern frontiers; the Sultanate of Oman on the southeast frontier; Yemen in the south; and the Red Sea and the Gulf in the west and northeast respectively (Mufti, 2000: 1). The country has a population of about 27.1 million in 2010 (Central Department of Statistics, 2010). With the discovery and exploration of oil in commercial quantities, the Saudi economy has developed rapidly and this has impacted positively on every facet of the Saudi society (WHO, 2006: 7).

One principal area that the Saudi authorities focus attention on is in the provision of healthcare services to its citizens. Between 2005 and 2008, Riyadh committed about 84.5 billion (Saudi Riyal) to improve the healthcare for the Saudi population (Ministry of Health, 2008: 106). Since then, the amount earmarked for healthcare services has been on the increase while the total expenditure on health as percentage of the Gross Domestic Product (GDP) was 3.3% in 2008 (WHO, 2010). The increase in funding of the health

sector and the consequential modernisation of the Saudi healthcare system, coupled with the considerable economic growth rate and upgrade of its healthcare facilities, the country's health system, based on performance, was ranked 26th among 191 healthcare systems while during the same year, Canada, Australia, the United States and New Zealand were ranked 30th, 32nd, 37th, and 41st respectively (WHO, 2000: 206). Despite these achievements, Saudi Arabia's healthcare system is challenged by a number of factors, which, in the long run, thwart government's ideals and efforts to implement TQM in healthcare services.

Based on the aforementioned, this study engages in a critical examination of the Saudi healthcare system and looks at its structure, implementation of quality management, and its challenges. The paper traces the antecedents of, and inquire into, the country's healthcare system to explain how the growth of the Saudi economy serves as a magnet that attracts medical expatriates from all over the world to develop its health sector. While this development is heartening, the study will argue that though Riyadh has performed creditably in improving the country's healthcare infrastructure, whereas TQM, which is the heartbeat of the health service delivery, has not been effectively implemented. The study will conclude by some recommendations that will, hopefully, assist to overcome these challenges.

2. Saudi Arabia: Demographic and Socio-Economic Contexts

The demographic and socio-economic contexts of Saudi Arabia are fundamental to any academic endeavour that seeks to uncover the state of the country's healthcare system and its challenges. This is because an analysis of the country's demographic and socio-economic features will help to understand the magnitude of responsibility on the part of the Saudi authorities and the financial resources at its disposal to meet the expectations of the citizens. Saudi Arabia has an homogeneous population in that the people share common linguistic, religious and cultural values (Al-Farsy, 1990:199-200). The Saudi population, according to

the country's Central Department of Statistics (2003), was 16.9 million in 1999 but this figure soared to about 22.67 million in 2003 and, according to the Department current data, the Saudi population is 27.1 million in 2010. The population is projected to reach 36 million in 2020 (Schieber, 2001). The population, overwhelmingly characterised by a large cohort of youth, is presently composed of 49.1% female and 50.9% male (http://www.cdsi.gov.sa/census31/index.php). The reason for this demographic structure can be found in the presence of a large number of resident male foreigners working in the country. Between 1998 and 2008 the average annual population growth rate was 2.5% (WHO, 2010), and this was due to a decrease in mortality rate and a high fertility rate. Rural-urban migration has been a defining feature of the Saudi population as there is now a major population concentration in the major cities such as Dhahran, Medinah, Riyadh and Jeddah. The capital city of Riyadh has a population of about 6.25 million in 2009 (http://www.moh.gov.sa/statistics/population.html)

As stated earlier, Saudi Arabia is a resource rich country (because of oil in particular). It has the largest reserves of oil globally and accounts for 25% of the world's total oil supply. This makes the country a major player in the international oil market and a respected member of the Organisation of Petroleum Exporting Countries (OPEC). The remarkable performance of the Saudi economy, especially between 1960 and 1980, showcased the country to the world as a possible model of economic success. This healthy economic profile impacted positively on and increased the standards of living of the people of Saudi Arabia (Looney, 1982: 69). Unfortunately, in the 1980s, the government experienced deficit in its budget due to the fall in oil prices at the international oil market, but the situation was ameliorated in the 1990s. The Saudi authorities have been very conscious of the state of the country's economy as Riyadh, through its Ministry of Economy and Planning, has put in place a series of a five-year National Development Plans since 1970, which set the socio-economic goals for the country. Through these National Development Plans, Saudi

Arabia has been able to, for example, encourage private economic activities, increase jobs, increase per capita income, reduce poverty. The industrial sector oils the Saudi economy as it creates more than 51% of the GDP and the lion's share of this figure comes from oil and gas industry. The service and agriculture sectors account for 43% and 5% of the economy respectively (WHO, 2006: 15). The country's healthy economic profile and favourable government policies have enabled Saudi Arabia to join the ranks of the top 25 countries in the world, in terms of ease of doing business (World Bank, 2008). The country is also a member of the Group of 20 (or G-20); a group of developed and emerging-market countries.

3. The Healthcare System in Saudi Arabia: A Peep into History

Before the discovery of oil, Saudi society was traditional, isolated and poor which implies that the way of life was very much backward. During this period, there was no standardised healthcare system, and healthcare services were largely based on traditional practices and medicines. In 1926, Saudi Arabia under its visionary leader, King Abdulaziz Al-Saud (1880-1953), issued a Decree establishing a 'Health Department' (Mufti, 2000: 3). This singular event marked a significant milestone in and could be described as the beginning of the modernisation and the emergence of organised healthcare system in the Kingdom, despite the fact that the country was still underdeveloped and poor. Hospitals and clinics were set up in major urban centers in which the newly established Health Department was tasked to supervise these healthcare facilities. As part of the government eagerness and determination to have a well organised and efficient healthcare system, a decision was made in which the Health Department, which later became the General Directorate for Health and Aid (GDHA), was attached to the Bureau of the Attorney General. A Health Council, headed by the Attorney General, was established to raise the standards of healthcare services and control diseases in Saudi Arabia (Mufti, 2000:3). Despite the efforts of the Saudi authorities to standardize and modernise its healthcare system, funds at its disposal were meager, and

this hampered attempts to develop a modern healthcare system.

The complete transformation of the Saudi Arabia's health sector in the real sense of the word commenced in 1954 with the establishment of the Ministry of Health (Al-Mazrou, Khoja and Rao, 1995). The Ministry of Health is responsible for the overall supervision of the healthcare facilities, both in the public and private sectors. With the increase in revenue derived from sales of crude oil, the Saudi government instituted the country's first five-year National Development Plan in 1970 to promote development in a number of areas, including healthcare. During this period and also under successive National Development Plans, the Saudi healthcare system witnessed a complete transformation, for the government was able to establish the necessary infrastructure of primary healthcare, hospitals and research facilities. Though the country relies on the services of expatriates medical personnel to work in these expanded health facilities, it has invested heavily in human resources development through the provision of scholarship opportunities to Saudis to pursue careers in the medical field (Jannadi et al, 2008: 48).

4. The Healthcare System in Saudi Arabia: An Analysis of Structure

Saudi Arabia is a welfare state and its government, according to Article 31 of the Saudi constitution, is oblige to provide free healthcare services to all Saudis. The citizens have the right to free healthcare services, which have been provided for via the development of health policy. This policy is committed to a "Health for All (HFA)" goal. The objective of

the Saudi government is to provide free medical care for all Saudis in public healthcare facilities. Both public and private sectors are responsible for the provision of healthcare services in the Kingdom, though the former takes the lead. The Ministry of Health, under the leadership of the Minister of Health, is responsible for managing the country's health system. The Ministry of Health has a "well-defined, decentralised organisational and administrative structure. Its functions include strategic planning, formulating specific health policies, supervising all health services delivery programmes, as well as monitoring and controlling all other health-related activities" (Al-Yousuf, Akerele and Al-Mazrou, 2002). The Ministry of Health is the principal government agency entrusted with the provision of healthcare services (including preventive, curative and rehabilitative healthcare) for the citizens. Sebai, Milaat, and Al-Zulaibani (2001:3) shed light on the roles and importance of the Saudi Ministry of Health when they assert that:

> The Ministry of Health provides around 60% of the health services, free of charges, through 13 health directorates. 20% of the health service is delivered free through other government agencies and the remaining 20% is provided by the non-government sector, which is growing rapidly.

The Ministry of Health provides healthcare services through a network of primary healthcare centers numbering 2,037, located in both large cities and small towns throughout the country, and 244 hospitals (http://www.moh.gov.sa/statistics/indi_phc.html).

Additionally, other government agencies also provide healthcare services. These include the Ministry of Defense and Aviation (MODA), Ministry of Education (MoE), the Saudi Arabian National Guard (SANG), the Ministry of the Interior (MoI) and the Red Crescent Society. These agencies are very organised and independent of the Ministry of Health in that they have their own budgetary allocations, oversee the administration of their health facilities and recruit their own medical personnel. For example, the General Department of Medical Services manages hospitals and primary healthcare centers under MODA. It should be emphasised here that these public agencies provide healthcare services via a combination of primary, secondary and tertiary healthcare

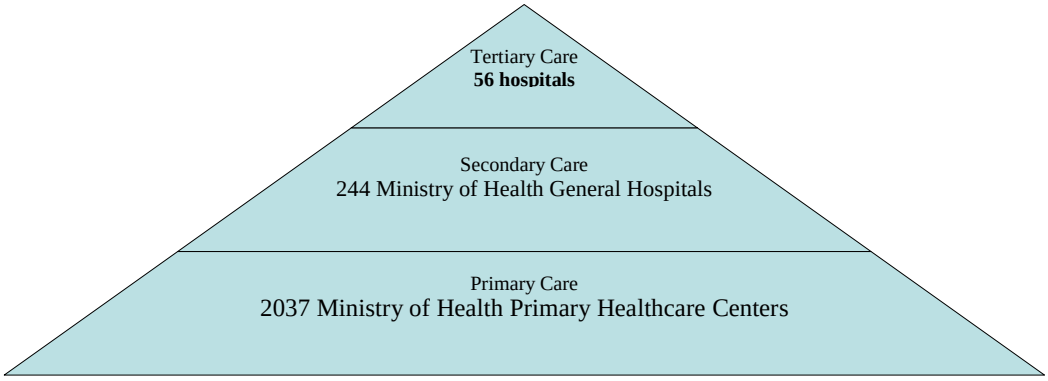
facilities for benefit of their workers and their families. Arguing along the same line, Al-Yousuf, Akerele and Al-Mazrou (2002) state that "apart from the specialist hospitals, the health facilities in this sector are primarily designed to serve the workers of the different establishments and members of their families. *As a rule, services are not extended to members of adjoining communities and where such communities are lacking services; it is the responsibility of the Ministry of Health to provide them*" (Italics added). In extreme cases, some of the government agencies provide specialized healthcare services such as treatment of cancer, to the general public.

Moreover, the private sector in Saudi Arabia provides healthcare services for a fee. Owned by wealthy individuals and private companies, private healthcare sector facilities are found throughout the Kingdom, but predominantly in the urban centers. They provide healthcare services through their heath facilities in hospitals, clinics, dispensaries, pharmacies, medical laboratories, physiotherapy centers, etc. Since 1975, the authorities in Saudi Arabia have been encouraging investments from both foreign and local businesses into the country's health sector through various incentives. Despite these efforts, the share of the private sector in the provision of healthcare services is insignificant when compared to the public sector. The private sector accounts for 21.1% of the 53,888 hospital beds in Saudi Arabia, which totaled 11,362 (Ministry of Health, 2008). With the population projection of 36 million in 2020 (Schieber, 2001), the contribution of the private sector needs to increase.

Levels of Healthcare Services in Saudi Arabia's Pubic Sector

There are three tiers of healthcare providers under the Ministry of Health in Saudi Arabia. The first tier is the Primary Health Services, which oversee healthcare centers. The next tier contains general hospitals, while tertiary services exist at the third level.

Figure 1: Healthcare Services Provided by the Ministry of Health

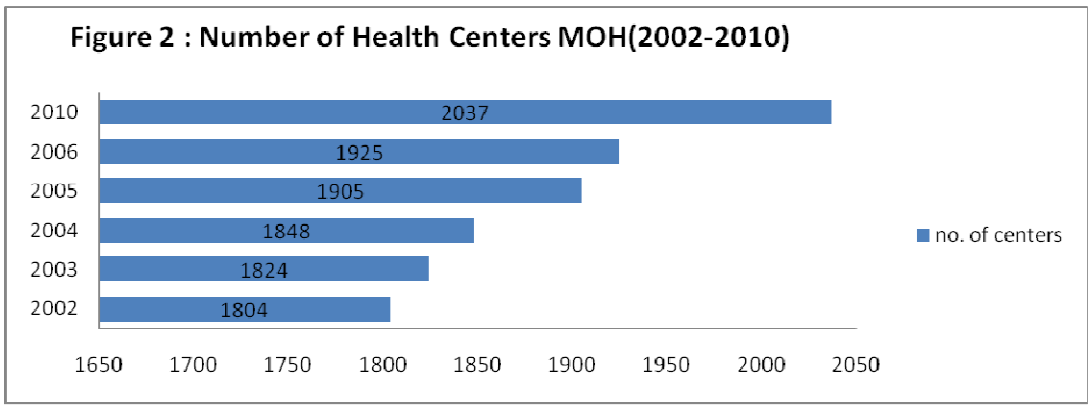


Source: Ministry of Health, 2010. http://www.moh.gov.sa/statistics/indi_phc.html

Primary Care

Primary healthcare was a given a boost when Saudi Arabia adopted and implemented the 1978 "Alma-Ata Declaration" which emphasized the importance of grassroot participation in the provision of healthcare, with the primary objective of achieving healthcare for all the citizens (Al-Ahmadi and Roland, 2005: 2). Consequent on being a signatory to the Alma-Ata Declaration, there was a great interest in and eagerness for the opening of primary healthcare centers in the Kingdom, as shown in figures 1&2. In 2006, there were 1,925 primary healthcare centers in the country and these centers on the average attended to 8,727 people. The Ministry of Health has been vigorously promoting a policy that promotes the facilitation of easy

access to healthcare facilities, and this policy has recorded between 67% and 95% success in prenatal care and between 83% and 94% success in vaccination programmes (El-Gilany and Aref, 2000; Al-Teheawy and Foda, cited in Al-Ahmadi and Roland, 2005: 2). In the Kingdom of Saudi Arabia, the establishment of primary healthcare centers is a major step in the provision of healthcare services. This is because "[m]ore than 60% of patients prefer to be attended to in those centers" (Al-Ahmadi and Roland, 2005: 2). The primary health centers provide adequate healthcare services to the people as they are predominantly responsible for the provision of basic healthcare services. Despite the importance of the primary healthcare services as the gateway to other healthcare facilities in the country, there has been an increase in the number of reported cases of cardio-vascular diseases, and obesity, diabetes and prevalence of high blood pressure among the people of Saudi Arabia, and these problems are blamed on the attitudinal changes in the society. These cases are referred to the secondary healthcare facilities, which occupy the middle of the pyramid of the levels of healthcare services provided by the Ministry of Health, while more complicated cases are referred to the tertiary healthcare, which are found at the apex of the pyramid (Figure 1). The changes in numbers of healthcare centers between 2002 and 2010 are shown in Figure 2.



Source: Data compiled by author from (1) Health Statistical Year Book (Riyadh: Ministry of Health, 2008)

(2) http://www.moh.gov.sa/statistics/indi_phc.html

Secondary Care

As noted earlier, secondary healthcare is a major component of the healthcare system in Saudi Arabia because patients are referred to this tier for further and appropriate treatment from the lowest level of the health pyramid (i.e. Primary Healthcare Centers). The majority of the secondary healthcare services are provided at district level in the 244 general hospitals managed by the regional directorates (see Figure 1). Other governmental health services, which consist of 38 hospitals and the 113 private hospitals, are growing in number and are available in the major cities (see Table 1). These hospitals are under the unified control of the Ministry of Health. The establishment of hospitals is ever increasing due to the increase in oil revenues available to the Saudi government. Another innovation occasioned by the availability of oil wealth is the decentralisation in the provision of healthcare delivery. In the past, general hospitals relied heavily on the specialist hospitals in Riyadh; the goal now is for each region to have its own specialist hospitals. Table 1 shows the distribution of hospitals in different healthcare sectors in Saudi Arabia between 2008 and 2009.

Table 1: Hospitals in Different Healthcare Sectors in Saudi Arabia

Sector	Year	Hospitals
Ministry of Health (General hospitals)	2009	244
Other Governmental Agencies	2008	38

Private sector	2008	113
Total		395

Source: Data compiled by author from: (1) Health Statistical Year Book. (Riyadh: Ministry of Health, 2008: 226)
(2) Updated version of the Ministry of Health's statistics (2010). http://www.moh.gov.sa.html/

Tertiary Care

Hospitals at this level of healthcare services are better developed to take care of patients with chronic diseases, most of whom are referred from general hospitals. Because they deal with complex health problems, these specialised hospitals are staffed by very experienced medical personnel with modern medical equipment so that their patients get the best possible medical care. According to Jannadi et al (2008: 46):

> There are 56 specialist hospitals in Saudi Arabia. These include 20 obstetrics and paediatric hospitals, four eye and ear nose and throat (ENT) hospitals, four chest and fever hosptals, 17 psychiatric hospitals, 9 convalescence, leprosy and rehabilitation hospitals, and two cardiac and renal hospitals.

5. Total Quality Management in the Public Health Sector of Saudi Arabia

In the preceding sections, I presented and discussed Saudi Arabia as a state and society, and also the development and structure of the country's healthcare system. Here, the analysis focuses on the history of the implementation of TQM in the public health sector of Saudi

Arabia and its challenges. But before discussing TQM in the public health sector of Saudi Arabia, it will be useful to discuss, albeit briefly, the genesis of the application of quality in the healthcare sector.

Due to the cost effectiveness of TQM in increasing productivity in the industrial sector, there was the belief that its introduction and application would be advantageous to the healthcare sector. This belief definitely aroused interest in the improvement of the quality of care in the health sector in which three periods can be identified.

The first phase can be traced to the works of Nightingale and Codman. Nightingale, a nurse during the Crimean War, drew attention to the importance of systematically appraising health delivery systems, and the links between suitable care and adequate outcomes (Byers and Rosati, 2005: 9). For Codman, there was an urgent need for the introduction of a common standard in order to improve the quality of medical care. This was based on his assessment of medical care in the United States (Al Assaf, 1993; Pelletier and Beaudin, 2005). Codman argued for restructuring of the healthcare to create avenues for improvement. Based on Codman's work, there was the implementation of a 'five standard approach', which is also known as the 'minimum standards" (Coale and Redman cited in Luce, Bindman and Lee, 1994: 265). The minimum standards are: (1) organising hospital medical staff; (2) limiting staff membership to well-educated, competent and licensed physicians and surgeons; (3) framing rules and regulations to ensure regular staff meetings and clinical review; (4) keeping medical records that include the history, physical examination, and laboratory results; and (5) establishing supervised diagnostic and treatment facilities such as clinical laboratories and radiology departments.

The second phase in the development and implementation of quality standards in the health sector started in 1917 when the American College of Surgeons set up criteria for standards that had to be met by hospitals to be eligible for accreditation via the Joint Commission on Accreditation of Hospitals (JCAH). Donabedian gave standardisation and accreditation a theoretical boost through formulating a three-pronged method to symmetrically assessing the quality of healthcare. This

theoretical framework was founded on input, process and outcome (Byers and Rosati, 2005: 8). Donabedian's framework is known as the open system. Subsequently, JCAH became the Joint Commission on Accreditation of Health Care Organisations (JCAHO), which developed a 10-step model to observe and evaluate processes to improve on the management of quality healthcare based on Donabedian's framework.

The third period was associated with a new approach to the application of quality developed by Berwick, Baltaden and Deming. Berwick and Batalden tapped into Japanese experience in the industrial sector of the economy, and applied concepts to the health sector. Another dimension was added when the 14 cardinal points of Deming were used by Baltaden to chart a new course for Quality Assurance in the health system. Findings by Deming and Baltaden were spread through the Juran Institute. The 1990s was a turning point in the development of standards quality in the heath sector, with number collaborative efforts by experts as well as quality organisations in the field of quality management with overall aim of improving the quality of healthcare services (Pelletier and Beaudin, 2005: 10).

Despite these efforts in the developed world to implement quality, Third World countries were generally far behind as there was no awareness concerning the evaluation of quality of care. Healthcare systems in Third World regions were deplorable with increases in mortality rates, especially in the 1980s. The main concerns of the developing countries and their health policy-makers were how to achieve increased access to medical care in urban areas, and also how to increase budgetary allocation to the health sector without reflecting on how to introduce and implement quality assurance programme with all the accompany benefits. According to Geyndt (1995: 24), quite a number of Third World countries have seen the advantages of cost reduction through the implementation of quality programmes in the West, and have been prompted to introduce the same in an effort to improve the quality of healthcare delivery. In Saudi Arabia, the quest to improve the quality of the healthcare delivery system has been at the

center of healthcare decision-making. To achieve this goal, the Saudi Ministry of Health in 1984 identified and named Primary Healthcare Centers as one of the key strategies of the fifth five-year National Development Plan (1990-1995) with emphasis on quality of care. In 1993, the Ministry of Health established the National Committee on Quality Assurance, and also produced guidelines for quality assurance programme in Primary Healthcare Centers, which was approved by the World Health Organisation (Jarallah and Khoja, 1998: 531). In 1995, a management development programme was launched. This was to prepare regional supervisors to perform key roles in quality improvement efforts especially in the primary healthcare (Al-Hamdi and Roland, 1995: 331).

From the 1980s, the implementation of Quality Assurance programmes shows that the Saudi government is determined to improve the quality of care delivered in its healthcare system. This transformation in the Saudi health sector in the area of the implementation of TQM is more noticeable in the healthcare facilities, which are operated by western companies. There are many examples of healthcare facilities that are applying Quality Assurance in the healthcare system in Saudi Arabia. These include: the Arabian American Oil Company (ARAMCO), the King Faisal Specialist Hospital and Research Center Services (KFSH&RC), the King Khaled Eye Specialist Hospital Services (KKEH) and the Ministry of Defence and Aviation Services (MODA). In addition to the healthcare facilities operated by western companies, the Saudi Ministry of Health has been implementing TQM in its health facilities. Some of these healthcare facilities will be described to uncover their contributions to the implementation of quality management.

The ARAMCO Medical Services

The goal of the Arabian American Oil Company (ARAMCO), which was accredited by the Joint Commission on Accreditation of Hospitals, is the provision of healthcare services to its staff and their family members in Saudi Arabia. For example, the Dhahran Health Center (an ARAMCO hospital) has been certified by the Joint

Commission Accreditation on Hospitals (Soltis, 1986: 266). ARAMCO was a western company at that time, came to explore oil facilities and exploit crude oil, and its workforce was 100% western. Since ARAMCO staffs were expatriates who were used to high standard health services that were available in the West, the company had to establish a hospital that matched western standards independent of the Saudi Ministry of Health. In fact, Quality Assurance that was set up in Saudi Arabia in 1982 aimed at monitoring and evaluating "the quality and appropriateness of care in all Arabian American Oil Company health care facilities and to identify and resolve problems that have an impact on patient care and clinical performance" (Soltis, 1986: 266). Conclusively, this method was an innovation in the health care systems of Saudi Arabia and ARAMCO is a pace setter in the improvement of quality care in the country.

King Faisal Specialist Hospital and Research Center Services

King Faisal Specialist Hospital and Research Center Services (KFSH&RC) was established in 1975. Its main objective is to provide the highest services through its Quality Management Plan, which focuses on patients. At the beginning of its operation it was managed by the Hospital Corporation of America, but it has been under the Saudi management since 1985 (http://www.kfshrc.edu.sa). Skillicorn (1987:89) affirms that a symposium organised by KFSH&RC in 1986 was a catalyst for the introduction of quality programmes since emphasis was put on the necessity to raise the standard of quality of healthcare in assessing patients. The Joint Commission on Accreditation of Hospitals accredited King Faisal Specialist Hospital for its Quality Assurance programme in 2000 and reaccredited in 2005, while its latest accreditation was in March 2008 (http://www.jointcommissioninternational.org/)

King Khaled Eye Specialist Hospital Services

The main objective of King Khaled Eye Specialist Hospital (KKEH) is to provide qualitative and cost-effective healthcare based on Quality Assurance principles. This is in accordance with JCAHO's standards, with the belief that this would be ideal since the hospital was under the management of an American company that has the required expertise in ophthalmic care. However, the Ministry of Health operates KKEH, which conducts training for ophthalmologists and seminars (http://www.kkesh.med.sa). Carver (1985:185) made reference to a number of problems that initially confronted the smooth implementation of Quality Assurance principles in the KKEH programme. They were:

1. There were no standards for providing eye care on such a large-scale basis (which is the reason why KKEH could not apply quality at the beginning)
2. There was no organised quality assurance department
3. There were no set standards or measurement of performance
4. The workforce comprised people of 28 different nationalities so that professional preparation methods and ideas about patient care varied considerably and were inconsistent
5. Ophthalmologists were not familiar with the quality assurance process.

KKEH was accredited in 2001 and reaccredited in 2005, while the latest accreditation was in 2008 (http://www.jointcommissioninternational.org/)

The Ministry of Defence and Aviation (MODA) Services

The Ministry of Defence and Aviation (MODA) raised the standards of health care in Saudi Arabia by applying quality management programmes in its hospitals. Dixon (1982:52) asserts that MODA has focused its operation towards the standards set up by the JCAH. He argues further that MODA's efforts to monitor and implement standards in hospitals were crowned by the fact that hospitals in Saudi Arabia benefited from it.

The Ministry of Health

The Ministry of Health began to implement TQM in hospitals in the 1990s when it realised that those healthcare facilities in Saudi Arabia that applied TQM, such as KFSH&RC and KKEH, were improving. As a result in 1990, a project was undertaken by the Saudi Ministry of Health and the US based Hospital Administration Development (HOSAD) (Al-Abdul-Gader, 1999: 34). This project was predominantly established to help the Ministry of Health to form a comprehensive Quality Assurance programme. The project was conducted for many years but it could not achieve its entire goal because there was no specific quality standards apply in the Ministry of Health hospitals. In addition, the organisational structure of the Ministry of Health hospitals did not support the efforts since there were no quality culture in these hospitals. Furthermore, there was no General Directorate in the Ministry of Health that was responsible for the implementation of quality. But in 2000, a General Directorate of Quality Assurance was created within the Ministry of Health (Minister Memo No. 1523/11 of July 1 2000) (Naiaz, 2005: 69).

Since 2000, the Saudi healthcare system has witnessed many successful quality initiatives. The first innovation was in 2001, when Makkah Regional Quality Programme (MRQP) was launched under the supervision of a Makkah Prince. MRQP aims at improving the quality of health service in Makkah region by applying a regional quality standard in Makkah's public and private hospitals. MRQP standards were developed after extensive review of many health quality standards such as ARAMCO, JCAHO and the Canadian standard. The first edition of the MRQP standards was published and applied in Makkah's hospitals in 2003. This successful national attempt was a trigger for other health initiatives in the Ministry of Health to follow the same steps.

In 2006, the second initiative was undertaken by General Directorate of Quality Assurance in the Ministry of

Health when it launched a new quality programme by using its quality standards. The programme was consisted of three stages that were successfully implemented in hospitals (Naiza, 2006). The third initiative replaced the two successful previous initiatives. In 2006 the Ministry of Health established an accredited body, the Central Board of Accreditation for Health Care Institute (CBAHI), to help in the accreditation process in public health as well as private health services (http://www.cbahi.org.sa). The CBAHI standards were developed by the collective efforts of many healthcare sectors in Saudi Arabia. The teams of experts were from the Ministry of Health, KFSH&RC, Saudi ARAMCO, National Guard Healthcare Services, the Saudi Armed Forces healthcare services, the Saudi Commission for Health Specialties, Security Forces Healthcare Services and the private sector. The CBAHI standard manual was approved in 2006. As a result of extensive efforts on the implementation of quality standards in the Ministry of Health hospital, 21 hospitals were accredited by CBAHI in 2010 (Al-Riyadh 26 July 2010).

Improving quality management is an ongoing process that is closely linked with the overall development of health services. As discussed above, international evidence of the need to improve on the quality of care in health services has impacted positively on the implementation of quality management in a range of health organisations in Saudi Arabia.

6. Challenges to the Implementation of Total Quality Management in Saudi Arabia

From the preceding section, it is obvious that the government of Saudi Arabia has taken positive steps and invested heavily in its health sector in order to improve its healthcare facilities across the kingdom. Despite these efforts, there are quite a number of obstacles in its health sector that do not, contrary to expectation, allow the effective implementation of TQM in the healthcare services.

The first of these obstacles concerns the healthcare services financing system. It is apparent from the

discussions above that the healthcare services throughout the Kingdom are majorly provided by the public sector in which the Ministry of Health takes the lead. The ministry of Finance provides the funds for the health facilities. Since most of these facilities are under the supervision of the Ministry of Health and to its responsibility of proving healthcare services to all the country's citizens, the Ministry of Health is confronted with the bureaucratic problem in efficiently managing the funding of these healthcares facilities, as these facilities are not getting their requirements to apply quality management directly. The heavy burden of adequately financing the provision of healthcare delivery has been a difficult task for the Saudi Ministry of Heath, in spite of the significant budgetary allocation that it receives every year. Facilities improvement and direct and substantive investment by the government in the healthcare system has been an ongoing process in Saudi Arabia.

Another significant area that the implementation of TQM is being challenged in Saudi Arabia is the lack of qualified heath workforce. The huge investment in the heath sector actually paid off as it resulted in the expansion and modernisation of the country healthcare facilities. But, it should be realised that the expansion of these healthcare facilities need to be staffed by medical practitioners. The availability of enough medical professionals of Saudi extraction has been one of the major problems of the country's health sector in general and the implementation of quality management in particular.

Despite the frantic effort of the Ministry of Health to increase the number of medical professionals of Saudi origin specialised in quality management, the demand for medical practitioners to work in the already expanded healthcare facilities exceeded the available local manpower. This situation has created a gap, which need to be filled by foreign health workers. In 2006, it was estimated that 78.7% and 76% of physicians and nurses respectively working in the country were foreigners (Ministry of Health, 2006). The situation is worrisome because, as Al-Ahmadi (2007: 177) rightly argued, the turnover among the medical workforce is

37% in Saudi Arabia. The government has put in place a set of policies that aim at increasing the number of the country's health work force of Saudi origin. Of particular relevant here is the Saudi Labour Force Council that adopted in 2003, a set of strategies to increase the number of health work force. Amongst such strategies were, to encourage the private sector financing in establishing medical training institutions and funding of postgraduate studies in medical sciences. The government has taken the realisation of these goals seriously and Riyadh's commitment to such objectives especially those relating to allied health is being reflected in its successive five-year National Development Plans[1]. While the government commitment to increase the number of its health workforce is not in doubt, a critical examination of these development plans show that these efforts are gear more towards allied health work force than quality management professionals.

Another important challenge to the implementation of quality management in the Saudi health sector concerns the lack of an established and efficient National Health Information System (NHIS). Though, attempts at establishing such system is not new in Saudi Arabia but all previous efforts have not been able to produce tangible results (WHO, 2006). In the absence of such a system, decision markers on health related issues are deprived of vital tools/data to measure the dimension of implementation of quality management. Though, there are appreciable developments in the improvement in telecommunications in health facilities. This development will, undoubtedly, support the accuracy and reliability of the NHIS, and also lead to the improvement in healthcare services and the implementation of quality management.

7. Concluding Remarks

This paper has discussed the healthcare system in Saudi Arabia and principally focused on its level of development, structure, implementation of TQM and the

[1] These are the 8th, 9th, and 10th National Development Plans of (2005-2009), (2010-2014) and (2015-2019) respectively.

future challenges. The study found that the healthy economic profile of the country empowered the Saudi government to modernise its health sector and this development has attracted medical professionals from all over the world. While significant efforts have been made to improve the country's healthcare infrastructure, the same cannot be said in the area of the implementation of TQM, which this study considers as the heartbeat of the health service delivery and this has posed serious challenges to the country's healthcare system. To overcome these challenges this study recommends the followings:

First, since the implementation of TQM is a comprehensive and ongoing process in all healthcare facilities in Saudi Arabia, special funds need to be allocated by the Ministry of Finance to the Ministry of Health for quality departments in all healthcare facilities. This fund will help the quality management departments to employ qualified quality management specialists and to have sufficient equipments and also to conduct quality-training programmes. Second, the Ministry of Health should encourage the quality management professionals to work in their area of specialisation in order reduce the rate of turnover. The quality management profession need to be treated just like other medical fields such as nursing, etc by giving the quality professionals a clear job descriptions and special carrer titles. These quality professionals also need to be financially motivated especially those working in remote areas of the country. Third, since there is no established and efficient NHIS in the country, the Ministry of Health should create Regional Quality Health Information System (RQHIS) in each region of the Kingdom of Saudi Arabia. This will help to provide the health decision makers with reliable and valuable data to measure the dimension of the implementation of quality management in each region. In general, the obsctacles that are facing the implementation of quality management in all the regions of the country will be identified and this will help the authorities to find appropriate solutions to these problems.

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