

# Systematic review of quality of care in Saudi Arabia

## *A forecast of a high quality health care*

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### ABSTRACT

**الأهداف:** استكشاف الهيكل الحالي لنظام الرعاية الصحية في المملكة وتقييم جودة الرعاية الصحية في المملكة العربية السعودية على أساس المؤشرات المقدمة من معهد الطب (IOM) وتقديم توصيات لتحسينها.

**الطريقة:** هذه الدراسة تستكشف الهيكل الحالي لنظام الرعاية الصحية السعودية باستخدام مراجعة منهجية لدراسات نشرت خلال الفترة ما بين 2009 و 2013. IOM للرعاية الصحية الجيدة (آمنة وفعالة و محورها المريض ، في الوقت المناسب ، والكفاءة، عادلة ) هذا المؤشر استخدم لتحديد نوعية الرعاية الصحية في المملكة العربية السعودية. تم تقييم الدراسات التي شملت السلامة المنهجية من خلال إعطاء نقاط الجودة على أساس معايير راسل وغريغوري . وتم تحديد التحديات و قدمت توصيات لتحسين الرعاية الصحية .

**النتائج:** تطورت نوعية الرعاية الصحية في المملكة العربية السعودية بشكل كبير خلال السنوات الأخيرة على جميع المستويات من الخدمات الصحية. مثل العديد من البلدان، تستثمر المملكة العربية السعودية المال والجهود المبذولة لتحسين نوعية الرعاية الصحية في المملكة. على الرغم من إحراز تقدم كبير، والحواجز التي تؤثر على هذه النوعية لا تزال واضحة كما أن زيادة السكان، واحتياجات الرعاية الصحية للمرضى، عوامل تؤثر على نوعية الرعاية الصحية يمكن تصنيفها إلى عوامل المريض ( مثل محو الأمية والصحة، والحصول على الرعاية، والثقافة) وعوامل مقدمي الخدمة ( بما في ذلك الرعاية الطبية، وعبء العمل، والثقافة، والرضا الوظيفي).

**الخاتمة:** تقديم الرعاية الصحية الجيدة لجميع المرضى هو حق من حقوق الإنسان الأساسية، الرعاية الصحية ذات نوعية رديئة تسبب معاناة للمريض وللمنشأة الصحية، وسوء استخدام موارد المجتمع .

**Objectives:** To explore the current structure of the Saudi health care system, and assess the quality of health care in the Kingdom of Saudi Arabia (KSA) based on the indicators provided by the Institute of Medicine (IOM), and to provide recommendations for improvements.

**Methods:** This study explores the current structure of the Saudi health care system using a systematic review

of studies published between 2009 and 2013. The IOM indicators of quality health care (safe, effective, patient-centered, timely, efficient, and equitable) are used to determine the current quality of healthcare in KSA. Studies that examined the quality of health care were evaluated for methodological soundness by giving a quality score based on Russell and Gregory's criteria.

**Results:** The quality of healthcare in KSA has progressed significantly over the recent years at all levels of health services. Like many countries, KSA is investing money and efforts to improve quality of healthcare in the Kingdom. Although significant progress has been made, barriers affecting this quality are still apparent as the general population increases, patients' health care needs, and demands are also rising. Factors affecting the quality of healthcare can be categorized into patient factors (such as health literacy, access to care, and culture), and providers' factors (including medical care, workload, culture, and job satisfaction).

**Conclusion:** As a result of these unaddressed issues, the quality of healthcare in the Kingdom may be degenerating. Additionally, as the population of KSA has increased and medical technology has become more sophisticated and costly, and patients' demands and expectations have also increased. Providing quality healthcare to all patients is a fundamental human right. Poor quality healthcare causes patient suffering, institutional waste, and misuse of community resources.

*Saudi Med J 2014; Vol. 35 (8): 802-809*

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*Received 26th January 2014. Accepted 3rd June 2014.*

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Saudi Arabian health care services are managed primarily by the Kingdom's Ministry of Health (MoH) and by a number of organizations that operate hospitals and medical services for their employees. Over the years, health services in the Kingdom of Saudi Arabia (KSA) have improved greatly particularly in terms of access and quality. Between 1970 and 2009, the number of hospitals rose from 74 to 415, while the number of beds increased from 9,039 to 58,126.<sup>1</sup> The Saudi government is prioritizing health care services for Saudis and expatriates. Approximately 11% of the Kingdom's 2009 budget or 52.3 billion SAR (\$14 billion) has been allocated to develop its health care industry.<sup>2</sup> Currently, the MoH covers 60% of the total available health services and finances health care services in KSA. It oversees 244 hospitals (33,277 beds) and 2,037 primary health care (PHC) centers.<sup>3</sup> The private sector also contributes to health care access in KSA by operating clinics, dispensaries, and large hospitals such as Soliman Fakeeh Hospital in Jeddah, and ARAMCO hospital in Dhahran. Many of these healthcare facilities are in cities and in large municipalities.<sup>2,3</sup> Like many countries, KSA is investing money, and working to improve health care quality. An analysis by the World Health Organization (WHO), which uses the 5 Institute of Medicine (IOM) performance indicators to measure health systems in 191 member states, rates the French health care system the best in the world. France is followed by Italy, Spain, Oman, Austria, and Japan.<sup>4</sup> In addition, France shows remarkable survival rates for different cancers and postoperative complications.<sup>5</sup> Unlike France, the United States' health care system continues to be challenged by massive costs, poor patient outcomes, and increased health care needs. According to 2 reports, *To Err is Human: Building a Safer Health System*<sup>6</sup> and *Crossing the Quality Chasm: A New Health System for the 21st Century*,<sup>7</sup> approximately 98,000 hospitalized Americans die each year as a result of errors in their care. The second report<sup>7</sup> also details defects and shortcomings in the American health care system, including the inability to translate knowledge into practice and apply new technology safely and appropriately. Quality of care is the "degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge."<sup>8</sup> The IOM specified the following 6

indicators (or descriptors) of high quality health care: safe, effective, patient-centered, timely, efficient, and equitable. These indicators serve as a blueprint in determining the quality of health care in many health care systems. High quality medical care should: 1) provide services based on scientific knowledge to all who can benefit and refrain from providing services to those who are not likely to benefit; 2) seek to minimize health care related injury; 3) avoid wasting time and resources; 4) improve patient outcomes; and 5) provide consistent and respectful care regardless of patient characteristics and demographics.<sup>8</sup> Although the health care system in KSA has shown considerable progress in recent decades, barriers affecting the quality of care in KSA are still apparent. The purpose of this study is to explore the current structure of Saudi health care system and assess the quality of health care in KSA based on the indicators provided by the IOM, and to provide recommendations for improvements.

**Methods.** *Search strategy.* Studies that examined the quality of health care in KSA were identified through online and manual literature searches using the following electronic databases: ISI Web of Knowledge, Science Direct, PubMed, and Cochrane. The search terms used were quality of care, AND Saudi Arabia, AND healthcare quality. The electronic search was completed in consultation with several experts and supplemented by several databases.

*Inclusion and exclusion criteria.* We included studies that met 3 criteria: 1) focus on the current structure and development of quality of health care in KSA; 2) focus on issues or areas of concern as they are related to the quality of health care in KSA; and 3) studies published in English and in peer-reviewed journals between 2009 and 2013. We also included studies that carried out different methods of analysis. Studies not carried out in KSA were excluded from the study.

*Data extraction.* Data were extracted from each database independently by 2 researchers and assessed for inclusion/exclusion criteria. Titles and abstracts were screened for potential duplication and significance by the 2 researchers. After the preliminary screening, the included studies were analyzed and reviewed by a specialist. Details of the author of the study, location of the study, sample, and major findings were extracted from each of the studies that met the inclusion criteria.

*Quality appraisal.* After the extraction of all included articles, all studies were reviewed and analyzed by the authors. Each study was assessed for relevance based on the indicators provided by the IOM and evaluated for methodological soundness by giving a quality score

**Disclosure.** Authors have no conflict of interests, and the work was not supported or funded by any drug company.

based on Russell and Gregory's criteria.<sup>9</sup> Each of the studies was given a quality score ranging from 1-5 (with 5 being the highest) based on whether the article answered each of the following questions: 1) is the research question clear and adequately substantiated; 2) is the design appropriate for the research question; 3) was the sampling method appropriate for the research question and design; 4) were data collected and managed systematically and; 5) were the data analyzed appropriately?

**Results.** The online literature search yielded 48 results, of which 32 met our selection criteria. Of the 32 studies retrieved for more detailed evaluation, only 13 studies met the inclusion criteria. Details of the quality assessment of all articles included in the study are shown in Table 1. Table 2 shows how the studies identified the quality of health care, and issues concerning quality of care and barriers influencing and affecting the improvement of quality care in KSA.

**Safety.** Three studies show issues concerning safety of healthcare by medical errors and medication safety practices. Only 30% of hospitals in KSA had a medication committee, and only 9% had a medication safety officer,<sup>10</sup> while medical error litigations in KSA were found mostly involving surgeons and obstetricians, especially in the MoH hospitals.<sup>11</sup> Furthermore, the accreditation process shows a positive impact on one hospital in quality of patient care and patient safety indicators although barriers such as multi-cultural, multi-language competitive environment were experienced.<sup>12</sup>

**Effective.** Six of the reviewed studies examined the patients' perceptions and satisfaction towards quality of health care. The patient satisfaction rate based on giving discharged information ranged from moderate to low level (19.3-50%), and it was found higher in private hospitals ( $p < 0.05$ ).<sup>13</sup> In a study of pharmacists in eastern Saudi Arabia, 61.2% of patients reported that they did not understand the information provided by the pharmacists.<sup>14</sup> Approximately 20-27% of the respondents said they were deprived of medication information.<sup>14</sup> Saudi patients in Riyadh expressed higher satisfaction rates regarding pharmacists. In a survey, 38.5% of the respondents reported that aside from dispensing medication, pharmacists also gave advice, or counseling on how to use medication, as well as side effects and drug interaction ( $p = 0.001$ ).<sup>15</sup> In addition, 51.2% of the patients reported that the pharmacist gave clear instructions while dispensing

medication, and 35% said a pharmacist plays an active role in their compliance to treatments.<sup>15</sup>

Reported barriers also include underreporting of adverse events by both nurses and physicians due to administrative barriers. A total of 56.7% of the respondents preferred to disclose errors with near misses, while 29.2% did not prefer to disclose any errors, and 27.2% of the participants chose to disclose only errors with minor harm.<sup>16</sup>

A comparative study between the health care quality of private hospitals in Jordan and KSA shows both countries have better health care quality in tangible items such up-to-date equipment, physical facilities were visually appealing, employees appeared neat and tidy, availability of modern equipment and accessibility of health care services.<sup>17</sup>

The sixth reviewed study compared patient satisfaction with service quality in Saudi Arabian public and private sector hospitals. According to the patient satisfaction survey, quality of hospital service was higher among private hospitals than public hospitals ( $p < 0.05$ ). This was statistically significant. Meanwhile, only three scopes such as tangibles, safety, and empathy have higher satisfaction rates in public hospitals.<sup>18</sup>

**Patient centered.** According to a cross-sectional descriptive study<sup>19</sup> that aimed to investigate the awareness of patients' right in KSA, 74.8% of 250 respondents said they were not aware of their patients' bill of rights, especially the rights to be kept fully informed of his/ her diagnosis and treatment plan. Another study<sup>14</sup> showed affecting the care of patients with the pharmacist lack of responsiveness of patients' preferences and needs. The majority of the respondents in the study of Alturki<sup>14</sup> reported that the pharmacist showed unwillingness to try to understand patients' problems.

**Timely.** Delay in access to care and long waiting times to see a provider or a specialist is mainly provider or clinician has a high workload or any factors such as cultural beliefs. A study by Eleishi et al<sup>20</sup> assessing the reasons for the delay in patients seeking medical advice found that cultural belief hinders and considered the main reason of the delay. Furthermore, only 33% of other specialists who were initially consulted referred patients to a rheumatologist.

**Efficient.** A descriptive cross-sectional study assessed the quality of work life (QWL) among primary health care nurses.<sup>21</sup> In 134 primary health care centers, results showed that the QWL among primary health care nurses is below the average on the Brooks scale. Respondents were dissatisfied with their work life. Factors include unsuitable working hours, lack of facilities for nurses, inability to balance

**Table 1** - Quality assessment reviewed studies.

Research study	Is the research question clear and adequately substantiated?	Is the design appropriate for the research question?	Was the sampling method appropriate for the research question and design?	Were data collected and managed systematically?	Were the data analyzed appropriately?	Quality score
Medication safety practices in hospitals: A national survey in Saudi Arabia. <sup>10</sup>	Yes	Yes	Yes	Yes	Yes	5
The pattern of medical errors and litigation against doctors in Saudi Arabia. <sup>11</sup>	Yes	Yes	Yes	Yes	Yes	5
Comparison of patient safety and quality of care indicators between pre and post accreditation periods in King Abdulaziz University Hospital. <sup>12</sup>	Yes	Yes	Yes	Yes	Yes	5
Patient perceptions regarding information given on hospital discharge in Almadinah Almunawwarah, Kingdom of Saudi Arabia. <sup>13</sup>	Yes	Yes	Yes	Yes	Yes	5
A study investigating the level of satisfaction with the health services provided by the Pharmacist at ENT hospital, Eastern Region Alahsah, Kingdom of Saudi Arabia. <sup>14</sup>	Yes	Yes	Yes	Yes	Yes	5
Patients' perception, views and satisfaction with pharmacists' role as health care provider in community pharmacy setting at Riyadh, Saudi Arabia. <sup>15</sup>	Yes	Yes	Yes	Yes	Yes	5
Personal preference and perceived barriers toward disclosure and report of incident errors among healthcare personnel. <sup>16</sup>	Yes	Yes	No	Yes	Yes	4
Health care services quality at private hospitals, from patients' perspective: A comparative study between Jordan and Saudi Arabia. <sup>17</sup>	Yes	Yes	Yes	Yes	Yes	5
Patients' satisfaction of service quality in Saudi hospitals: a SERVQUAL analysis. <sup>18</sup>	Yes	Yes	Yes	Yes	Yes	5
Hospitalized patients awareness of their rights in Saudi governmental hospital. <sup>19</sup>	Yes	Yes	Yes	Yes	Yes	5
Rheumatological medicine literacy among Middle Eastern populations. <sup>20</sup>	Yes	Yes	Yes	Yes	Yes	5
Quality of work life among primary health care nurses in the Jazan region, Saudi Arabia: a cross-sectional study. <sup>21</sup>	Yes	Yes	Yes	Yes	Yes	5
Factors affecting Saudi hemodialysis patients' perception of healthcare providers' empathy. <sup>22</sup>	Yes	Yes	No	Yes	Yes	4

work with family needs, inadequacy of vacations, poor staffing, management and supervisory practices, lack of professional development opportunities, and an inappropriate working environment.

**Equitable.** Empathy, being part of holistic care is not shared across the board or not consistent between the nurses in morning shifts and night shift.<sup>22</sup> The study by Al Onazi et al<sup>22</sup> assessed the empathy level

of healthcare providers as perceived by hemodialysis (HD) patients and its determinants. Results show that empathy transcends also the language barrier. Patients dialyzed in the evening shifts perceived less empathy from health care workers. The higher scores given by older, female, and less educated patients might simply reflect their lower expectations of empathy.<sup>22</sup>

**Table 2** - Summary of studies based on the indicators of Institute of Medicine.

Indicators	Findings	Literature sources
Safe	<ul style="list-style-type: none"> <li>- In 78 public and private hospitals surveyed, only 30% had a medication safety committee and merely 9% had a medication safety officer. The pharmacist was also not involved in obtaining medication histories in all hospitals in the survey. Furthermore, almost all hospitals do not have a list of look-alike sound-alike (LASA) medications and almost 40% of the hospitals reported did not double-check their calculation and the final concentrations of prepared electrolyte solutions. It was found that the presence of a medication safety officer or committee within a hospital was strongly associated with the presence of a list of error prone abbreviations and a LASA list (<math>p &lt; 0.001</math>).</li> <li>- 20.4% of the errors occur in the operating room, followed by 18.1% in the emergency room, then general wards 12.9%, outpatient department 10.4%, delivery room 9.2% and intensive care unit (ICU) 2.9%. About 25% of reported deaths occurred in surgery and obstetrics, respectively.</li> <li>- Although there are many barriers experienced in King Abdul Aziz University Hospital, such as multi-cultural, multi-language competitive environment, the accreditation process demonstrates a positive impact on quality of patient care and patient safety indicator.</li> </ul>	10,11,12
Effective	<ul style="list-style-type: none"> <li>- A low percentage of satisfaction ranging from 19.3% and 50% was observed among patients and guardians about giving health information during the discharge process. According to the patient satisfaction survey, giving discharge information was found higher in private hospitals compared with public hospitals (<math>P &lt; 0.05^*</math>).</li> <li>- Overall satisfaction ratings of pharmacy services were moderate to low level. Most satisfied patients are among the age group of 50-60 years old (<math>df = 8</math>, <math>F = 8.36</math>, <math>p &lt; 0.001^*</math>). The majority of the respondents, 61.2%, reported that they did not understand the information provided by the pharmacist. About 20-27% of the respondents were still deprived of medication information.</li> <li>- Saudi patients show better satisfaction, perception and appreciation of the pharmacists' role in the health care team. Based on the survey, 38.5% of the respondents reported that aside from dispensing medication, pharmacist also gives advice or counseling on how to use medication, reactions and drug interaction (<math>p = 0.001</math>). Also, 51.2% of the patients reported that the pharmacist gives clear instruction while dispensing medication, 35% said they believed pharmacists play an active role in making sure they comply with treatments. The survey reveals 40% of the respondents were satisfied with their pharmacists' performance.</li> <li>- Major barriers include under-reporting of adverse events by both nurses and physicians due to administrative barriers. Most of the sample (56.7%) preferred to disclose errors with near misses, while some of the participants (29.2%) preferred not to disclose any errors and 27.2% of the participant choose to disclose only errors with minor harm.</li> <li>- Patients said tangibles items such as up-to-date equipment, physical facilities were visually appealing, employees appeared neat and tidy, availability of modern equipment and accessibility of health care services was found better among private hospitals both in Jordan and Saudi Arabia (<math>p &lt; 0.001</math>).</li> <li>- According to the patient satisfaction survey, quality of hospital service was found higher among private hospitals compared to public hospitals (<math>p = 0.05</math>).</li> </ul>	13-18
Patient centered	<ul style="list-style-type: none"> <li>- About 22.6% said an unwillingness to understand patients' problems were also observed among pharmacists.</li> <li>- Out of 250 patients surveyed, 74.8% said they were not aware of their patients' bill of rights especially the rights to be kept fully informed of his/her diagnosis and treatment plan.</li> </ul>	14,19
Timely	<ul style="list-style-type: none"> <li>- Cultural beliefs are the main reason for the delay in patients in seeking medical advice and only 33% of other specialists who were initially consulted referred patients to a rheumatologist.</li> </ul>	20
Efficient	<ul style="list-style-type: none"> <li>- Quality of work life (QWL) among primary health care nurses is below the average on the Brooks scale. This indicates respondents were dissatisfied with their work life. Factors that influence includes unsuitable working hours, lack of facilities for nurses, inability to balance work with family needs, inadequacy of vacations, poor staffing, management and supervisory practices, lack of professional development opportunities and inappropriate working environment.</li> </ul>	21
Equitable	<ul style="list-style-type: none"> <li>- Empathy transcends the language barrier. Patients dialyzed in evening shifts perceived less empathy from health care workers. The higher scores given by older, female, and less educated patients might simply reflect their lower expectation of empathy.</li> </ul>	22

**Discussion.** After an extensive search, this literature search identified relatively few studies that focused on the current state of quality health care in KSA. Ten of the reviewed studies collected their data using a hospital-based survey.<sup>10,12-14,17-20,22</sup> Three of the studies were conducted in a primary health care setting.<sup>15,16,21</sup> One study used records from the Medical Violation Committee (MVC) and the Medical Jurisprudence Committee (MJC), which consists of information on the details of the cases, details on where the error had occurred, and details of the errors.<sup>11</sup> Although the included studies have

different settings, methodology and design, they had similar results showing various issues affecting patients' satisfaction concerning the quality of health care.

Three of the included studies concern the safety of health care services in KSA. Safety practices for dispensing medication and medical errors and litigation were documented and observed. Across all reviewed studies that investigated this relationship, safety practices in dispensing medication are distressing. The numbers of medication committee and medication safety officers are below average.<sup>10</sup> Preferably, the medication safety officer is responsible and should manage a medication

safety program in a hospital especially in a teaching hospital.<sup>23-26</sup> Although the role and responsibility of a medication safety officer is limited and general,<sup>27</sup> providing specific healthcare staff with the ability and a strong clinical background will ensure best practices.<sup>27</sup> Other barriers observed were medical errors and litigation that mostly occurred in the operating room followed by the emergency room.<sup>11</sup> Similarly, medical errors were also observed in other countries.<sup>28,29</sup> The occurrence of errors is caused by a combination of human and system factors.<sup>30</sup> Although different barriers were observed, a positive outcome exhibits on patient safety and quality of patient care due to the accreditation process.<sup>12</sup> A recent study found that the accreditation process helps and improves health care quality.<sup>32</sup> This accreditation process should be implemented in all health care institutions and should be taken in order to limit or address issues such as medication safety and medical errors. As all healthcare institutions, patient safety is their main priority.

Evidence for current effective health care was also apparent in the reviewed studies. Specifically, Al Borie and Damanhour<sup>18</sup> found a higher patient satisfaction rate when reporting on the quality of service in both private and public hospitals in KSA. Although there were differences in the level of quality demonstrated by the various hospitals under review, the study indicated overall positive patient satisfaction at these hospitals. The relationship of patients to health care professionals has also been found to significantly influence the quality of patient care, and thus significantly influence patients' health outcomes. For example, the degree of health care professionals' empathy was associated with improved levels of patient satisfaction.<sup>32</sup> Empathy also transcends the language barriers: despite the fact that there were significantly more Arabic-speaking nurses in this study, empathy scores given by patients were still high, indicating that empathy is not related to linguistic communication only.<sup>22</sup> Consistent, quality care, regardless of patient characteristics and demographics, will improve patient outcomes, and overall quality of health care. Although there are a large number of expatriate health professionals in KSA, results from the study by Al Awa et al<sup>12</sup> provide evidence for a positive impact of accreditation process on the quality of patient care and patient safety as reported by nursing staff.

Data also showed various issues affecting patients' satisfaction concerning the quality of health care. Patients' needs and expectations are increasing as they expect the best health care possible. Patients today want to actively participate in the decision-making process, in terms of proposed procedures, treatments,

and their various alternatives. The MoH has the primary responsibility of meeting the health care needs of the general population. In accordance with this responsibility, the MoH published a patients' bill of rights in 2001.<sup>19,33</sup> However, many patients and their families may not be aware that their rights have been officially recognized by the Saudi government through such policies and regulations.<sup>19</sup> Healthcare providers should elucidate patients' rights before and after providing health care services. Such communication will thus provide for a better understanding between patients and practitioners, alleviate poor outcomes, and enhance provider and client safety.

Health professionals' (namely, nursing staff) perceptions of their work environment may influence the quality of care given to the patients. For instance, nurses constitute the largest workforce in all KSA healthcare organizations, and therefore have a great impact on quality of care and patient outcomes.<sup>3</sup> Health care providers' workloads, language barriers, and cultural differences limit their ability to educate patients' families about their care. Although health care workers generally report a more positive outlook on life compared with the general population (even if they are exposed daily to physical suffering, pain, and emotional distress), it is important to recognize roles and attitudes that could cause frustration, dissatisfaction, and emotional stress in these populations. Prevention of the development of dissatisfaction for health care workers is a key element to consider in providing services for patients and their families.<sup>32</sup> Improving the quality of health care should focus not only on patient satisfaction, but also on health care provider satisfaction. Improving all aspects of the health care system for all stakeholders is vitally important. Improvements must focus on the entire spectrum of the health care experience, from the time a patient arrives seeking medical attention to the time he or she has been discharged. Failure to provide continuity of quality care leads to dissatisfaction and poor outcomes. Failure to provide continuity of quality care leads to dissatisfaction and poor outcomes. The results of this systematic review indicate a need to improve the quality of health care in the Kingdom.

There are limitations that should be considered in this review. The majority of reviewed studies were performed using a cross-sectional analysis that cannot infer causality, and can only describe association. Another limitation of this review was the sample of the included studies; the number of samples cannot determine or represent the whole Kingdom, which may result in bias from the study. Also, with the limited number of studies that reported each indicator, this

review may not capture or forecast quality of healthcare in the current state and future years. Hence, there is a need for additional and larger studies that will use these indicators to measure the quality of healthcare in the Kingdom. Although this study has some limitations, the evidence and results of this literature search highlights the barriers affecting the quality of healthcare in the Kingdom. Hence, it will be a great start to address these issues and continue to increase rates of patient satisfaction.

In conclusion, despite the achievements of the current structure of the Saudi healthcare system and the fact that the MoH in KSA is the primary provider and financier of health care services (approximately 75%),<sup>2</sup> issues concerning the quality of healthcare are still arising. Such issues include: safety in dispensing medication, a rise in medical errors, providing treatment in a timely manner, avoiding long waiting lists, and the provision of discharge information for continuous care. As a result of these unaddressed issues, the quality of healthcare in the Kingdom may be degenerating. Additionally, as the population of KSA has increased and medical technology has become more sophisticated and costly and patients' demands, and expectations have also increased. Although expenditure in MoH has exponentially increased to meet these patient demands, in the long term the negative impact of the MoH's ability to pay may be observed. To improve the quality of healthcare efficiently, and to significantly reduce problems for patients, the system should be flexible and adaptive. The introduction of both cooperative and private health insurance could offer a welcome shift from the current "sole care provider" paradigm. Moreover, in order to monitor the quality of care for patients and professionals, there is a need to assess the quality of services based on both national and international standards. This will require that appropriate methods or tools, such as satisfaction surveys and accreditation instruments, are available for use by hospital management. Furthermore, a public health awareness initiative and health literacy dissemination by the government and healthcare professionals should focus on providing patients with information on their rights before, during, and after treatment. Comprehensive and accurate health information, and understanding this information, is essential for the development of health literacy, patient satisfaction, and quality of care.

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