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# Assessment Of Health Security In Hospitals: A Systematic Review Of Current Practices And Challenges" In Saudi Arabia: Literature Review 2024

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## Abstract

### Background

One of the top priorities of the Saudi government is the development of its Health Security in Hospitals of Challenges" in Saudi Arabia , which has been recognized as one of the most advanced in the Middle East. In Saudi Arabia, various public and private healthcare facilities, including health security in hospitals and clinics, are supervised by the Ministry of Health (MOH), the primary government body responsible for providing healthcare. In 2024, the Saudi government announced a strategic framework of initiatives to diversify Saudi Arabia's economy and reduce its dependency on oil. These initiatives cover developing public service sectors, including health, education, infrastructure, recreation, and tourism. As part of the Vision 2030 initiative, the Saudi Health Sector Transformation program was launched in 2024 to enhance healthcare services' accessibility and quality through a comprehensive, efficient, and integrated health system Health Security in Hospitals has gained significant attention at the national and global levels, "security" is not a simple term; instead, it is "essentially contested" - that is, it induces debates about what it means and how to use it.

**Aim of this systematically reviews**: To assessment define used in Health Security in Hospitals Current Practices and Challenges" in Saudi Arabia 2024.

**Method:** the research method was a systematic review performed in three stages. The first stage was electronic searching based on selection criteria among multiple sources at various time points during the year 2024. These sources included online literature searches and other governmental health agencies.

**Results:** health security can contribute to the overall patient experience by participating in patient centered initiatives. For example, they can engage in community outreach programs that promote health and wellness, thereby fostering a positive relationship between the healthcare facility and the community it serves.

**Conclusion**: health security requires more state and international collaboration efforts to reach Global Health Security. To the best of our knowledge, no known government body or organization is responsible for governing health security in Saudi Arabia. However, the current study presents a definition of health security and differentiates it from the public health approach,

**Keywords:** Assessment, Health Security, Hospitals, Current Practices, Challenges" in Saudi Arabia.

## Introduction

### Background:

One of the top priorities of the Saudi government is the development of its Health Security system, which has been recognized as one of the most advanced in the Middle East [1]. In Saudi Arabia, various public and private Health Security facilities, including hospitals and clinics, are supervised by the Ministry of Health (MOH), the primary government body responsible for providing healthcare [2]. In 2016, the Saudi government announced a strategic framework of initiatives to diversify Saudi Arabia's economy and reduce its dependency on oil. These initiatives cover developing public service sectors, including health, education, infrastructure, recreation, and tourism [3]. As part of the Vision 2030 initiative, the Saudi Health Sector Transformation program was launched in 2021 to enhance healthcare services' accessibility and quality through a comprehensive, efficient, and integrated health system [4]

Health security play a crucial role in ensuring compliance with safety regulations and protocols. They are often responsible for monitoring access points, verifying the identities of individuals entering the facility, and ensuring that safety measures are adhered to. This vigilance is essential in preventing unauthorized access and protecting sensitive areas, such as emergency departments and pediatric units [5]. Also the Evolving Role of Health security. Historically, health security were primarily tasked with monitoring premises and deterring criminal activity. However, the evolving landscape of healthcare has necessitated a broader scope of responsibilities. Security personnel are now expected to engage with patients and staff, manage conflicts, and respond to emergencies. This shift reflects a growing recognition of the importance of security in creating a therapeutic environment conducive to healing [6]

The evolving role of health security also encompasses the need for cultural competence. As healthcare facilities serve increasingly diverse populations, security personnel must be equipped to interact respectfully and effectively with individuals from various backgrounds. This includes understanding cultural norms, communication styles, and potential sensitivities that may arise in interactions with patients and their families. By fostering an environment of respect and understanding, health security can contribute to a more positive healthcare experience for all individuals involved [7]

In many healthcare settings, health security are trained to handle a variety of situations, including deescalating conflicts, managing aggressive behavior, and providing assistance during medical emergencies. Their training often includes crisis intervention techniques, communication skills, and an understanding of healthcare protocols. This comprehensive training equips security personnel to navigate the complexities of healthcare environments, where emotions can run high, and tensions may escalate quickly [8].

The One Health approach is increasingly seen as the foundational management strategy for preventing future pandemics by addressing root causes at the animal-environment interface [9] However, a consistent theme in the literature is the inadequate translation of these conceptual frameworks into demonstrable, sustained operational capabilities [10] . The lack of integrated, synergistic planning between universal health coverage (UHC) and health security initiatives represents a persistent challenge, despite growing recognition that these elements are mutually reinforcing [11].

## Methodology

### Aim of the study:

To assessment of Health Security in Hospitals: A Systematic Review of Current Practices and Challenges" in Saudi Arabia 2024

### Study design:

Systematic reviews using Online searching engines were using databases to identify relevant articles through the included electronic databases: Google Scholar, PubMed, and Saudi Digital Library (SDL), data extracted from published articles were systematically analyzed for Health Security in Hospitals Current Practices and Challenges" in Saudi Arabia 2024. However, the current study presents a definition of health security and differentiates it from the public health approach, in addition to

emphasizing the importance of governing the related health sectors within each country in order to improve health security and have a positive impact on overall Global Health Security.

**Search strategy**:

This literature review approach this systematic review follows the online searching engines this literature review adopts a systematic review approach this systematic review follows the online searching engines to assessment of Health Security in Hospitals: A Systematic Review of Current Practices and Challenges" in Saudi Arabia 2024. A comprehensive search was conducted across academic databases including PubMed, Scopus, Web of Science, and Google Scholar. The search covered peer-reviewed articles published between 2015 and 2024 to ensure the inclusion of recent developments. Keywords used included "Health Security" "Current Practices," "Challenges" in Saudi Arabia"

**Searches and Data Sources**

A comprehensive search was performed to obtain studies on the Health Security in Current Practices and Challenges" in Saudi Arabia 2024 in Modern Healthcare Systems in Saudi Arabia. The databases used in the search included Pro Quest and Scopus, and the keywords used were 'Health Security ', Hospitals', 'Saudi Arabia', 'Current Practices' , 'Challenges" in Saudi Arabia' . These keywords were used to find articles with matching terms in their abstracts or titles. To discover the most recent studies and literature on our review topic, the search was limited to articles published between 2015 and 2024.

**Inclusion criteria**

This review considered the following studies: English language studies; published and peer-reviewed articles of the last 5 years; studies that discussed the definition of health security and the key variations in how the concept was interpreted and applied in medical field contexts; studies that discussed the major public health events in Saudi Arabia from a historical point of view; previous reviews were included since the present review aimed to identify key terms and trends rather than extracting data for meta-analysis; individual studies included in meta-analyses were included

**Exclusion Criteria**

Exclusion criteria involved studies focusing exclusively on clinical or nursing roles without administrative context. A total of 30 articles were initially retrieved, and after screening titles, abstracts, and full texts for relevance, 7 studies were selected for review. Thematic analysis was used to identify recurring patterns related to technological adaptation, task expansion, communication Health Security in Hospitals a Systematic Review of Current Practices and Challenges" in Saudi Arabia in healthcare Systems.

**Data Extraction**

The researchers of the present study were enlisted into three groups: The first group was assigned to an online search based on inclusion criteria; their results were imported into Excel. The second group was assigned to screening the title and abstract and categorizing the articles into high and/or medium relevance according to the research objectives of the present study. The third group was assigned to incorporate a process of critique or appraisal of the evidence. This appraisal aimed to assess a study's methodological quality and determine how much it had addressed the possibility of bias in its design, conduct, and analysis. Based on the voting system and after assessing the quality of each article, the investigators in this group decided to include or exclude the selected article.  Studies were excluded if they were published before 2020.

**The process of selecting the articles, which are contained in this review.**

The second stage involved determining the relevance of the selected papers to the study's objectives; the selected papers had moderate to high relevance to the study's objectives. The third stage was to evaluate the methodological quality of a study; we selected peer-reviewed published papers and websites recognized as trustworthy sources of information. The search yielded 143 articles; 7 met the

inclusion criteria and were subjected to the definition of health security. Despite proposed definitions, agreement has yet to be reached on the content and scope of health security.

**Table1: Summary of Evolving Role of the Medical Secretary and Health Assistant in Modern Healthcare Systems in Saudi Arabia 2024.**

| Author, Date, Country | Region | Study design | Study aim | Results |
|---|---|---|---|---|
| **Alrabiah, et al (2024) [12]** | Saudi Arabia | systematic review | To address an overview of Success of Saudi Health care System in through the opportunities and Challenges a systematic review 2024 | The Saudi Health Security in Hospitals System has achieved considerable success, and it is considered a pioneering programmed in the country within a few years of its establishment. This is reflected in certain effective and accessible healthcare services, such as diabetes care education and maternal health care. However, dental services are still unavailable in most PHCCs, and variations in some aspects of Saudi Health care System quality, such as the management of chronic diseases, have been identified. In a study performed similar variations in Saudi Health care System quality were observed **Conclusions** Healthcare success of System is a crucial part of Saudi Vision 2030, and it seeks to restructure of Saudi Healthcare System sector to establish a more comprehensive, accessible, affordable, efficient healthcare system that prioritizes the wellbeing of every citizen. So far, KSA has made significant steps toward achieving comprehensive healthcare transformation by 2030. However, several challenges persist due to factors such as population growth, elevated rate of preventable injuries, disparities in the quality of healthcare, insufficient primary healthcare services, limited human resource capacity, the need for a more transformational strategy to improve the Health Security in Hospitals . |
| **Almugti, et al (2023) [13]** | Saudi Arabia | . The research method was a scoping review performed in | . This study aimed to define three terms frequently used in health security | The government of Saudi Arabia had outstanding achievements by conducting a proactive and comprehensive approach to managing the COVID- |

| | | three stages. The first stage was electronic searching. The second stage involved determining the relevance of the selected papers to the study's objectives | discussions. These terms are national health security, | 19 pandemic. The MOH has been leading the country's Response, working closely with other governmental sectors and healthcare providers to implement various measures to control the spread of the virus. Despite being highly advanced, healthcare systems worldwide have encountered various challenges during the COVID-19 pandemic, such as shortages of medical supplies and burnout among healthcare workers due to prolonged and intense workloads. Several studies conducted during the pandemic have highlighted the need for continued investment in healthcare systems to improve their capacity to respond to the next public health emergencies and ensure effective collaboration and communication between healthcare facilities. **Conclusions**: The term "health security" has recently gained significant attention at the national and global levels. Various studies have been conducted to support its use from health, national security, and political perspectives. This study aimed to define health security within the context of the threats and risks in Saudi Arabia, as well as the political and administrative framework that governs the MOH with other relevant government entities. The investigators of the current study proposed a definition for health security as a comprehensive national system encompassing all preparedness, response, and recovery activities that the state should lead to ensure readiness and effectiveness in protecting the population within its borders from all threats and incidents that pose risks to public health, whether internally, across borders, or internationally. |
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| **Alslamah, et al (2022) [14]** | Saudi Arabia | Medicare and Medicaid use hospital data to track hospital performance on matters pertaining to IPC. In addition, many hospitals have limited capacity with which to develop the core required to build an effective IPC programmer | To evaluate the needs for infection control and establish an active infection control programmer in order to reduce the various risks associated with HAIs and improve the safety of healthcare | The country has many private sector healthcare services. The private sector runs 125 hospitals in total with 11,833 beds and 2218 dispensaries and clinics that are primarily located in major towns and cities. Overall, KSA currently boasts over 53,000 hospital beds per 1000 residents. When combined with the public sector, KSA's bed per population has risen to over 70,000 beds. The KSA Health Security in Hospitals system Challenges" in Saudi Arabia also is divided into primary, secondary, and tertiary healthcare. Primary healthcare provides basic healthcare services to all people in KSA. Specialized treatment is offered at some private and public facilities, with referrals being made to hospitals such as the King Faisal Specialist Hospital, higher education hospitals (teaching hospitals) and research centers<br>**Conclusions**<br>Despite continued efforts to become globally competitive and meet the highest of standards, this goal has not yet been achieved. Nevertheless, KSA has become a recognized healthcare leader within the Arab Middle East region. The Saudi Ministry of Health continues to evolve and develop in its aim to meet the highest global healthcare quality levels . According to a report published by the Health Security in Hospitals over the period from 2015 to 2016, the Ministry of Finance allocated SAR 59,985.36019 for healthcare spending, rising to SAR 62,342.539 in 2016 . However, as the Kingdom of Saudi Arabia Budget Report the Ministry of Finance started allocating 19% of the national budget to healthcare and education. Saudi Arabians receive free treatment in all public hospitals, clinics, and outpatient centers, but foreigners cannot enter the kingdom for work purposes or for any length of time, if they do not have health coverage with a major |
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| | | | | insurer. |
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| **Alharbi, et al (2024) [15],** | Saudi Arabia Qassim | systematic review | To investigate the efficacy and efficiency of e-health solutions in Saudi hospitals to enhance the resolution of interoperability issues; | Saudi Arabia's healthcare system is undergoing fast change, and the incorporation of e-health solutions is essential to this development. In line with the Vision 2030 endeavor, the Saudi government is proactively advocating for the integration of cutting-edge technologies to augment the caliber and availability of healthcare services. The integration of various E-health tools, such as telemedicine, electronic health records, and advanced health information systems, is part of this paradigm shift . The adoption of E-health solutions in Saudi healthcare is driven by a variety of factors, including the need to improve service quality, boost efficiency, and increase accessibility. With the help of these technical developments, isolated and underprivileged communities may now have access to healthcare services, removing geographical constraints, for example, computerized health records make it easier for healthcare practitioners to share data seamlessly, which encourages coordination and more individualized patient treatment **Conclusions** There are obstacles associated with integrating E-health technologies into Saudi hospitals; yet there is also a significant chance for improved healthcare quality. A roadmap for overcoming these obstacles and seizing opportunities provided by the research. Saudi hospitals can maximize E-health integration for better healthcare outcomes by addressing the theoretical and practical aspects and putting the suggested techniques into practice.  The sample size was limited so results could b generalized therefore; future researchers are required to conduct similar studies with larger |

| | | | | sample sizes including more regions to build a powerful theory for knowledge and practice. |
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| **Al-Otaibi, et al. (2024)[16]** | Saudi Arabia | comprehensive review | To explore the multifaceted roles of health security in healthcare environments, examining their responsibilities, the challenges they face, and the impact they have on patient care and overall hospital operations. | The presence of health security in healthcare settings is not merely a response to external threats; As healthcare systems face rising patient volumes, heightened instances of violence, and the need for enhanced safety protocols, health security have evolved from traditional surveillance roles to proactive participants in fostering a culture of safety and security. Health security are often the first line of defense against potential threats, tasked with deterring violence, managing conflicts, and responding to emergencies. Their training encompasses crisis intervention techniques, effective communication, and an understanding of healthcare protocols, enabling them to navigate the unique challenges of healthcare settings. By maintaining a visible presence, security personnel not only deter aggressive behavior but also create a calming atmosphere for patients and staff, thereby enhancing the overall patient experience. **Conclusions** The role of health security in healthcare settings is multifaceted and essential for maintaining a safe and supportive environment. As the healthcare landscape continues to evolve, the responsibilities of security personnel will likely expand further. By recognizing the importance of health security in enhancing patient care, supporting healthcare staff, and addressing violence, healthcare facilities can foster a culture of safety that benefits everyone involved. Investing in the training and integration of security personnel within healthcare teams is crucial |

| | | | | for optimizing their impact. As healthcare organizations strive to improve patient outcomes and staff well-being, the role of health security will remain a vital component of comprehensive safety strategies. Ultimately, a collaborative approach that values the contributions of security personnel will lead to safer, more effective healthcare environments. Moreover, the integration of health security into the healthcare team can facilitate better communication and collaboration ong all staff members.. |
|---|---|---|---|---|
| **Alfahad, et al. (2024) [17]** | Saudi Arabia | . comprehensive review | . The review examines the core objectives of Vision 2030 in healthcare, including infrastructure expansion, workforce development, digital health integration, and research advancements. | Vision 2030 has led to substantial improvements in Saudi Arabia's public health outcomes by advancing healthcare infrastructure, expanding workforce capacity, promoting preventive health, and integrating digital technologies. These changes are contributing to better quality of care, increased healthcare access, improved health literacy, and a stronger focus on preventive measures. Below are some key impacts on public health outcomes. Vision 2030 has prioritized quality improvement across healthcare services, including training healthcare professionals, expanding specialized medical centers, and enhancing facility infrastructure. These efforts have raised the standard of care available in Saudi Arabia, with patient satisfaction levels improving as a result. National surveys show that healthcare users report greater satisfaction due to shorter wait times, access to specialized services, and more comfortable hospital environments. Additionally, the adoption of international healthcare quality standards has ensured that care quality meets global benchmarks, further enhancing patient trust in the healthcare system. **Conclusions** Saudi Vision 2030 represents a transformative effort to modernize Saudi Arabia's |

| | | | | healthcare system, improve public health outcomes, and position the Kingdom as a leader in healthcare innovation. This comprehensive review has examined the vision's impact on healthcare infrastructure, workforce development, digital transformation, and preventive care, all of which contribute to enhanced quality of care, increased accessibility, and better public health outcomes. Vision 2030 initiatives have led to notable achievements, including increased hospital capacity, advancements in healthcare workforce training, widespread adoption of digital health technologies, and a focus on preventive health that has improved chronic disease management and public health awareness |
|---|---|---|---|---|
| **Aljuaid, et al (2016) [18]** | Saudi Arabia | A Systematic review | To identify the key issues, problems, barriers and challenges particularly in relation to the quality of care in university hospitals in the Kingdom of Saudi Arabia (KSA), and to provide recommendations for improvement | |

## Results and discussion

Health security can contribute to the overall patient experience by participating in patient centered initiatives. For example, they can engage in community outreach programs that promote health and wellness, thereby fostering a positive relationship between the healthcare facility and the community it serves. This involvement not only enhances the reputation of the facility but also reinforces the importance of safety and security in promoting overall health

The findings of this systematic review confirm that the concept of health security has matured into a complex, multi-dimensional discipline, characterized by the convergence of biological and digital threats, yet hampered by deep-seated conceptual and systemic challenges [19,20]. The results move beyond a mere description of threats, offering a critical interpretation of the underlying causes of current health security failures and disconnect between policy articulation and operational effectiveness. The demonstrated necessity of integrating emerging digital vulnerabilities—such as those related to cloud computing and applications—into the established framework of health security represents a significant conceptual evolution [21,22] . This interpretation aligns with the argument by [23] that threats are increasingly converging, requiring a paradigm shift away from a purely

biomedical focus. The finding that cyber-attacks compromise essential health services [24] shows that the protection of digital infrastructure is now an equivalent priority to controlling

Also the review highlights a need to improve the quality of Health Security in Hospitals specifically in areas of Challenges" in Saudi Arabia, clinical effectiveness and patient-centeredness, at university hospitals in KSA. A recent study exemplified a link between these three dimensions, suggesting they should considered as a group. [25] Of the reviewed studies concern patient safety as one of the important indicators of quality of care. A study by [23] indicated that there was a significant difference between the mean scores of Health Security in Hospitals and perceptions regarding the safety domain, giving a lower value than physicians do

Therefore, this difference could be due to failures of leadership, a need for better management and a need to establish a culture of safety alongside leadership reform in university hospitals. According to [24] argument, mainly nurses rather than physicians carry out the demands of patient care. Moreover, nurses spend more time than physicians do, looking after patients, which could explain the nurses' higher workload. In addition, [22] found that feedback and communication about errors are most strongly associated with lower frequency of events reported. This finding could be due to fear of reporting and some respondents' beliefs that reporting. [22]

## Conclusion

This article sought to contribute to debates about conceptualizing health security and understanding health security politics. It set out to challenge the use of traditional security paradigms, which obscure the significance of public health threats to individual and community security and well-being. The brief overview of the different denominations of health security demonstrated that the grounding of existing analysis in securitization theory and constructivist thought has been driven in part by the desire to validate the claim that health-related challenges were indeed relevant security concerns, and in part by the need to fit within existing debates. Overall, as has been demonstrated, health security analysis has remained predominantly anchored to the securitization approach, despite critiques levied at the Copenhagen school by critical and feminist scholars.

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