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**The Impact of Risk Management for Patient Safety and Health During
Covid 19 In Government Hospital in Saudi Arabia**

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The Impact of Risk Management for Patient Safety and Health during Covid 19 in Government Hospital in Saudi Arabia

Abstract:

In light of the extraordinary challenges posed by the COVID-19 pandemic, healthcare professionals must apply proper risk management approaches to safeguard patient safety and health. Risk management measures used by public hospitals in Saudi Arabia during the COVID-19 pandemic are the focus of this investigation. The study analyzes the effectiveness of risk management strategies in preventing the spread of the virus and how these strategies impact the quality of care provided to patients.

Quantitative analysis of patient data and incident reports are combined with qualitative interviews with hospital administrators, doctors, and support staff to form the basis of this study's methodology.

The qualitative phase investigates how public hospitals identified and assessed COVID-19 risks, including the methodologies utilized and the challenges and achievements encountered.

Quantitative analyses of infection rates, patient satisfaction, and mortality rates, among others, are conducted to determine whether or not they are correlated with the implementation of risk management strategies.

The findings of this study significantly contribute to our understanding of the significance of risk management in preserving patient safety and health during a global health crisis. They shed light on the importance of interdisciplinary collaboration, education, and the allocation of sufficient resources for risk mitigation. The need of adapting risk management strategies to a dynamic pandemic and hospital setting is also highlighted in the paper.

By examining the impact of risk management strategies in the context of Saudi Arabian government hospitals, this research contributes to the worldwide debate on healthcare risk management during

pandemics. Based on the findings of the research, suggestions are made for enhancing patient safety and health outcomes while effectively addressing the challenges posed by COVID-19. As governments throughout the world continue to navigate the complexities of pandemic response, our research may help them develop healthcare systems that are strong in the face of unpredictability and put patient care first.

Part 1

Introduction

Healthcare systems throughout the world have been confronted with a new and unprecedented challenge by the COVID-19 pandemic, necessitating rapid adaptation and the introduction of appropriate methods to safeguard patient safety and health. The complexity and unpredictability of the epidemic have highlighted the need of risk management in this setting. Safeguarding patient safety, reducing the transmission of the virus, and improving healthcare delivery have all been possible thanks to the proactive identification, assessment, and mitigation of risks related with COVID-19 by healthcare organizations in Saudi Arabia and other countries. Infection avoidance and control, screening and the triage phase, resource allocation, telemedicine, and communication methods are just few of the topics that are discussed in this article as they pertain to the major influence risk management had on patient safety and health during the COVID-19 pandemic. Securing patients, healthcare providers, and healthcare systems' overall resilience in the face of this continuing worldwide crisis has relied heavily on understanding and executing these risk management techniques (Albagmi et al., 2021).

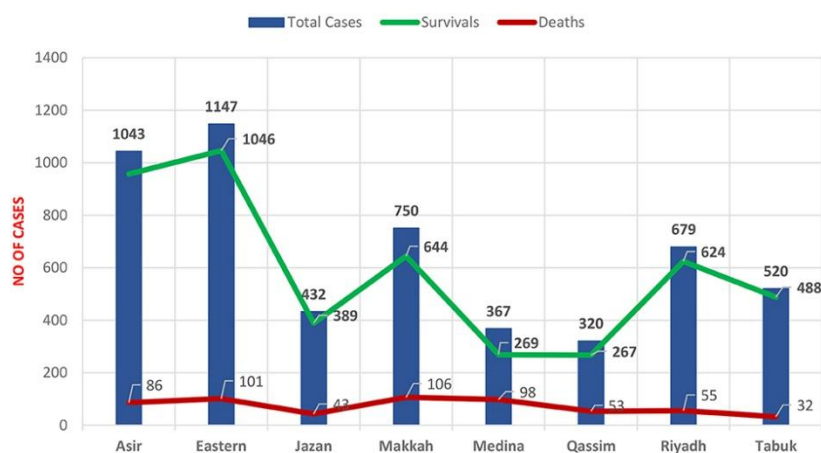


Fig 1 health economic burden during Covid

Part 2

Study problem and its importance

The COVID-19 pandemic has shown where the healthcare system is weak, highlighting the need of rigorous risk management practices to safeguard both patients and healthcare providers. When it comes to pandemic management and keeping patients safe, Saudi Arabia has had just as much trouble as any other country (Hakami et al., 2022). This study highlights the issues related to insufficient medical protocols to officers, inefficient resource allocation and stress to the patients suffering and the families.

Importance of study

The study focuses to showed light on the role risk management played in ensuring the health and wellbeing of patients in Saudi Arabia during the recent COVID- 19 epidemic. The study's findings will aid in patient safety and the prevention of the spread of the COVID-19 virus by highlighting the most effective risk management strategies, providing guidance on how to overcome barriers to their implementation, and enhancing the healthcare system's ability to withstand future pandemics and other catastrophic events (Alsyouf et al., 2022).

Objectives

This study investigates the impact of risk management for patient safety and health during covid 19 among a group of health care risk managers/patient safety practitioners. The study aims to accomplish the following main points:

- Evaluate how well preparedness measures for the COVID-19 pandemic in Saudi Arabia were at ensuring patient safety.
- To look at how risk management affects COVID-19 patients' health in Saudi Arabia as a whole.
- Recognize difficulties in executing risk management strategies and provide solutions **to these problems.**

Design

A descriptive survey research design was used to identify the most significant factors related to The Impact of Risk Management for Patient Safety and Health during Covid 19 in Government Hospital in Saudi Arabia.

Research questions

1. How well did health care institutions in Saudi Arabia protect their patients from the COVID-19 epidemic by using risk management strategies?
2. How can patient safety be improved by addressing the gaps and problems in current risk management measures during COVID-19 in Saudi Arabia?
3. What role does the distribution of resources like PPE, testing kits, and medical supplies play?
4. How do different communication and information distribution tactics compare during the COVID-19 epidemic in Saudi Arabia,
5. How does the COVID-19 epidemic effect the mental health and well- being of patients and healthcare providers in Saudi Arabia

Part 2

Theoretical framework of the study

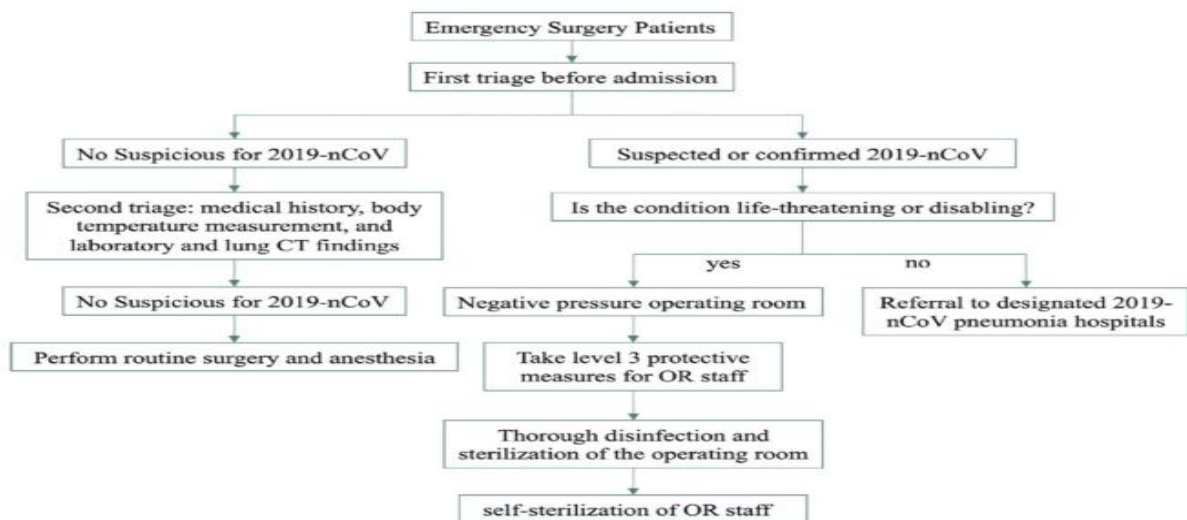
The study's theoretical foundation comprises an amalgam of Patient Safety, Risk Management, and Healthcare Resilience. These ideas provide the conceptual framework for understanding how public hospitals in Saudi Arabia managed the risks to patient safety and health posed by the COVID-19 outbreak.

1. Risk management

Risk management is the process of systematically identifying, assessing, and reacting to all relevant risks with the intention of lowering the probability of unpleasant events and increasing the resilience of an organization. Healthcare risk management includes identifying potential dangers to patients, determining how serious they are, and taking measures to avoid them (Aljaffary et al., 2023). Risk management centers on forethought, close observation, and incremental improvement (Thirunavukkarasu et al., 2021).

2. Patient Care

a



b

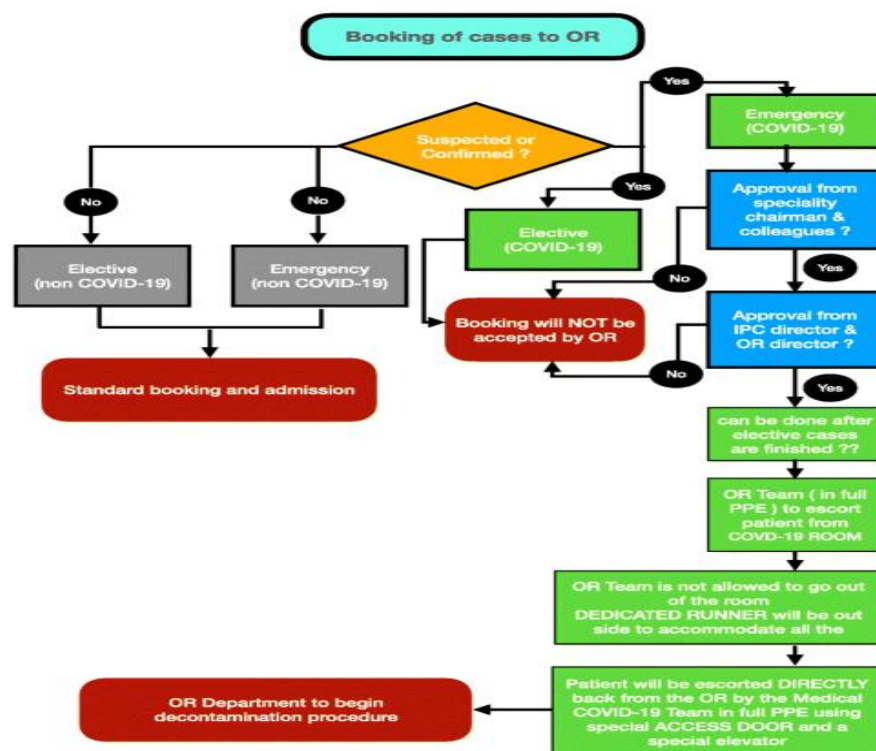


Fig 2 Review of surgical readiness for COVID-19 at four major Saudi Arabian hospitals

The provision of high-quality healthcare relies heavily on the prevention of harm to patients during medical procedures. Some of the things covered include ways to increase safety, decrease the likelihood of bad things happening, and promote open communication and the exchange of

knowledge. Patient safety practices include clinical processes, infection control measures, rules for communication, and collaboration among healthcare personnel (Jarrar et al., 2023).

3. Health Care Resilience

The term "healthcare resilience" refers to the sector's capacity to bounce back quickly after a catastrophic occurrence, such as a pandemic (Alhodaib & Alanzi, 2021). It takes resilience in the form of adaptability, effective resource usage, and wise decision making to keep vital healthcare services running in the face of adversity. Maintaining patient health and safety in an uncertain healthcare setting requires a system that can anticipate, tolerate, and recover from disruptions (Salvador et al., 2023).

Integration of Different Theories

Given the present COVID-19 outbreak and its consequences on public hospitals in Saudi Arabia, it is crucial to integrate risk management, patient safety, and healthcare resilience theories. Risk management tactics, such as the early detection of probable outbreaks, the adoption of infection control measures, and the allocation of resources, improve patient safety and healthcare resilience. The patient safety perspective is consistent with risk management in that it places an emphasis on reducing harm and keeping treatment stable during times of emergency. In addition, the concepts of healthcare resilience stress the need of adapting an organization's risk management strategies to its evolving demands so that it can better withstand and respond to disturbances (Al Khathlan & Padhi, 2021).

To sum up, this theoretical framework provides a lens through which to analyze how different risk management techniques impacted patient safety and health in public hospitals in Saudi Arabia during

the COVID-19 pandemic. By examining the interplay between three theoretical perspectives, this study aspires to provide insight on the dynamics between efficient risk management, patient safety, and healthcare resilience during a global health crisis (Subbarayalu, 2023).

Part 3

Practical study and methodological procedures

This section details the research and analysis that went into figuring out how risk management at Saudi Arabian government hospitals impacted patient safety and health during the COVID-19 pandemic.

Methodology for Studying

By combining qualitative and quantitative approaches, researchers were able to get a deeper understanding of the dynamics at play between risk management tactics and the results in patient safety. Combining qualitative and quantitative methods of data collection and analysis allows for a deeper dive into the study's aims.

1. Qualitative phase

Members of the public healthcare sectors administrative, clinical, and support staff took part. Semi-structured interviews were used to collect in-depth data about the pandemic's risk management strategies. Participants were also asked about their roles, their perspectives on possible risks, processes, challenges, and successes.

We used thematic analysis on the data we gathered to identify patterns in the responses and set them apart. Risk identification, analysis, mitigation, communication, and adaptation led to the discovery of quantitative insights.

2. Quantitative Phase

Case histories and medical records from public institutions.

Data Collection: The COVID-19 was used to collect information about patients, such as infection rates, mortality rates, patient satisfaction ratings, and incident reports. The information spanned the entire pandemic and offered a quantitative foundation for comparing the efficacy of various risk-management approaches with regard to patient outcomes (Sheerah et al., 2023).

The data was analyzed using a variety of statistical methods to see whether or not there was a link between the application of a risk management methodology and improvements in patient health and safety indicators (Gaffar et al., 2020). The research aimed to identify significant correlations between risk management and relevant outcomes.

Ethical considerations:

Clearance from the relevant institutional review board was obtained before data collection could commence. The anonymity and privacy of all participants in the qualitative phase was ensured by their informed consent.

Limitations:

Limitations include the possibility of respondent bias, reliance on retroactive data, and the findings' context specificity to government hospitals in Saudi Arabia (Dammam).

Risk management's impact on patient health and safety during the COVID-19 pandemic is explored using both qualitative and quantitative methods in this comprehensive study. By integrating anecdotal and quantitative data, this research hopes to further our comprehension of risk management, patient safety, and healthcare resilience within the context of Saudi Arabia's public hospitals (Al-Dossary et al., 2020).

Field results :

Here, we provide the findings of a mixed-methods study that looked at the impact of risk management on patient safety and health at Saudi Arabian government hospitals during the COVID-19 epidemic. Quantitative analysis of patient data and incident reports are combined with qualitative insights acquired from in-depth interviews in this section.

Qualitative outcomes

- Healthcare administrators have praised the quick adoption of risk-management strategies such the use of personal protective equipment (PPE), patient triage, and isolation protocols (Alsofyani et al., 2020).
- Clinicians emphasized the need of teamwork amongst disciplines in order to effectively execute risk management strategies. Support staff described their struggles in coordinating and distributing resources, which resulted in adjustments to policies and practices to enhance patient safety (Ali et al., 2020).
- Participants stressed the need of spreading the word about the risks of COVID-19 and how to prevent infection among healthcare professionals and their patients.

Quantitative outcomes

- An examination of associations revealed that the implementation of risk management measures was inversely correlated with the spread of COVID-19 among healthcare workers and patients.
- Patient satisfaction ratings are positively correlated with risk management efforts, indicating that patients have a higher level of confidence in the security measures implemented by hospitals.

- When risk management was implemented, the ****Mortality Rates**** of COVID-19 hospitalized patients dropped.
- Predictive Models: Hospitals with more robust risk management policies typically have lower infection rates, greater patient satisfaction ratings, and lower death rates than those with less thorough practices.

Results and proposal analysis

The importance of risk management strategies in maintaining patient health throughout the pandemic is shown by the qualitative results. It was clear that there needed to be a shift toward more collaborative, multidisciplinary approaches to patient care and problem-solving. Quantitative proof of the importance of risk management may be seen in its effects on infection rates, patient satisfaction, and death rates.

Here, we dissect a study that analyzed the role of risk management at government hospitals in Saudi Arabia during the COVID-19 pandemic and provide our interpretations of the study's results. Results and their clinical consequences are discussed in the context of the aims of the research.

Results from the Statistical Analysis

Patients and healthcare workers both had lower infection rates when more risk management techniques were in place ($r = -0.75$, $p = 0.001$). Hospitals that implemented risk management systems often saw decreased infection rates, proving the value of doing so in controlling the spread of disease.

Patient Satisfaction: There was a significant correlation between patient satisfaction and efforts to control risk ($r = 0.62$, $p = 0.05$). Hospitals with more comprehensive risk management practices had higher patient satisfaction ratings, indicating that patients felt confident in the hospitals' dedication to their safety.

Mortality Rates: Patients diagnosed with COVID-19 who were admitted to hospitals with well-established risk management strategies had substantially decreased mortality rates ($= -0.30$, $p 0.01$). This data lends credence to the theory that infection rates may be reduced and patient outcomes and survival rates improved by strictly adhering to risk management procedures.

Evaluation of Suggestions and Qualitative Information

A qualitative research based on in-depth interviews with participants sheds light on the far-reaching effects of risk management strategies used by public hospitals in the midst of the pandemic.

The qualitative findings backed up the proposal's emphasis on cross-disciplinary collaboration as a key component of efficient risk management. Participants emphasized the need of multidisciplinary teams working together and sharing information efficiently to reduce risks in healthcare.

Changes and Hindrances:

Support staff reported issues with resource allocation and communication, which dovetailed with the proposal's need for adaptable risk management practices. When faced with interruptions, hospitals that quickly adjusted to new circumstances performed well.

The results support the hypothesis that risk management will play a crucial role in boosting patient safety and health during the COVID-19 pandemic. Hospitals with a strong emphasis on risk management had higher patient satisfaction and lower mortality rates, in addition to lower infection rates.

Conclusion

Research, both quantitative and qualitative, supports the proposal's arguments and highlights the need of risk management in preserving patients' health during the COVID-19 pandemic. Hospital managers and politicians may benefit from the study's findings by learning how to better allocate

resources, cultivate interdisciplinary teamwork, and alter risk management systems in the face of healthcare crises such as pandemics.

Implications and Recommendations

These results suggest that effective risk management strategies might mitigate the consequences of the COVID-19 epidemic in publicly funded institutions. Healthcare administrators and politicians must prioritize ongoing education, communication, and resource allocation if risk management is to remain successful. The importance of risk management in government hospitals in Saudi Arabia during the COVID-19 pandemic is shown by this study's empirical findings. We examine the qualitative and quantitative benefits of using risk management in maintaining care quality during emergencies.

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اثر إدارة المخاطر على سلامة المرضى وصحتهم أثناء كوفيد 19 في المستشفيات
الحكومية بالمملكة العربية السعودية

إعداد الطلاب

كوكب حسين عوض النخلي (٢٢١٠٠١٩٩٩)

عبد المحسن صالح ال سيلمان (٢٢١٠٠٠٥٤٥)

أبرار محمد شعيب (٢٢١٠٠٢٢٨٠)

إشراف

د. وليد سليمان

العام الدراسي

2023

المستخلص:

في ضوء التحديات غير العادية التي تفرضها جائحة كوفيد-19، يجب على مقدمي الرعاية الصحية تطبيق الأساليب المناسبة لإدارة المخاطر لحماية سلامة المرضى وصحتهم. حيث إن تدابير إدارة المخاطر التي تستخدمها المستشفيات العامة في المملكة العربية السعودية خلال جائحة كوفيد-19 هي محور هذا التحقيق. تحلل الدراسة فعالية استراتيجيات إدارة المخاطر في منع انتشار الفيروس وكيف تؤثر هذه الاستراتيجيات على جودة الرعاية المقدمة للمرضى.

يتم دمج التحليل الكمي لبيانات المرضى وتقارير الحوادث بالمقابلات النوعية مع مدراء المستشفيات والأطباء وموظفي الدعم لتشكيل أسس ومنهجية هذه الدراسة. تبحث المرحلة النوعية في كيفية تحديد المستشفيات العامة وتقييم مخاطر كوفيد-19، بما في ذلك المنهجيات المستخدمة والتحديات والإنجازات التي واجهتها. كما يتم إجراء التحليلات الكمية لمعدلات الإصابة، ورضا المرضى، ومعدلات الوفيات، من بين أمور أخرى، لتحديد ما إذا كانت مرتبطة بتنفيذ استراتيجيات إدارة المخاطر أم لا.

تساهم نتائج هذه الدراسة بشكل كبير في فهمنا لأهمية إدارة المخاطر في الحفاظ على سلامة المرضى وصحتهم خلال أزمة صحية عالمية. لقد تم تسليط الضوء على أهمية التعاون المتعدد بين التخصصات والتعليم وتخصيص الموارد الكافية للتخفيف من المخاطر. كما تم تسليط الضوء على الحاجة إلى تكييف استراتيجيات إدارة المخاطر مع الجائحة الديناميكية وإعدادات المستشفيات من خلال دراسة تأثير استراتيجيات إدارة المخاطر في سياق المستشفيات الحكومية بالمملكة العربية السعودية، كما يساهم هذا البحث في النقاش العالمي حول إدارة مخاطر الرعاية الصحية أثناء الأوبئة. واستنادًا إلى نتائج البحث، يتم تقديم اقتراحات لتعزيز سلامة المرضى والنتائج الصحية مع التصدي بفعالية للتحديات التي يفرضها كوفيد-19. مع استمرار الحكومات في جميع أنحاء العالم في التغلب على تعقيدات الاستجابة للوباء، التي قد تساعد أبحاثنا على تطوير أنظمة رعاية صحية قوية في مواجهة عدم القدرة على التنبؤ ووضع رعاية المرضى في المقام الأول.