

Patient Safety as a Core Focus in Multidisciplinary Healthcare Teams: Systematic Review

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ABSTRACT

Background: As the prevalence of ailments and diseases worldwide increases, medical facilities and services are also evolving. However, the resources are limited, so by the time the best solutions are implemented, a new virus or bacteria emerges. Now is the time when patient care requires a multidisciplinary approach; hence, MDTs, or multidisciplinary teams, are set up to meet the requirements of patient care. This present study will evaluate the scenario in Saudi Arabia. This is a review study based on the previous research conducted by the authors in Saudi Arabia and other developing countries. The development of MDTs in recent years, the present scenario, and future prospects will be evaluated. Some of the major challenges and barriers will also be discussed.

Study Objectives: The objective of this study is to identify global patient safety frameworks in the context of Saudi Arabia, with a focus on the multidisciplinary approach to safety culture and interprofessional collaboration.

Materials and Methods: The Study is based on the previous studies conducted from 2015 to 2024. A total of 38 studies were considered by the authors of Saudi Arabia and other international authors. Studies were collected after deciding on the inclusion and exclusion criteria.

Keywords: Patient safety, Clinical safety, multidisciplinary team, Interprofessional collaboration, Saudi Arabia.

1. INTRODUCTION

It is impossible to overstate the importance of patient safety as one of the most crucial components of the quality of medical care delivered. Globally, healthcare institutions are implementing innovative practices to enhance patient outcomes and minimize medical errors. (Algethami et al, 2024) Using multidisciplinary teams, or MDTs, has emerged as a strategy for implementing the Vision 2030 framework's operations and achieving its objectives in Saudi Arabia. With this organizational-wide shift, the multidisciplinary team is at the forefront of patient-directed care, emphasizing the importance of healthcare.

Multidisciplinary teams comprise experts from various related professions who collaborate to deliver comprehensive patient care. The decision-making mechanism is enhanced by the diversity of patterns and talent, which reduces risk and increases efficacy. (Kaud et al 2022)

In high-risk areas, such as emergency rooms and intensive care units, where strict deadlines for decisions apply, multidisciplinary teams play a crucial role in Saudi hospitals. However, several organizational and cultural obstacles, including power and cultural disparities at work, as well as the general lack of a unified practice, make it challenging to adapt multidisciplinary teams and provide motor development treatment in the Saudi context. (Albalawi et al, 2020) This essay will examine the impact of multidisciplinary teams on patient safety in Saudi hospitals, focusing on both their successes and the challenges encountered.

Patient safety assessment has acquired great strategic value within the country's healthcare system. According to the Ministry of Health, while developing Vision 2030, the Kingdom is committed to preventing unnecessary harm and increasing the safety level of the entire healthcare system, creating safe care at all levels. (Alahmadi et al 2016) A cross-professional, health system, and resource approach, with organization and coordination of patient care among physicians, nurses, pharmacists, therapists, laboratory scientists, and administrators, is essential. Effective multidisciplinary teamwork and scale support are crucial for enhancing the identification of adverse events and minimizing errors.

Saudi Arabia is facing difficulties in delivering healthcare services due to the rapid expansion of shifting services and the diversity of the workforce in relation to growing healthcare accreditation. (Aljadhey et al 2015) These shifts require transitioning to an integrated practice from siloed, single-professional approaches. Although there is a growing understanding of the advantages of multidisciplinary teams for patient safety, the gaps remain considerable. (Vincent et al 2016) Poor communication, hierarchy, unclear roles, and limited interprofessional education remain significant barriers to implementing team-based patient safety. Also, for some cultures, authority and not culture in error reporting and a 'don't make mistakes' culture, pose barriers to reflection and learning.

Source: Newsome et al, 2016.

Figure 1: Multidisciplinary patient-focused team approach

The objective of this review is to identify and critically evaluate the available literature on the role of multidisciplinary healthcare teams in patient safety within the Saudi Arabian healthcare system. Peer-reviewed journals, public policy frameworks, and school documentation from 2015 to 2024 are analyzed to identify key themes, problematic obstacles, and challenges to facilitating access to safety within team-based frameworks. To understand the distinct ways safety outcomes are conceived, implemented, and maintained, even within the more complex web of healthcare ecosystems, the analysis focused on the MMS model, TeamSTEPPS, and other global frameworks of safety, aligning with the review's themes. (Manser et al, 2018) (Alzahrani et al, 2021)

Saudi Arabia is focusing on domestic issues that the nation is facing while incorporating international best practices, particularly in the area of MDT systems, similar to other nations. In addition to emphasizing the need for more innovation in areas such as interprofessional education systems, leadership engagement systems, and systemic support, the assessment makes clear that a cultural shift is required to improve safety as a system. The debate provides suggestions for enhancing the multidisciplinary team in alignment with the Saudi healthcare system's objectives, aiming to improve the understanding of multidisciplinary team efficacy through the integration of current research and real-world cases. The review's recommendations and overall analysis serve as a way to support the expanding body of knowledge about safety procedures and healthcare in the Gulf region. They also advise policymakers, educators, and healthcare leaders on how to promote safer and more resilient healthcare systems.

2. RESEARCH GAPS

During the review of studies related to the current topic, several research gaps were identified. Major gaps are mentioned below:

1. Most studies based on multidisciplinary teams and patient safety were based on primary data, i.e., sectional in nature, and presented only glimpses of the related dynamics and culture of safety.
2. It was found that the minimum studies were longitudinal in nature, and only a few studies have examined the influence of patient safety and related outcomes in terms of development and related aspects.
3. In recent years, some studies have explored the role of occupational therapists, laboratory scientists, radiographers, and social workers in patient safety; however, minimal work has been conducted on the collective efforts of these professionals.

3. RESEARCH OBJECTIVE

The objective of the study is to identify global patient safety frameworks in the context of Saudi Arabia, with a focus on the multidisciplinary approach to safety culture and interprofessional collaboration.

4. RESEARCH METHODOLOGY RESEARCH DESIGN

This present study employs the narrative literature review approach, also known as an exploratory research design. In this research design, the main focus remains on the developments in the recent past, the current scenario, and future prospects for the respective point in question. Here, the area of study is multidisciplinary teams and their role in patient safety. The study is a systematic review of published and presented studies in Saudi Arabia investigating. This present review study will synthesize the process of MDTs, identify the tools and applications used by the teams, and examine the respective outcomes of the process, as well as the major challenges to patient safety.

5. INCLUSION AND EXCLUSION CRITERIA

Inclusion

- This present review will include the studies conducted from 2015 to 2024.
- As English is the common medium of communication in most countries in the world, studies published or presented in the English language will be included; some of the studies in Arabic may also be included.
- Based on the pre-decided keywords, the study will include only the relevant studies related to MDTs in Saudi Arabia.
- Studies conducted in Saudi Arabia will be given preference, but some of the international studies will also be included to elaborate on the concept of MDTs.

Exclusion

- Studies conducted prior to 2015 will not be included in the present review.
- Studies published or presented in languages other than English or Arabic, and the studies that are not accessible, will be excluded.
- Any of the studies not having the relevant keywords will be excluded.
- Non-textual studies will be excluded.

Sources of Data

Some of the important sources of data are given below:

1. PubMed/MEDLINE, Embase, Scopus, Web of Science, etc.
2. Saudi Digital Library, Index Medicus for the Eastern Mediterranean Region (IMEMR), CINHALL, and relevant Saudi journals.
3. Ministry of Health (KSA) publications, doctoral thesis archives, conference proceedings, and institutional reports.

Keywords

The study will include only those reviews that have the respective keywords. Some of the important keywords are as follows:

"Patient safety", "clinical safety", "multidisciplinary team", "interprofessional collaboration", "Saudi Arabia", "KSA", "healthcare", "hospital".

Information Extraction

A master file will be prepared, and the respective information will be stored in it. The major heading will be (Author, Year, Journal), followed by Hospital setting (PHCs, Private, Public), Types of MDTs, measures of patient safety, and major challenges.

Ethical Considerations

- As this present study reviews past studies and is based solely on secondary data, no human subjects or primary data will be included.
- All sources are properly cited and used in accordance with academic integrity standards.
- Some of the sensitive data related to healthcare and healthcare security was interpreted with caution.

6. DISCUSSION

Role of MDTs in Patient Safety

The implementation of patient safety through cooperation and communication among healthcare team members has been globally commended for multidisciplinary teams. (Alzahrani et al, 2019) Due mostly to the increasing volume of complex cases, MDTs have gradually altered the clinical results of patients in Saudi Arabia. The premise is that involving more people ensures a

thorough process is followed when making decisions about a patient's care, thereby preventing many of the mistakes that are sometimes made when only a few experts are involved in the issue. Medical errors can be reduced, which is a significant benefit of multidisciplinary teams. When the plan is properly implemented, it enables the team to identify hazards and take early action. (Alshammari et al 2018)

To modify the treatment plan and thereby reduce the incidence of adverse events, MDTs frequently discuss patients' status in intensive care units. Additionally, the open fault attribution in multidisciplinary teams was provided in order to lessen the crew members of Vertex being held accountable for their faults. The effectiveness of multidisciplinary teams, however, largely depends on the caliber of interprofessional connections, notwithstanding these advantages. (Pasay et al, 2020) The completion of an organization's goals may suffer greatly from unclear communication patterns, unclear role allocations, and a lack of willingness to collaborate. Evidence from studies shows that MDTs in Saudi hospitals address these issues, indicating the need for support strategies to encourage key aspects of collaboration. (Gittel et al, 2016)

Perils of Saudi Vision 2030

Through Vision 2030, multidisciplinary teams have been adopted by the custodians of Saudi Arabian healthcare sector reform. In Vision 2030, the foundation for MDT development has been established by emphasizing patient demands and advocating for ongoing quality improvement. (Alzahrani et al, 2022) It is also recognized that achieving the established safety and quality goals requires interdisciplinary collaboration among clinical specialists. (Al-Ahmadi et al 2015)

Vision 2030 includes the adoption of value addition through the use of technologies that have led to the formation of multidisciplinary teams. By ensuring that information is easily shared among team members, electronic health records and other information technologies help to reduce the likelihood of mistakes. (Alshammari et al 2023)

Additionally, it has involved workforce integration, whereby trainees have been funded to provide training that provides healthcare staff with the necessary collaborative skills. However, the rapid transformation of healthcare to align with Vision 2030 presents some intriguing challenges. Since they are under pressure to modify their methods while still providing high-quality care, many healthcare workers find skills training to be a challenging task. It is also essential to continue supporting components that directly improve MDTs by allocating resources to sustain higher patient safety outcomes. (Alshammari et al 2021)(Alotaibi et al, 2022)

Best Practices of Patient Safety

Hospitals in Saudi Arabia and other healthcare facilities worldwide are utilizing concepts from multidisciplinary teams as a groundbreaking tool to enhance patient safety. The fact that MDTs offer opportunities for the involvement of a wide range of professionals with the capacity to make better decisions is one of the key arguments for their creation. These teams fail to consider all patient needs, offer opportunities for collaboration, and do not tolerate minor errors. Multidisciplinary teams are a valuable tool for augmenting safety goals in Saudi hospitals, where the technical nature of many situations increases the likelihood of cross-specialty treatment. (Alshammari et al 2023)

Multidisciplinary teams in Saudi hospitals face certain obstacles; nevertheless, despite these challenges, their advantages will be covered in more detail below. Among the challenges are communication and language barriers, cultural differences within the team, and a lack of resources to complete the assigned duties and projects. (Alqahtani 2020) To optimize MDTs, they thus reiterate the necessity of implementing form-specific treatments. Saudi hospitals can provide multidisciplinary teams with the resources they need to enhance the safety and efficiency of healthcare facilities if these issues are addressed. When it comes to deploying multidisciplinary teams, the first important lesson is the need to establish clear protocols and identify the roles that each team member will play. (Alharbi 2021)

The issue with role blurring is that members of the care team may neglect or overlap crucial activities, endangering patient safety and coordination. To improve the cleanliness of carrying out care coordination responsibilities as designated by various team members to accomplish planned objectives, it can be easier for each MDT team member to understand their accountability when structural protocols and professional standards for MDT working protocols are implemented. Several protocols also help establish a cordial atmosphere and reduce verbal misunderstandings that may arise during meetings. For example, multidisciplinary teams function more effectively when meeting protocols are followed, such as creating a timetable, establishing clear goals, and allocating tasks. Since the majority of healthcare workers operate under pressure, such procedures are crucial for Saudi hospitals. (Alshammari et al 2022)

In addition to increasing mutual respect, role clarity facilitates trust among group members. People are more inclined to put

in more effort and discuss the patient's outcomes if they understand how they can benefit both themselves and other team members. Such a strategy is crucial when addressing a wide range of issues in the modern healthcare setting. (Aljohani et al 2024)

Major Challenges and Barriers

Saudi Hospital offered qualified people capital with multicultural and linguistic backgrounds who operate in the medical field. Such diversity, on the one hand, adds a wide range of viewpoints and abilities to the healthcare system, but it also poses a significant challenge for multidisciplinary teams. These differences may lead to interpersonal conflict, information misinterpretation, and slowdowns in teamwork. Companies may only overcome the aforementioned obstacles by investing in training programs that focus on communication and/or culture. Through cultural awareness exercises, team members can be assured of embracing their individual uniqueness and valuing the diversity of their teammates. (Alqahtani 2022)

Members who receive team communication training learn how to listen and express themselves clearly, which reduces the number of conflicts caused by poor communication channels. To be sure, there are other ways to make practical adjustments that will help all members of multidisciplinary teams communicate. Consistency in language usage during team meetings, for instance, may restrict decision-makers' ability to use other languages; in the Saudi healthcare system, English is the most commonly used language. To increase the coherence and efficacy of the information being communicated, they should also mandate the use of organized checklists and electronic tools for staff communication. Hospitals in Saudi Arabia will establish effective multidisciplinary teams and function as cohesive units if these issues are resolved. (Alotaibi 2023)

The implementation of MDTs in Saudi hospitals has certain disadvantages despite their many benefits. The bureaucratic nature of healthcare organizations and the degree to which this environment restricts rather than promotes innovative thinking and unrestricted information sharing among colleagues are two of the practice setting's biggest problems. It is common knowledge that multidisciplinary teams seek to leverage diverse ideas and methodologies; nevertheless, junior team members are unlikely to voice their concerns. The complexity of MDT is a result of the cultural diversity of Saudi healthcare workers. Communication is often a concern in these workplaces, where the majority of linguists and cultural experts operate. Ineffective communication and decision-making in multidisciplinary teams are caused by linguistic and cultural perception gaps between team members.

7. CONCLUSION

Patient safety in Saudi Arabian hospitals can be greatly enhanced by the use of diverse, interprofessional teams. Therefore, MDTs provide a wider range of consultation, and better decision-making results from combining various areas of knowledge. Additionally, it demonstrates that establishing a multidisciplinary team may be a means of enhancing patient safety in Saudi hospitals, which are aimed at achieving Vision 2030. Although these initiatives have improved overall clinical and patient-related outcomes, it is crucial to address the challenges outlined in this research to preserve the efficacy of the initiatives. As Saudi Arabia's healthcare system continues to evolve, MDTs will be crucial in achieving safety and quality objectives. Expanded and sustained investment in technology, standardization, and MDT training can unleash the full potential of the healthcare system, delivering safer, better care for everyone.

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