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# Healthcare services in Palestine, overcoming the challenges and opportunities for improving quality of medical care: A narrative review

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Review Article

## **ABSTRACT**

Palestinians face significant challenges in accessing quality healthcare due to various factors, including a shortage of medical professionals and facilities, inadequate infrastructure and equipment, political unrest, and violence. Despite efforts to reform the healthcare system, many Palestinians continue to struggle to obtain decent healthcare. This study conducted a narrative review using qualitative data collection methods to analyze the difficulties and possibilities for improving healthcare resources and services in Palestine. The research examined the current state of healthcare resources and services in Palestine and identified the primary challenges to expanding access to high-quality healthcare. These results align with the review's goals by identifying areas that require enhancement to improve healthcare access and quality in Palestine. A narrative review of 18 articles revealed that Palestine's healthcare system requires significant improvements in many areas, such as infrastructure, financing, and governance, to address the existing issues. The formation of primary healthcare clinics increased financing for medical care, and the development of healthcare infrastructure and funding emerged as potential remedies for enhancing the healthcare system in Palestine. Substantial advancement in healthcare infrastructure, financing, and governance are necessary to ensure Palestinians have access to the healthcare services they need to thrive. Our study emphasizes the importance of addressing the challenges faced by the Palestinian healthcare system and highlights potential opportunities for improvement. By implementing the suggested remedies, policymakers and stakeholders can work towards enhancing the quality and accessibility of healthcare services in Palestine.

## INTRODUCTION

Ensuring access to quality healthcare is crucial for any population's well-being and prosperity. However, in Palestine, numerous obstacles hinder the achievement of equitable and effective healthcare services.¹ Palestinians encounter significant challenges in obtaining adequate healthcare, including a lack of medical professionals and facilities, and the impact of political unrest and violence. Despite attempts to reform the healthcare system, many Palestinians still face difficulties in accessing satisfactory healthcare.² Challenges in Palestine's healthcare system have extensive consequences, affecting health outcomes and quality of life for individuals and communities. Urgent action is necessary to assess current healthcare resources, pinpoint critical challenges, and seek potential remedies. Despite continuous efforts to enhance the system, a notable portion of Palestinians still grapple with limited access to essential healthcare services.³

Recent advancements in health and the global healthcare infrastructure have underscored the necessity for enhancements and progress within the Palestinian healthcare system, despite its classification and inclusion among low and middle-income countries.<sup>4</sup> In low- and middle-income countries, a significant obstacle to the success of initiatives is the need for more integration of primary healthcare. Despite notable achievements, many of these nations



expressed concerns that the Millennium Development Goals (MDGs) might still need to be met by 2015.5

The global health system has grown substantially in recent decades, with financial, climate, and food crises significantly impacting health. Assessing the performance of the healthcare system plays a pivotal role in driving improvements, given that healthcare stands as one of the foremost objectives of any developed society.<sup>6</sup> The World Health Organization (WHO)'s objective is to enhance health equity and address the fundamental determinants of health.<sup>7,8</sup>

Palestine, located in the Middle East and North Africa (MENA) region, includes the territories of the West Bank (WB), Jerusalem, and the Gaza Strip (GS). Its population is 4.8 million, among whom 42% are officially registered refugees.<sup>2,4</sup> In recent decades, Palestinians have witnessed a rapid epidemiological shift, renowned for the rising prevalence of noncommunicable diseases (NCDs) like cardiovascular disease (CVD), diabetes, cancer, and additional conditions with difficulties in access to primary healthcare.<sup>9</sup> Palestinian medical and public health institutions face considerable challenges due to limited financial resources and inadequate research infrastructure. Despite these hurdles, research is actively promoted and linked to academic progression. Addressing these challenges requires increased investment in research infrastructure and fostering international collaborations to enhance the quality and impact of Palestinian research efforts.<sup>10</sup>

Even with improvements to the healthcare system, many Palestinians still need help getting access to high-quality treatment. It resulted in several issues, including a lack of healthcare workers and facilities, poor infrastructure and equipment, and political unrest and violence, which may interfere with delivering and accessing healthcare. Furthermore, a large number of Palestinians find it challenging to pay for healthcare services owing to the high prices of medical care and the scant availability of health insurance. The Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) scale, formulated by the Agency for Healthcare Research and Quality (AHRQ), is widely acknowledged and extensively employed. It has garnered endorsement from the Centers for Medicare and Medicaid Services in the USA.

As per data from the Palestinian Central Bureau of Statistics, Palestinians encounter significant levels of poverty and unemployment, with rates standing at 16% in the West Bank (WB) and 47% in the Gaza Strip (GS). However, economic conditions are comparatively more favorable in the WB than in the GS. Consequently, individuals in the WB have superior access to quality hospitals outside of Palestine. This report seeks to assess the existing status of primary healthcare in Palestine and recommend strategies for improving access to quality basic healthcare services. It will analyze the challenges inherent in delivering such services and propose viable solutions. Furthermore, the report will delineate specific strategies to enhance and develop access to high-quality primary healthcare within the nation, concluding with actionable recommendations for Palestine to bolster and broaden access to exemplary primary care. The proposed solutions aim to bolster the healthcare system in Palestine and enhance accessibility to healthcare services of superior quality. This review was conducted to evaluate the present condition of healthcare services in Palestine and pinpoint the obstacles and potentials for enhancing medical care quality.

## METHODS Search strategy

An electronic search was conducted in 2015-2022 to identify pertinent literature on healthcare services in Palestine. This approach employed Medical Subject Headings (MeSH) terms and freely selected keywords associated with Palestinian healthcare, challenges, opportunities, and quality improvement. We explored databases like PubMed, Scopus, and ScienceDirect using the keywords "Palestine", "Gaza", "West Bank", "Health System", "Health Services", and "Key Health Care".

## **Data collecting**

Once the initial search was completed, the researchers used a standardized data extraction form to collect essential information from each relevant study. This approach helped ensure consistency and accuracy in the data collection process. The review relied on freely available and publicly accessible secondary data sources, with two independent reviewers conducting the data extraction to maintain precision and reduce the risk of bias. Our search was limited to Englishlanguage publications, focusing on recently published materials.

#### Exclusion and inclusion criteria

The inclusion criteria for the studies were that they had to be relevant to Palestinian healthcare services, the healthcare system, medical care, and quality of care, published in English, and publicly accessible and freely available. Two independent reviewers were involved in the data extraction process to ensure consistency and accuracy and to reduce the risk of bias. A total of 360 records were obtained from various sources, and after initial exclusions for duplicates, 122 reports were assessed for eligibility. Further exclusions were made based on different outcomes, study designs, non-English language, and accessibility criteria (non-open access), and articles do not relate to health care and health services, with the final selection process aimed at including articles that directly addressed the challenges and opportunities for improving healthcare resources and services in Palestine. The selection flowchart is presented in Figure 1.

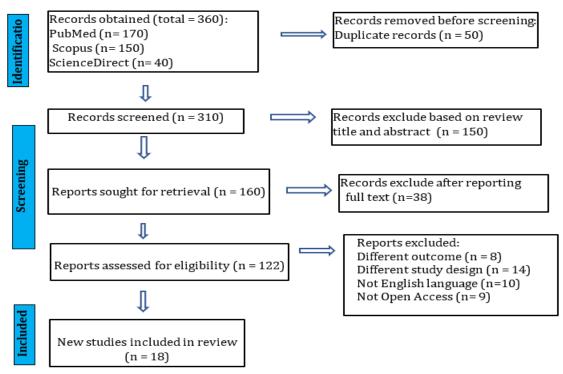


Figure 1: Literature search result

#### **RESULTS**

The healthcare system in the Occupied Palestinian Territories (OPT) is influenced by the unstable political environment in which it functions. The OPT contends with persistent conflict and economic difficulties. Recently, initiatives aimed at bolstering the capabilities of the Palestinian public healthcare sector have emerged, resulting in several reforms. These reforms have received substantial support from international contributions. Palestine is one of the 50 nations with active conflicts worldwide. Over the past three decades, these conflicts have influenced civilian health needs access as well as the quality of life for Palestinians through insecurity and unequal access to all services and health care. The development of the

Palestinian health system can be divided into four notable periods, overseen successively by the Department of Health during British colonial rule, Egypt in Gaza and Jordan in the WB, and Israel starting from 1967. The Palestinian Authority (PA) and the existing Ministry of Health were established in 1994, while internal refugees have been cared for by UNRWA (United Nations Relief and Works Agency for Palestine Refugees in the Near East).<sup>14</sup>

Initially, health research in Palestine was conducted to address the needs of the Palestinian community and to produce evidence supporting the development of independent and well-informed health policies. However, the majority of resulting research studies remain unpublished reports. Nowadays, the primary healthcare organizations in Palestine include the Ministry of Health, UNRWA, and Palestinian Red Crescent. The UNRWA, as a non-governmental organization, primarily delivers tertiary primary care services, mainly in East Jerusalem, and to a lesser extent, secondary care services, along with some primary healthcare services to Palestinian refugees. 15

The Palestinian Ministry of Health is the primary healthcare provider, encompassing hospital care, and it bears the most significant responsibility for addressing the ongoing rise in demand for healthcare services.<sup>13</sup> Similar to other countries, Palestine struggles with a lack of funding and inadequate research infrastructure, which makes it challenging to allocate appropriate funds for the advancement of health research and to empower the Palestinian people to create autonomous and knowledgeable health policies.9 The Middle East peace process appeared to end the conflict between Israelis and Palestinians, but the facts on the ground suggest otherwise. Since 1994, the Palestinian Ministry of Health has managed public healthcare providers in the WB and GS, non-profit organizations, and for-profit commercial health entities, and the UNRWA remains active in delivering healthcare services. 4,16 International aid has supported the ongoing reform initiatives to restore the providers' capability.<sup>17</sup> Palestinians in the WB and GS face many obstacles when trying to obtain medical care due to problems and obstacles, including Israeli movement restrictions, Palestinian conflicts between the two parts of the country, insufficient health financing, health infrastructure problems, and insufficient health training programs, which leads to an increase in stress and negative repercussions.9 Israel's dominance over Palestine is upheld (and heightened) through an international aspect that involves restricting access to colonial territories alongside a "domestic" dimension characterized by permits and infrastructure segregation that regulate movements within these areas, particularly within medical settings.<sup>18</sup>

The situation remains intricate and demanding, characterized by heightened isolation and stricter constraints on movement observed between the WB and GS and among cities within the WB. Palestinians encounter restrictions on their mobility between various areas within the OPT. Presently, Israelis retain authority over critical infrastructure elements such as water, electricity, borders, and transportation, while Palestinians have limited self-governance over their affairs. This unique context influences the prioritization and execution of health policies.<sup>13</sup>

Established data analysis systems within departmental and hospital frameworks often need more coordination and efficient inter-connectivity, posing challenges in analyzing and interpreting patient outcomes, especially for specific populations or communities. While government hospitals have spearheaded the implementation of the Electronic Medical Record (EMR), there needs to be more comprehension regarding the achievements and efficacy of analogous information systems in private hospitals. Gaining insights into the advancements and implementation processes of EMR in various private hospital settings provides practitioners with valuable opportunities to learn lessons and deploy effective systems to bolster individual and community well-being.<sup>19</sup>

Public policies, laws and legal frameworks, social and economic systems, and political choices and procedures are all examples of structural determinants of health. However, these variables are often misunderstood and interpreted in terms of biology or behavior, which results in the loss of chances to enhance health outcomes. Furthermore, the Israeli-Palestinian conflict, directly and indirectly, affects the quality of life and health of Palestinians residing in East Jerusalem, including impeding their access to medical treatment and hindering their ability to utilize the ambulance service operated by the Palestinian Red Crescent.<sup>20</sup> The most current study

in Palestine looking at the lack of skills in the healthcare industry is the report done in 2015 discussing the Skills Gaps and Development in the Occupied Palestinian Territory.<sup>3,21</sup> The research report above delves into the skills gaps present in the Palestinian labor market, examining the severity of the issue, the skills held by employees and graduates, and the demands of the private sector. This study comprehensively analyzes the situation by triangulating stakeholder data and qualitative inputs from interviews and focus groups. It underscores the significant challenge posed by skills gaps in Palestine, as evidenced by the struggle of most business owners to fill job vacancies. Moreover, perceptual gap exists between employers, potential employees, and educational institutions regarding graduates' skill levels, indicating a substantial mismatch in the labor market. The report advocates for drawing lessons from ongoing private sector initiatives to streamline and standardize skills development endeavors while also stressing the necessity of establishing a neutral research center to investigate potential discrimination in skills development and employment practices.

Takruri et al. sought to evaluate how Palestinian patients perceived the services offered at both local and referred hospitals through the HCAHPS questionnaire. The HCAHPS questionnaire is a widely used scale developed by the Agency for Healthcare Research and Quality (AHRQ) and supported by the Centers for Medicare and Medicaid Services in the USA, assesses six critical aspects of patients' hospital experiences, including communication with healthcare providers, staff responsiveness, hospital environment cleanliness and quietness, medication communication, and discharge information. It consists of 19 core questions focusing on patient care experiences, covering sociodemographic variables in the first part and specific care-related questions in the second part. Responses are recorded on a 4-point Likert scale and then dichotomized for analysis, providing valuable insights into patient perceptions of hospital care quality. It found that, generally, Palestinian patients' hospital experiences were moderate but showed notable differences depending on factors like gender, health status, financial situation, place of residence, and type of hospital. The findings suggest that female participants, individuals in good health, those with better financial means, residents of Gaza, and those seeking medical care outside of Palestine reported higher HCAHPS scores.

One of the study's key findings is the classification of the skills deficiencies for both management and administrative staff. The government healthcare sector has a centralized policy in its managing practices. Hence, the researchers chose the private sector to study the effect of management practices in improving service quality in Palestine. Ensuring the highest patient satisfaction with services would enhance the organization's financial success. Another interpretation, rooted in US concepts, highlights the significance of Total Quality Management (TQM) as a management approach. Understanding the current condition of primary healthcare in Palestine and devising measures to enhance access and quality require research. The implementation of EMR is considered a promising IT approach for improving healthcare quality. The EMR system's capacity to handle a large volume of information and data within the healthcare system addresses various requirements across clinical, organizational, and healthcare administration domains. As health objectives evolve, the importance of adaptive systems grows. Most healthcare providers find convenient access to medical records through EMR highly beneficial. While the significance of EMR in clinical settings is paramount, the technological demands for health information are continuously advancing.

According to the researchers, the quality of medical and health reports in Palestine has improved but still needs to improve to meet satisfactory standards. Insufficient documentation contributes to research inefficiency in Palestine, where resources for health research are minimal. Palestine cannot afford to allocate resources to subpar medical and health research. Palestinian research institutions and researchers need to prioritize minimizing waste and enhancing the value of their research efforts. The challenges faced by Palestinian researchers in achieving optimal research quality include limited resources for research, difficulties in publishing historical works, inadequate attention given to reducing waste, and the crucial need to adhere to international reporting guidelines. While there has been some progress, most reports still lack sufficient reporting and fail to meet all the necessary criteria. Those conditions

emphasize the ongoing obstacles that Palestinian researchers encounter.<sup>24</sup> It is essential to address these issues by improving reporting standards, allocating more resources to research, and promoting adherence to international guidelines. These measures are necessary to enhance the quality of medical and health reports from Palestine and bring them up to acceptable standards in the field. In recent years, there has been significant growth in the adoption of EMR in medical practice. The EMR provides a valuable opportunity to improve patient surveillance and evaluate service provision, potentially leading to advancements in health policy and promotion. This technology-driven improvement has enhanced information flow and streamlined coordination among patient care teams.<sup>19</sup>

One of the prominent challenges in the healthcare system in Palestine is the significant impact of political and economic unrest on its functionality. Healthcare services are often subpar, and medical supplies and equipment are lacking due to financial restrictions. Many individuals now lack access to healthcare due to the devastation of healthcare facilities brought on by the region's violence. It is becoming more challenging to import necessary medical equipment and supplies due to the continuing siege in Gaza. Secondly, the infrastructural and resource challenges, the Palestinian healthcare system also faces infrastructural and resource challenges. There is a shortage of trained healthcare professionals, including doctors and nurses, and many Palestinian healthcare workers lack access to essential training and education opportunities. Moreover, there is a lack of medical infrastructure, including modern medical equipment and facilities.

The third one is challenges in health education and awareness. Another significant issue is the Palestinian population's low levels of health education and awareness. Many patients lack a fundamental understanding of health-related topics, which prevents them from taking preventive actions and causes them to ignore chronic disorders. Healthcare professionals also struggle to communicate with non-Arabic-speaking patients, which may lead to incorrect diagnoses and treatment. Fourthly, the deficiency of medical professionals, particularly specialists, is further compounded by restrictions imposed by the Israeli occupation, which hinder freedom of movement and access to educational and training opportunities. 12,13,17

Consequently, healthcare professionals often have to work outside their areas of expertise, resulting in less-than-ideal patient outcomes. The last issue is the fragmentation of the healthcare system in Palestine, which significantly intensifies the difficulties encountered by healthcare professionals. Coordinating and allocating resources pose challenges due to the fragmentation of the healthcare system among the Ministry of Health, non-governmental organizations, and private healthcare providers. However, patient satisfaction during hospitalization relies on a harmonious balance between their perceptions and expectations. Patient experiences encompass multiple factors, such as waiting times, the quality of care received from admission to discharge, and communication with the healthcare team. In assessments of hospital services in Cameroon, patients primarily emphasized the importance of both the technical proficiency and interpersonal abilities of the healthcare team. 12,13

There are serious issues with Palestine's healthcare system that must be addressed immediately. A coordinated effort by the PA, healthcare providers, and foreign partners will be needed to address these issues. The healthcare system in Palestine may enhance the standard of medical treatment and better meet the needs of the Palestinian people by taking advantage of chances for innovation and cooperation.<sup>3,16</sup>

There are several issues facing Palestine's healthcare system, all needing quick attention. The biggest challenges to delivering high-quality healthcare are a need for more medical staff and resources, poor infrastructure, and unstable political environments.<sup>2,11</sup> However, there are ways to improve, such as using technology and forming global alliances. We will explore these issues and possibilities in this discussion area and propose ideas for enhancing Palestine's healthcare system. Some suggestions from researchers and opportunities were made for improving the quality of medical care in Palestine in light of the local environment.

## Leveraging technology and innovation

JKKI 2025;16(1): 105-116

Using cutting-edge technology and innovation is one of Palestine's most important options for enhancing medical treatment. Patients who live in isolated or obstructed locations may now have remote access to medical treatment because of telemedicine. People needing medical treatment may get it thanks to cutting-edge techniques like telemedicine, point-of-care diagnostics, and mobile clinics. In the Palestinian context, utilizing technology and innovation is essential for improving medical treatment.<sup>3</sup> Moreover, prioritizing innovative methods such as point-of-care diagnostics and mobile clinics is stressed to enable those requiring medical assistance to access it, notwithstanding the challenging local circumstances. The harsh living conditions endured by many Palestinians, encompassing issues such as unemployment, inadequate infrastructure, and the enduring effects of ongoing conflict, have erected substantial obstacles to obtaining quality healthcare.<sup>21</sup> Given this scenario, incorporating technology and innovation into healthcare is a promising approach to surmounting some of these hurdles and enhancing the overall standard of medical services in Palestine.

## Improving healthcare workforce development

Initiatives to strengthen the healthcare workforce could significantly benefit the Palestinian healthcare system. One approach to enhance this involves increasing the number of skilled healthcare professionals. Establishing medical education programs tailored to the local context, such as nursing and medical technician training courses, could be crucial in developing a competent and sustainable healthcare workforce.<sup>25</sup> These programs would not only tackle the shortage of qualified personnel but also provide individuals with the specialized skills necessary to navigate the unique challenges of delivering healthcare in Palestine's intricate environment. By investing in workforce development, the Palestinian healthcare system can enhance its capacity, improve service delivery, and ultimately raise the standard of medical care accessible to its population.<sup>3</sup>

## Strengthening primary healthcare services

The Palestinian healthcare system must be improved, especially primary healthcare services. Providing patients with access to basic healthcare services may aid in preventing chronic illnesses, early detection of health issues, preventative treatment, and disseminating health information. It is vital for improving the overall quality of medical care, which requires investing in infrastructure and resources to equip staff facilities, particularly in undeserved regions. Prioritizing preventive measures like vaccinations and screenings to reduce chronic illnesses and detect health issues early is crucial. Health education initiatives are also pivotal for empowering patients. Strengthening primary healthcare will enable Palestine to meet the healthcare needs of its population better and enhance health outcomes throughout the region. Primary healthcare is a fundamental component of the healthcare system, concentrating on preventive and curative services delivered at the community level. This approach is especially crucial in resource-limited settings like Palestine, where access to healthcare services can be constrained. Primary healthcare is broadly acknowledged as the cornerstone of an efficient and equitable healthcare system. The WHO has consistently advocated bolstering primary care as a critical strategy to achieve universal health coverage and enhance population health outcomes.<sup>26</sup> In the specific context of Palestine, multiple studies have underscored the significance of fortifying the primary healthcare system. A review by Giacaman et al. observed that the Palestinian primary care system grapples with substantial challenges, such as constrained resources, unequal distribution of services, and fragmentation of care. Bolstering this system can potentially enhance access to essential health services, especially for vulnerable populations within Palestine.15

Furthermore, the study authors argued that expanding the breadth and quality of primary healthcare services in Palestine could help alleviate the burden of both communicable and non-communicable diseases. These conditions could lead to improved overall health outcomes and reduced healthcare costs. In a separate study, it was found that investment in primary care within

Palestine holds the potential to generate substantial health and economic benefits.<sup>27</sup> Strengthening the primary healthcare system in Palestine can yield numerous benefits. It can lead to improved health outcomes by addressing the population's needs at the community level, focusing on prevention and early intervention. This approach has proven effective, especially in resource-constrained settings like Palestine. Improved access to healthcare services is another key advantage, as primary care facilities are typically more accessible and closer to communities, making it easier for people to receive timely and appropriate care - a critical consideration given the geographical and financial barriers to healthcare access in Palestine.<sup>3</sup> Primary healthcare also encourages community engagement and participation in healthcare decision-making, fostering a sense of ownership and responsibility and contributing to better health outcomes and more effective healthcare systems. Furthermore, primary care is generally more cost-effective than specialized care, emphasizing prevention and early intervention rather than expensive treatments, an essential factor in resource-limited contexts like Palestine. Therefore, key priorities for bolstering primary healthcare in the country include increasing funding, improving infrastructure, enhancing human resources, and promoting community participation through education and empowerment initiatives.<sup>25, 28</sup>

# Increase funding for the healthcare system to improve infrastructure

To enhance the quality of medical care in Palestine, researchers suggest increasing funding for the healthcare system, focusing on improving infrastructure and expanding the medical workforce, which involves modernizing existing healthcare facilities to ensure they have state-of-the-art technology and resources.<sup>25</sup> Additionally, addressing the shortage of medical personnel requires hiring more doctors, nurses, and other healthcare professionals. The PA must allocate a significant portion of the national budget to healthcare and seek financial support from other nations and international organizations. Collaborative efforts to secure funding and expertise from external stakeholders are crucial for strengthening the healthcare infrastructure and ultimately improving access to quality medical care for Palestinians.<sup>1</sup>

## Promoting coordination and collaboration

Researchers propose enhancing the quality of medical care in Palestine by promoting coordination and collaboration among non-governmental organizations (NGOs), private healthcare providers, and the Ministry of Health. This involves establishing a centralized health information system to improve communication and resource distribution. Such a system would facilitate seamless information exchange among healthcare stakeholders, leading to better coordination of patient care and more efficient resource allocation.<sup>3</sup> By fostering collaboration across different sectors of the healthcare system, tailored and comprehensive healthcare strategies can be developed to address the unique needs of the local population. Through collective efforts, leveraging expertise and resources from various entities, significant improvements in medical care delivery can be achieved, ultimately benefiting the people of Palestine.<sup>25</sup>

## **International partnerships**

International partnerships offer promising opportunities to enhance the quality of medical care in Palestine, given the unique challenges of the local environment. These partnerships provide avenues for improvement, including access to training and education programs for healthcare workers.<sup>7</sup> By collaborating with international organizations and institutions, healthcare professionals in Palestine can gain valuable skills and knowledge to improve patient care and outcomes. Additionally, international partnerships may provide financial assistance for essential initiatives such as renovating healthcare facilities, acquiring medical supplies and equipment, and addressing critical infrastructure and resource gaps.<sup>15</sup>

#### **Implement EMR system**

All participants unanimously concurred that the system would streamline operations,

enhance efficiency, foster seamless communication between departments, bolster accuracy and security, and lead to cost savings. They emphasized its superiority over manual record-keeping systems and its potential to elevate patient care. Additional advantages of EMR mentioned included reclaiming space previously occupied by manual records. Respondents affirmed that the EMR system enhances patient data confidentiality by specifying user permissions and access levels.<sup>21</sup> Furthermore, these collaborations can facilitate joint research projects, enabling the exchange of expertise and innovative ideas to address healthcare challenges effectively. Moreover, international partnerships can assist in developing evidence-based rules and regulations, ensuring that healthcare practices align with international standards and best practices. By leveraging international partnerships, Palestine can significantly enhance the quality of medical care available to its population, ultimately improving health outcomes and well-being across the region.

Overall, the difficulties confronting Palestine's healthcare system are many yet manageable. Although there are many challenges to be addressed, like a lack of medical experts and resources, poor infrastructure, and unstable political conditions, there is also potential for advancement, including technological advances and international collaborations. The system of healthcare in Palestine may be improved to provide the Palestinian people with better medical treatment by taking on these issues and making use of these chances. To put these recommendations into action and raise the standard of healthcare in Palestine, the PA, healthcare organizations, and foreign partners must collaborate. We can guarantee that all Palestinians have the opportunity to utilize high-quality healthcare and financial assistance by working together. 10,29

The UN Development Assistance Framework for Palestine 2018-2022 highlights the significance of enhancing healthcare infrastructure and services. <sup>14</sup> This aligns with the study's findings, emphasizing the imperative for significant progress in healthcare infrastructure to tackle the existing challenges in the Palestinian healthcare system. <sup>13</sup> The research emphasized the necessity of efficient reform in public hospitals in the WB to tackle healthcare challenges in the region, which also emphasized the need for significant advancements in healthcare infrastructure and governance to address the problems facing the Palestinian healthcare system. To sum up, the review's findings align with current regulations, standards, and other research concerning the healthcare system in Palestine. The identified challenges and suggested solutions correspond with the priorities outlined in the United Nations Development Assistance Framework and the research conducted by Sultan and Crispim. <sup>13</sup> By aligning with existing regulations, standards, and research, the study's findings emphasize the urgent need for comprehensive improvements in the Palestinian healthcare system to ensure the population's access to high-quality medical care.

## CONCLUSION

This narrative review underscores the array of challenges plaguing Palestine's healthcare system, spanning from insufficient infrastructure and medical supplies to a dearth of skilled medical staff, all compounded by socioeconomic and political complexities. It stresses the urgent need to confront these multifaceted issues through collaborative, innovative, and evidence-based approaches prioritizing patient involvement and the delivery of top-tier healthcare services. This review outlines critical strategies for fortifying the Palestinian healthcare framework, including augmenting funding for infrastructure enhancement, attracting and retaining proficient personnel, and harnessing emerging technologies. It also emphasizes the significance of stakeholder cooperation in fostering community engagement, crafting sustainable health policies, and forging global alliances. Crucially, the review advocates for heightened emphasis on patient education, communication, and empowerment in their healthcare journey, alongside further research to comprehend healthcare provider perspectives and explore alternative quality metrics tailored to the Palestinian context.

## **CONFLICT OF INTEREST**

No conflict of interest.

#### REGISTRATION AND PROTOCOL

None

## **ACKNOWLEDGMENTS**

We express our gratitude to the institutions and organizations that supported and provided resources for this study, enabling us to investigate and address the challenges and opportunities in healthcare services in Palestine to enhance the quality of medical care.

## DATA AVAILABILITY STATEMENT

The data are available upon request due to political and unstable conditions in the area of research; for requesting data, please contact doaaramlawi94@gmail.com.

## SUPPLEMENTARY MATERIAL(S)

None

## **AUTHOR CONTRIBUTIONS**

All authors contributed equally to this manuscript. All authors read and approved the final manuscript. DAR wrote and revised the manuscript, IDAN reviewed and evaluated it, and RAN reviewed, evaluated, and designed the research.

## DECLARATION OF USING AI IN THE WRITING PROCESS

The authors didn't use AI in this article at any step of writing or others.

#### LIST OF ABBREVIATIONS

MDGs: Millennium Development Goals; WHO: World Health Organization; MENA: Middle East and North Africa; WB: West Bank; GS: Gaza Strip; LMICs: low- and middle-income countries; NCDs: noncommunicable diseases; CVD: cardiovascular disease; HCAHPS: Hospital Consumer Assessment of Healthcare Providers and Systems scale; AHRQ: Agency for Healthcare Research and Quality; MeSH: Medical Subject Headings; OPT: Occupied Palestinian Territories; PA: Palestinian Authority; UNRWA: United Nations Relief and Works Agency for Palestine Refugees in the Near East; EMR: Electronic Medical Record; TQM: total Quality Management; NGOs: non-governmental organizations.

## REFERENCES

- 1. Waterston T, Nasser D. Access to healthcare for children in Palestine. BMJ Paediatrics Open. 2017;1(1):e000115. DOI:10.1136/bmjpo-2017-000115.
- 2. Vitullo A, Soboh A, Oskarsson J, Atatrah T, Lafi M, Laurance T. Barriers to the access to health services in the occupied Palestinian territory: A cohort study. Lancet. 2012;380:S18–9. DOI:10.1016/S0140-6736(13)60200-7.
- 3. AlKhaldi M, Basuoni A Al, Matos M, Tanner M, Ahmed S. Health technology assessment in high, middle, and low-income countries: New systematic and interdisciplinary approach for sound informed-policy making: Research protocole. Risk Manag Healthc Policy. 2021;14:2757–70. DOI:10.2147/RMHP.S310215.
- 4. Leone T, Alburez-Gutierrez D, Ghandour R, Coast E, Giacaman R. Maternal and child access to care and intensity of conflict in the occupied Palestinian territory: A pseudo-longitudinal analysis (2000–2014). Confl Health. 2019;13(1):36. DOI:10.1186/s13031-019-0220-2.
- 5. Druetz T. Integrated primary health care in low- and middle-income countries: A double challenge. BMC Med Ethics. 2018;19(Suppl 1):48. DOI:10.1186/s12910-018-0288-z.
- 6. Ratkevičienė M. Legal framework for the training of health care specialists in the health care system of Lithuania to work with the disabled. Acta Educationis Generalis. 2020;10(2):150–61. DOI:10.2478/atd-2020-0015.
- 7. Hays RB, Ramani S, Hassell A. Healthcare systems and the sciences of health professional education. Adv Health Sci Edu Theory Pract. 2020;25(5):1149-62. DOI:10.1007/s10459-

- 020-10010-1.
- 8. Menon R. Preterm birth: A global burden on maternal and child health. Pathog Glob Health. 2012;106(3):139–40. DOI:10.1179/204777312X13462106637729.
- 9. Albarqouni L, Elessi K, Abu-Rmeileh NME. A comparison between health research output and burden of disease in Arab countries: evidence from Palestine. Health Res Policy Syst. 2018;16(1):25. DOI:10.1186/s12961-018-0302-4.
- 10. Albarqouni L, Abu-Rmeileh NM, Elessi K, Obeidallah M, Bjertness E, Chalmers I. The quality of reports of medical and public health research from Palestinian institutions: A systematic review. BMJ Open. 2017;7(6):e016455. DOI:10.1136/bmjopen-2017-016455.
- 11. Ravesteijn B, van Kippersluis H, van Doorslaer E. The wear and tear on health: What is the role of occupation? Health Econ. 2018;27(2):e69–86. DOI:10.1002/hec.3563.
- 12. Takruri A, Radwan M, El Jabari C, Nawajah I, Hassan S. Experiences of Palestinian patients with hospital services: A mixed-methods study. BMJ Open Quality. 2023;12(2). DOI:10.1136/bmjoq-2022-002118.
- 13. Sultan WIM, Crispim J. Measuring the efficiency of Palestinian public hospitals during 2010-2015: An application of a two-stage DEA method. BMC Health Serv Res. 2018;18(1). DOI:10.1186/s12913-018-3228-1.
- 14. Badwan N, Atta M. The impact of foreign aid on economic growth in Palestine: An empirical evidence. Asian Journal of Economics, Business and Accounting. 2021;21(5):99–114. DOI:10.9734/ajeba/2021/v21i530384.
- 15. Giacaman R, Khatib R, Shabaneh L, Ramlawi A, Sabri B, Sabatinelli G, et al. Health status and health services in the occupied Palestinian territory. Lancet. 2009;373(9666):837–49. DOI:10.1016/S0140-6736(09)60107-0.
- 16. Mardikaningsih R. Patient satisfaction based on quality of service and location. Journal of Islamic Economics Perspectives. 2022;4(1):31–7. DOI:10.35719/jiep.v4i1.60.
- 17. Sultan WIM, Crispim J. Are public hospitals reforming efficiently in west bank? Confl Health. 2018;12(1):44. DOI:10.1186/s13031-018-0180-y.
- 18. Griffiths M, Berda Y, Joronen M, Kilani L. Israel's international mobilities regime: Visa restrictions for educators and medics in Palestine. Territory, Politics, Governance. 2022;1–19. DOI:10.1080/21622671.2022.2095008.
- 19. Neirat D, Batran A, Ayed A. Development of an electronic medical records project for al-razi hospital in Palestine. J Public Health Res. 2023;12(4):22799036231217795. DOI:10.1177/22799036231217795.
- 20. Orr Z, Jackson L, Alpert EA, Fleming MD. Neutrality, conflict, and structural determinants of health in a Jerusalem emergency department. Int J Equity Health. 2022;21(1):89. DOI:10.1186/s12939-022-01681-w.
- 21. AlAstal AY. Emerging technological innovation in Gaza Strip municipalities: An entrepreneurial approach. Journal of Innovation and Entrepreneurship. 2023;12(1):27. DOI:10.1186/s13731-023-00293-0.
- 22. Daqar MA, Constantinovits M. The role of total quality management in enhancing the quality of private healthcare services. Problems and Perspectives in Management. 2020;18(2):64–78. DOI:10.21511/ppm.18(2).2020.07.
- 23. Mosleh M, Al Jeesh Y, Dalal K, Eriksson C, Carlerby H, Viitasara E. Barriers to managing and delivery of care to war-injured survivors or patients with non-communicable disease: A qualitative study of palestinian patients' and policy-makers' perspectives. BMC Health Serv Res. 2020;20(1):406. DOI:10.1186/s12913-020-05302-6.
- 24. Ayyat AJ, Abdullah MdF, Halim BBA. Challenges of human resource management in Palestine. The Journal of Management Theory and Practice. 2021;2(4):17–22. DOI:10.37231/jmtp.2021.2.4.122.
- 25. Jabareen H, Khader Y, Taweel A. Health information systems in Jordan and Palestine: The need for health informatics training. East Mediterr Health J. 2020;26(11):1323–30. DOI:10.26719/emhj.20.036.

- JKKI 2025;16(1): 105-116
- 26. Abuhaloob L, Petersen PE. Oral health status among children and adolescents in governmental and private schools of the Palestinian territories. Int Dent J. 2018;68(2):105–12. DOI:10.1111/idj.12345.
- 27. Mataria A, Khatib R, Donaldson C, Bossert T, Hunter DJ, Alsayed F, et al. The health-care system: An assessment and reform agenda. Lancet. 2009;373(9670):1207–17. DOI:10.1016/S0140-6736(09)60111-2.
- 28. AlKhaldi M, Meghari H, Alkaiyat A, Abed Y, Pfeiffer C, Marie M, et al. A vision to strengthen resources and capacity of the Palestinian health research system: A qualitative assessment. East Mediterr Health J. 2020;26(10):1262–72. DOI:10.26719/emhj.19.096.
- 29. AlKhaldi M, Abed Y, Pfeiffer C, Haj-Yahia S, Alkaiyat A, Tanner M. Understanding the concept and importance of the health research system in Palestine: A qualitative study. Health Res Policy Syst. 2018;16(1):49. DOI:10.1186/s12961-018-0315-z.