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Iraqi Health System: Structural Challenges and Reform Recommendations

Yamama Judaan Ali, Aisha Jafer Abdi, Esraa Ismail Yousif, Suraj Yousif Mohammed, Sajida Najeh Mohammed, Mohammed Nichirvan Mohammed, Helan Ramadhan Abdulrahman, Iman A. Jameel, Rondik Ahmad Ramadhan, Sufyan Elias Hajm, Yousif Hameed Ramadhan, Aywat Aziz Hussein and Ahmed A. Mosa *

Department of Clinical Sciences, College of Medicine, University of Zakho, Zakho, Kurdistan Region of Iraq.

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Abstract

Iraqi healthcare system, once a model in the Middle East, has deteriorated over the past four decades due to war, sanctions, political instability, and chronic underfunding. Despite constitutional promises of universal health coverage and considerable national wealth from oil revenues, Iraq continues to face profound challenges in access, quality, and equity of healthcare. This paper explores seven interlinked challenges undermining the country's healthcare delivery: deficits in primary care, human resources and dual practice, infrastructure and patient safety, governance and financing, health information systems, medical education and workforce production, and violence against healthcare providers. Drawing on recent evidence and reform efforts such as Health Resources and Services Availability Monitoring System (HeRAMS) and lessons from regional models like Turkey, the paper provides actionable recommendations aimed at rebuilding Iraq's health system into one that is equitable, resilient, and centered on primary healthcare.

Keywords: Healthcare; Iraq; Challenge; Recommendation; HeRAMS

1. Introduction

Iraqi health system was among the best systems in The Middle East. However, the system deteriorated over the last 40 years due to wars, sanctions, corruption and failure to be funded properly. The 2003 invasion along with mismanagement decimated Iraq's health care systems and infrastructure. Despite constitutional guarantees of universal access and substantial oil revenues, Iraq continues to have tremendous health system challenges, including access to care, quality of services, and equitable utilization that fails to meet the needs of individuals. The health system contains three main elements: (1) University affiliated medical schools, (2) private hospitals and clinics and (3) public general hospitals and primary healthcare (PHC) centers under the control of the Ministry of Health. Public facilities have weak resources, low staff morale, and extreme structural deficiencies. Private care is expensive, heavily unregulated, generates inequality and excessive use of health services (1-3).

This paper tackles the challenges of Iraq's healthcare system on seven fronts: basic care, health workforce, infrastructure and security, management and financing, health information systems, health training, and workers' welfare. It targets exclusively the issue of dual practice where doctors work shorter hours in public facilities and seek jobs in private clinics at higher pay, due the loss of the public system's efficiency.

* Corresponding author: Ahmed A. Mosa *

2. Overview of Iraq's healthcare system

Iraq's healthcare presents as a fragmented mixed system:

- University hospitals: Centers of tertiary care and medical education.
- Private clinics and hospitals: Catering mainly to those with ability to pay or private insurance.
- Public/governmental hospitals and primary healthcare: Hospitals intended to serve all citizens but constrained by funding, human resources, and management deficits. PHC centers remain underserved by providers and overlooked by policymakers. The WHO and Ministry of Health approved Basic Health Services Package (BHSP) formally outlines key PHC functions, but there is widespread under-implementation (1).

Dual practice in the country has made an issue for the system. Healthcare workers work part-time in formal public facilities, then proceed to private evening clinics to make their living (2).

Additionally, some of the essential infrastructure gaps include irregular water, sanitation, hygiene (WASH), and infection prevention-control (IPC) facilities throughout public PHC centers and hospitals (2). Governance and financing systems remain highly centralized, vulnerable to political interference and corruption. Budgetary priority for health is constrained by oil-price volatility and administrative inertia (3). Health information systems are emerging with the introduction of The Health Resources and Services Availability Monitoring System (HeRAMS) marking a shift toward data-driven planning (4).

Primary care is essential for good health for everyone, but in Iraq, it lacks enough support and attention. While the BHSP outlines the necessary services and staff, it has not been fully implemented. In addition, many care centers are unaware of the BHSP and the number of staff, available equipment, and medications differ across locations (1) .

3. Major challenges

Iraq's healthcare system continues to face complex and interrelated challenges that hinder its performance. This section highlights the key issues that must be addressed to enable meaningful and lasting reform.

3.1. Primary healthcare deficits

Large centers are overwhelmed with too many patients whereas smaller centers do not have enough patients. This imbalance leads to poor care leading doctors, especially those with specialized training, to prefer to work in large hospitals (5,6). As a result, smaller community health centers face staffing shortages. Remote areas receive even less assistance, with very few doctors experienced in general care. The quality of care for patients is lacking. Public health facilities have limited hours, there is no effective system to direct patients to the appropriate locations, there are no set appointment times, and individuals must decide on their own where to seek care. The healthcare providers are dissatisfied, with nurses feeling isolated and doctors believing they need more training (5,6).

3.2. Human resources and dual practice

The dual practice style has serious negative effects on public health. Studies from Kurdistan by RAND show that doctors work only 3-4 hours a day in public jobs and then move to their own, more profitable private work. Over 80% of doctors surveyed would prefer to stay in public work if the job setting and pay were better (2,3). Such a system harms the public health system and perpetuates inequality. It causes doctors to spend less time in public facilities, fails to provide adequate patient care, and reduces compliance with regulations. The two jobs highlight deeper financial and regulatory issues: insufficient pay, no rewards for good work, and weak oversight. Additionally, pay in the public sector remains low, regulations do not ensure doctors work the necessary hours, and compensation for later years does not reflect their performance, resulting in even less compliance. A vicious cycle begins where doctors do not provide good public care, sick people seek private care, and public facilities become even weaker (2,3).

3.3. Infrastructure, WASH and patient safety

Many large hospitals and health centers lack safe water, clean areas, and measures to prevent the spread of germs. The World Health Organization reports significant gaps in what hospitals require, such as proper tools, laboratories, and medication supplies in many locations it examined. Without these basic elements in place, the care provided falls short, staff become demoralized, and patients lose their trust (7).

3.4. Governance and financing

Iraq's health funding plan relies heavily on oil prices, which carries significant risks because of changing oil prices, slow administrative work, and unclear regulations. The health sector suffered greatly after the bans in the 1990s and the 2003 war, leaving it far below its previous level. Although public care is meant to be free, people often have to pay for it in private sector. Corruption and slow processes worsen these issues, causing inconsistent job opportunities and poor oversight of healthcare facilities. Health leaders find it difficult to turn ambitious plans into real actions in local areas.

3.5. Health information systems

The HeRAMS was launched in mid-2022, and had examined about 3,478 to 4,782 public health sites (with a goal of 5,205) by April 2023. This project was carried out by the WHO in Iraq. It explored various areas such as buildings, care provided, staff involved, and roadblocks. It made significant progress toward improving data availability. The next phase, Phase II in 2024 is designed to establish a technology system across federal and Kurdistan regions with support from the United Nations in Iraq (4).

3.6. Medical education and workforce production

In the 1980s, Iraq had the best medical schools in the Middle East. However, during the wars and united nation sanction and the sectarian tension after 2003, about 8,000 doctors stopping work; many died or left. Now, medical schools still use the old six-year plans with good trials to involve in modern teaching methods such as problem-based learning and studying in small groups. Persistent brain drains, low rural attraction, and imbalance between specialties and PHC provision create serious workforce challenges (8).

3.7. Violence against healthcare providers

Violence against healthcare workers getting worse in Iraq. Healthcare workers face threats and attacks from the families of patients if things go wrong. Such situations arise from deep flaws, such as poor facilities, inadequate staff, and overworked doctors. They damage trust, lead doctors to be overly cautious, and drive them to leave (9).

4. Recommendations

A comprehensive approach is essential to rebuild Iraq's health system and respond to its longstanding challenges. The following targeted recommendations address the seven main areas of concern.

4.1. Strengthening primary healthcare and referral systems

To improve the balance and quality of primary healthcare (PHC), the Ministry of Health should invest in expanding and equipping underused PHC centers, especially in rural and underserved areas. A national patient referral and triage system should be implemented to reduce overcrowding in tertiary centers and redirect non-urgent cases to PHC facilities. Family medicine, which is grossly overlooked, should be established as a core specialty in Iraq’s medical education, with incentives to attract general practitioners to rural and underserved regions. Additionally, community engagement programs and patient education initiatives should increase awareness about available PHC services and appropriate pathways to care (2,3).

4.2. Reforming dual practice and human resource policy

A key step to improve health care in Iraq is changing the policies for dual practice and managing public employees. It would be beneficial to implement strict work contracts for new medical graduates. These contracts should require them to dedicate all their work time to basic health care or public hospitals for three to five years before they can enter the private sector. We need to support this with pay that reflects their performance, commitment to the public, and changes in living expenses. A pay-for-work models in basic health centers could provide extra pay for attendance, accurate data sharing, patient satisfaction, and maintaining services. At the same time, we need stricter rules for assigning workers by offering better pay, housing, opportunities for career advancement, and ongoing medical training in rural areas to attract and retain staff there. Turkey gives a very successful example of transformation in the healthcare system. Turkey’s health transformation program banned dual practice by requiring healthcare providers to choose between public or private work. Such a reform led to the improvement in staffing and reduced absenteeism in public hospitals. It showed that with adequate pay and strict contracts, full-time public service is achievable (10).

4.3. Improving infrastructure, WASH, and infection control

An urgent national infrastructure audit should be conducted, using HeRAMS data to prioritize critical upgrades in WASH, and IPC in PHC and secondary hospitals. Funding mechanisms should prioritize basic facility readiness and essential equipment. Partnerships with international organizations can be leveraged for technical support and procurement. A national infection control policy should be enforced in all facilities, supported by regular training and inspection (7).

4.4. Enhancing governance and sustainable financing

Decentralization of health services should be gradually introduced, allowing local health directorates to allocate budgets and make decisions based on regional needs. A transparent health budgeting framework tied to performance indicators and population health metrics should be adopted. Additionally, a move toward health financing reform is necessary, including exploring social health insurance models to reduce out-of-pocket expenditures. Anti-corruption units and digital procurement systems can help minimize financial mismanagement and inefficiencies (11).

4.5. Scaling health information systems and data use

Expansion of HeRAMS must be institutionalized across all regions, including private sector integration, with a focus on interoperability, real-time monitoring, and health outcomes. Establishing an independent national health data center can consolidate data across sectors and support evidence-based policy-making. Continuous capacity building in health informatics for health workers is critical to sustain and utilize these systems effectively (4).

4.6. Reforming medical education and workforce production

Medical education should be updated to align with global standards. Curricula must prioritize general practice, public health, and preventive care. Scholarship and placement programs should incentivize medical graduates to serve in PHC settings. Residency programs must be restructured to reflect population health needs rather than urban-centric or specialty-heavy training. Brain drain can be addressed by offering clear career pathways, overseas training return agreements, and creating attractive research opportunities within Iraq (12).

4.7. Protecting healthcare workers and workplace safety

A national law criminalizing violence against healthcare workers must be passed and enforced. Hospital-based security units and hotlines should be developed to protect staff. Institutionalizing mental health support, debriefing protocols, and stress management for health workers is also essential. Enhancing communication with patients and families about realistic expectations and care protocols may also reduce misunderstanding and aggression (9).

5. Conclusions

Iraq's health system stands at a pivotal crossroads, burdened by decades of conflict, mismanagement, and systemic neglect. Yet it also holds potential for renewal. Addressing the entrenched issues, especially dual practice, workforce distribution, poor infrastructure, and weak primary care that requires evidence-based policy reforms, bold governance shifts, and sustained investments. Drawing on successful regional models like Turkey and leveraging partnerships with global institutions such as WHO, Iraq can rebuild a more equitable, efficient, and people-centered health system. The path forward demands political will, public trust, and a commitment to long-term reform that places health equity and system resilience at its core.

Compliance with ethical standards

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Authors' contributions

All authors have substantially contributed to the concept and writing of the manuscript, and approved the final version to be submitted, and take full responsibility for all aspects of the published paper.

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