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# Understanding the State of Health Care in Iraq: *Post-2003 Invasion Scenario*

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## 1. INTRODUCTION

Health systems suffer a heavy toll in fragile and conflict affected states, and Iraq is an exemplifying case[i]. An oil rich, land-locked nation in the West Asian continent, Iraq has a population of 34.81 million spread over 435,052 sq km. With a GDP of USD 220.5 billion and per capita income of USD 6320, Iraq ranks among upper middle income countries of the world[ii]. However over three decades of war, sanctions and occupation have collectively shaped the social realities of contemporary Iraq. Once known as the 'Cradle of civilisation', the modern-day identity of Iraq has come to be synonymous with al-Qaeda and Islamic State. Of all the areas affected by the internally driven as well as externally maneuvered chaos in Iraq, healthcare has taken the biggest hit; Iraq's health system has now lost its reputation as a leading regional force in 1970s**.** The eight year long Iraq-Iran war, which lasted from 1980 to 1988 killed half a million people on both sides and led to progressive diversion of funds away from the health sector.

The situation further deteriorated during the 1991 first Gulf war when public health budget was cut by 90% and the ensuing thirteen years of economic sanctions further crippled the health systems[iii]. The US government was aware in advance that the 1991 war would result in a profound public health crisis throughout the country. The human costs of disabling Iraq's civilian infrastructure were known in advance to the Pentagon. Partially declassified Defense Intelligence Agency assessments from January to March 1991 accurately predicted the onset of a public health crisis in Iraq. According to the first post-war U.N. mission, the 1991 Gulf war had caused 'apocalyptic damage' to the infrastructure and had reduced the country to 'the pre-industrial age.'[iv]

However a major blow came about with the US invasion of Iraq on March 20, 2003 which further dismantled the weak and fragile health sector. On the eve of US-led occupation of Iraq, the health system was weak, with non-functioning equipment, inadequate drug supplies, and fragile infrastructure.[v] Serious damages occurred from looting and destruction of facilities. Even though involvement of the occupying forces in the widespread looting and destruction remains uncertain, they were responsible for the medical infrastructure in the territories under their control. Broadly, the post invasion period witnessed structural changes towards a decentralised, private sector model along with increased financial investments in the health sector. After withdrawal of forces in 2012, Iraq witnessed internal instability, political unrest and upsurge in violence. Iraq became hotspot for terrorism and emergence of non-state actors. Though al-Qaeda was active in Iraq after 2003 US invasion, rise of Islamic State became a potent threat after 2013.

The country-wide averages of private and public hospitals, primary health clinics as well as physicians in the post-invasion period exhibited a promising scenario. However the performance of health indicators and access to healthcare services in different regions has remained unsatisfactory, thereby raising questions over the health policy. The objective of the paper is to analyse the changing trends in health indictors and geographical disparity in healthcare access, and understand medics' exodus as a gravest after effect of US-led invasion. The paper also aims to understand how average ratios of health indicators are used as a disguise by invasion forces to conceal the real state of health sector in Iraq. For the purpose of this study, health care access has been conceptualised in terms of three parameters-average access to primary health care clinics, public hospitals and private hospitals.1 Medics' exodus has been defined as movement of doctors within as well as outside Iraq in the post-occupation scenario and average ratio of physicians per 100,000 population has been used to understand the trends and pattern. The study depends on secondary sources. Published medical reports from Iraq's local sources as well as International sources were used. Statistics from both, WHO and Iraq Ministry of Health's have been used and statements by experts and diplomats have been quoted to establish the key argument.

[1] Due to paucity of data, this study will use data for the period 2003 and 2012. Updated data and statistical figures for 2014 are unavailable, thus analysis will mostly rely on the invasion period of 2003-2012.

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## 2. BRIEF HISTORICAL OVERVIEW

Basic understanding of episodic changes in performance of health care indicators explains how the health sector in Iraq has been compromised over years. Health-care data from WHO confirm that the Iraqi population-which in the 1980s was reported to have some of the best health indicators among the nations in the Middle East (West Asia) is paying a crippling price for the continuing violence, political infighting and widely acknowledged rampant corruption within the health system.[vi]

The history of formal health care system in Iraq began in early 1920s. In 1921 the first Directorate of Public health Services was formed which was upgraded to become a Ministry of Health in September of the same year. It was annexed in the following year to the Ministry of Interior as a Directorate. In 1952, the Ministry of Health was re-established and its organizational structure was formalized in 1959. The organisational structure of health system in Iraq, formalised in 1970s, operates at two main levels: the Ministry of Health as a central planning level, and the Directorates of Health as a local administrative level in each governorate. In 1981, a Public Health Law was enacted which stated that health is a right for each citizen and the responsibility of the state to provide all means to promote health prevent and treat diseases. In 1992, a separate Ministry of Health was established for the Kurdish Regional Government, based on similar basic organisational structure and system of the Iraq's Ministry of Health.[vii] By and large, most health resources were concentrated in Baghdad and the health structure of Iraq largely assumed the configuration of a centralised model focused on hospitals and curative care, providing free universal coverage.[viii]

With the US invasion of Iraq, a systemic structural shift towards decentralised model was proposed with ample scope to accommodate private sector as a player in health care sector along with the dominant public sector and reorient a primary health care based policy. Months into the occupation of Iraq, Paul Bremer repeats, 'The key message on Iraq since we got here is Iraq is now open to free trade.'[ix]

Rania Masri, an Arab American human rights activist gives a compelling narrative of Iraq after invasion.

> *'The US occupying forces have imposed on Iraq an economic program that no sovereign country would ever accept: it virtually guarantees that the Iraqi economy will be taken over by Western (mostly US) multinational corporations and banks. It is a policy that limits democracy, narrowing the public arena so that resources like health, education are controlled by the private sector, by unaccountable, tyrannical corporations.* '[x]

The health sector in Iraq was not exempted from free market ideology with which US had invaded Iraq. In 1970s and 80s, the health system was fully subsidized and free health care was provided to all Iraqis. The public health system provided free services of high quality and also paid high salary levels. However occupation forces' policy of privitisation of crucial sectors including health care showed their indifference towards needs of the people. Iraqis faced greater threats and needed greater protections going into war in 2003 compared with 1991. Most people had fewer assets and less purchasing power to acquire key goods in 2003 compared to 1991. Thus paid services of private sector proved cost ineffective for the users, especially in absence of any health insurance scheme. From a well functional, efficient model of Healthcare in the region up to 1980s, Iraq's health sector came to be described as a toxic concoction of dynamics including rampant fear, corruption and incompetence in the aftermath of US led invasion.

## 3. US INVASION OF IRAQ AND ENSUING HEALTH CARE CRISIS

Article 31 of the Iraqi Constitution, drafted by the Bush administration in 2005 and ratified by the Iraqi people, includes state-guaranteed (single payer) healthcare for life for every Iraqi citizen.

Article 31 reads:

> '*First: Every citizen has the right to health care. The State shall maintain public health and provide the means of prevention and treatment by building different types of hospitals and health institutions.*
>
> *Second: Individuals and entities have the right to build hospitals, clinics, or private health care centers under the supervision of the State, and this shall be regulated by law.*'

There are other health care guarantees, including special provisions for children, the elderly, and the handicapped elsewhere in the 43-page document. The constitutional rhetoric on reconstruction of Iraq in crucial sectors such as Health has been strong and optimistic; however the real progress has not converged with the tall promises made.

Iraq was invaded on the pretext of liberation and the Bush Administration had promised the Iraqi's a united, stable and free country. In a speech delivered weeks prior to the invasion, former US president Bush had stressed that 'a liberated Iraq can show the power of freedom to transform that vital region, by bringing hope and progress into the lives of millions.' The dismay regarding situation in post-invasion Iraq was highlighted in a survey done by NBC News on the tenth anniversary of US invasion in 2013. The general perception amongst respondents, mainly Baghdad based, was that the infrastructure and services, in general, have gone from bad to worse. Warnings regarding possibility of a health crisis and inability of the occupation forces to ensure healthcare to five million inhabitants of Baghdad were conveyed by UN relief agencies.[xi]

According to the International Committee of the Red Cross Report published in April 2003, 'as soon as Baghdad was under U.S. control, the medical system of Baghdad virtually collapsed'.[xii] Reports show that health infrastructure including ambulances and hospitals were fired upon by the US troops in Baghdad, border town of Rutbah and city of Nasiriyah.[xiii] Since the war and violence had destroyed the extant health infrastructure and dismantled the health sector, the focus was on repair rather than reform and expansion. Health services in Iraq did not respond to the needs of people. A 2013 Lancet special report on Maternal and Child health crisis in Iraq states that the healthcare scenario in Iraq is a mess compared to 2003, and 'at times, it seems to still be going backwards…'[xiv]

In the post invasion period, there had been a deliberate change in the health policy. The health policy imbibed a shift towards private sector and creation of private investment opportunities. The restructuring of the health sector was envisioned with a view to reorient the health policy; from public sector dominated model to market driven policy which would allow private sector participation. However gaps remain and serious debate surrounds the question of private sector involvement in health sector of war torn country like Iraq.

Despite the high level of domestic and foreign investment, the disequilibrium within Iraqi healthcare system is rather confounding. The US government had dedicated over USD 53 billion to the reconstruction of Iraq since 2003, but is difficult to determine how much the United States Department of State has provided in assistance in the sector health and what the long-term impact of this assistance has been[xv]. The Lancet medical report estimates that less than USD 1 billion, i.e. 1.8% of the reconstruction aid, was devoted to health-care infrastructure up to 2009, out of over USD 600 billion committed to US war in Iraq up to 2009. And of the 243 US government advisors working within Government of Iraq ministries, only ten worked on health related issues**.**

According to the World Health Organisation (WHO) report 2013, only 83% of the population has access to local health services, which places Iraq amongst the lowest ranks in the region. Thus legitimate questions can be raised about seriousness and sincerity of the invasion forces, particularly US, in liberating Iraq.

## 4. HEALTHCARE IN NUMBERS: STATISTICAL DECEPTION

Violence and insecurity are seen as the major impediments to healthcare in Iraq. However, an emerging school of thought argues that problems in the post invasion period have been more structural than violence-inflicted.

However to establish how the structural discrepancies have contributed to weakening of health care services in Iraq, it will be worthwhile to analyse the statistical averages of access to primary health care, public and private hospitals and regional variation in access.

Over 1,000 new Primary Health Care Clinics (PHCCs) and 46 public hospitals were functioning in 2012 compared with 2003. The relatively larger investments in Primary Health Care Clinics (PHCCs) than in public hospitals are consistent with the Ministry of Health plan of reorienting the public health sector towards primary care. The country wide number of primary health care centers per 100,000 population rose from 5.5 in 2003 to 7.4 in 2012.

**Primary health care centers per 100,000 population:**

| Year | PHCCs per 100,000 | % change |
|---|---|---|
| **2003** | **5.5** | **0** |
| **2012** | **7.4** | **35%** |

*Source: BioMed Central (2014)*

Despite the fact that the scenario, on an average, seems to have improved, the 35% incremental change in primary health care centers since US invasion has not translated itself into effective access to health services. Although the rate of

population growth was approximately the same in Kurdistan and central/southern Iraq, the gap in the number of PHCCs per 100,000 population widened from 2003 to 2012. While the Kurdish region witnessed an average increase of 4.3 primary health care centers per 100,000 between 2003 and 2012, the rise in Central and Southern Iraq was 67% lower at 1.4 primary health care centers per 100,000. Thus, a geographically skewed pattern in primary healthcare access can be noticed.

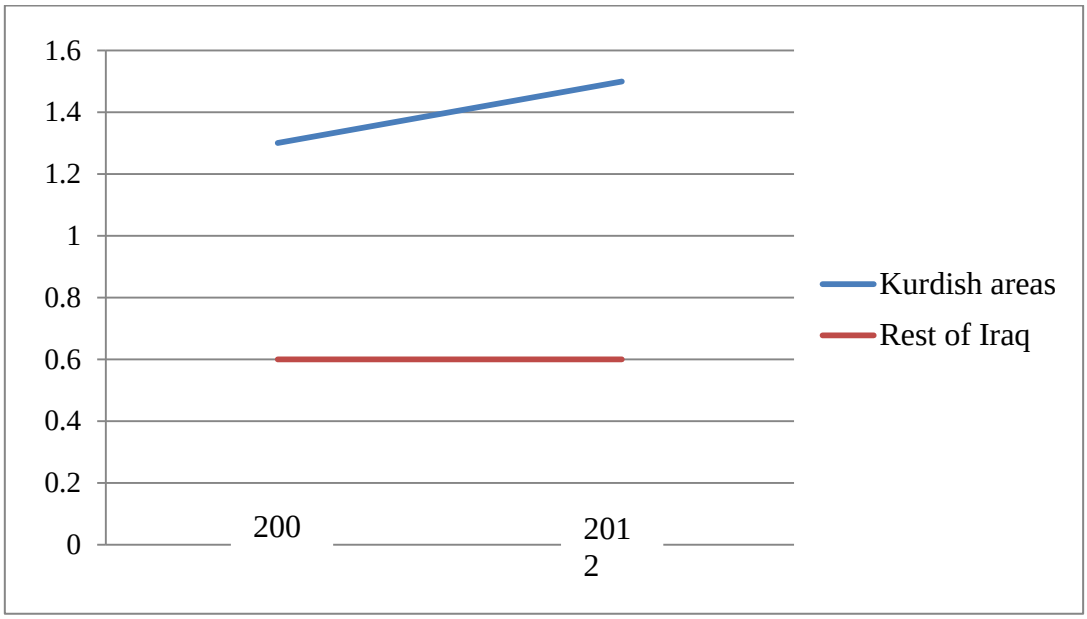
Similar differentials also exist in case of public and private hospitals. In 2003, there was an average of 0.7 public hospitals per 100,000 population in Iraq. In 2012, the countrywide average ratio remained the same at 0.7.

**Public Hospitals in Iraq per 100,000 Population (region wise):**

| Year | Public Hospitals per 100,000 | % change | Kurdish areas | Central/South Iraq |
|---|---|---|---|---|
| 2003 | 0.7 | 0 | 1.3 | 0.6 |
| 2012 | 0.7 | 0 | 1.5 | 0.6 |

*Source: BioMed Central (2014)*

Evidently there have been significant changes in the geographical distribution of hospitals.




*Source: Graph based on data from Biomed Central (2014)*

The average number of public hospitals per 100,000 population rose by 15% from 1.3 to 1.5 per 100,000 in Kurdish areas during the same time period, whereas it remained constant at 0.6 in centre/south, 60% lower.

In post-2003 period, the health policy was directed towards greater involvement of the private sector in healthcare. In case of private hospitals, the average number remained the same at 0.3 per 100,000 between 2003 and 2012. Nevertheless the number of private hospitals exhibited diverging trends in Central/Southern Iraq and Kurdish North.

**Public Hospitals in Iraq per 100,000 Population (region wise):**

| Year | Number of Private Hospitals per 100,000 | % change | Kurdish areas | Central/South Iraq |
|---|---|---|---|---|
| 2003 | 0.3 | 0 | 0.2 | 0.3 |
| 2012 | 0.3 | 0 | 0.6 | 0.2 |

*Source: Biomed Central (2014)*

In centre/south, the number of private hospitals per 100,000 population declined from 0.3 to 0.2. By contrast, in Kurdistan the number of private hospitals per 100,000 population rose from 0.2 to 0.6.

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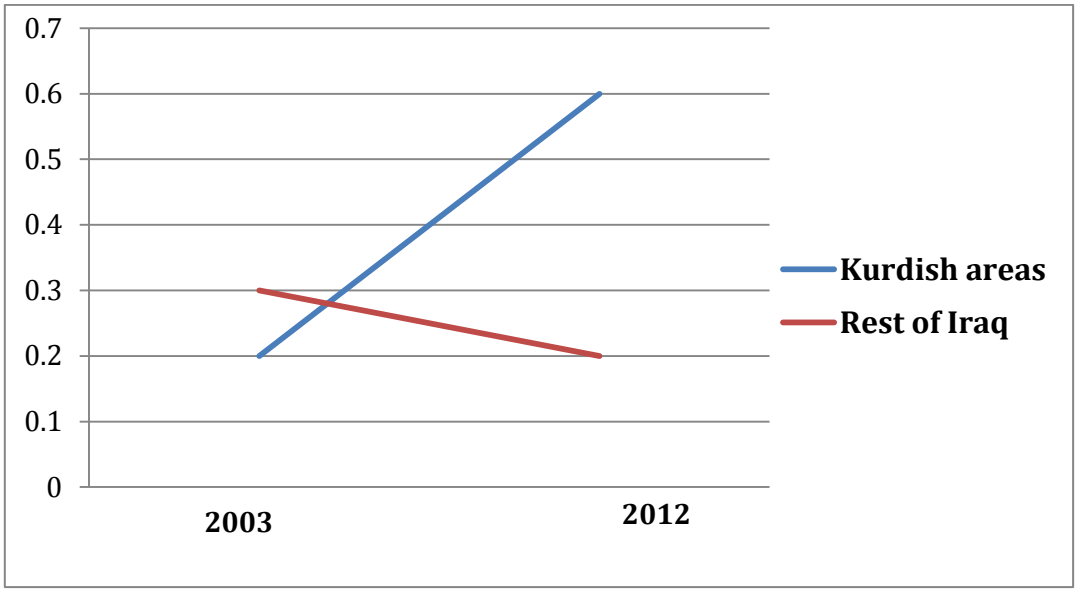
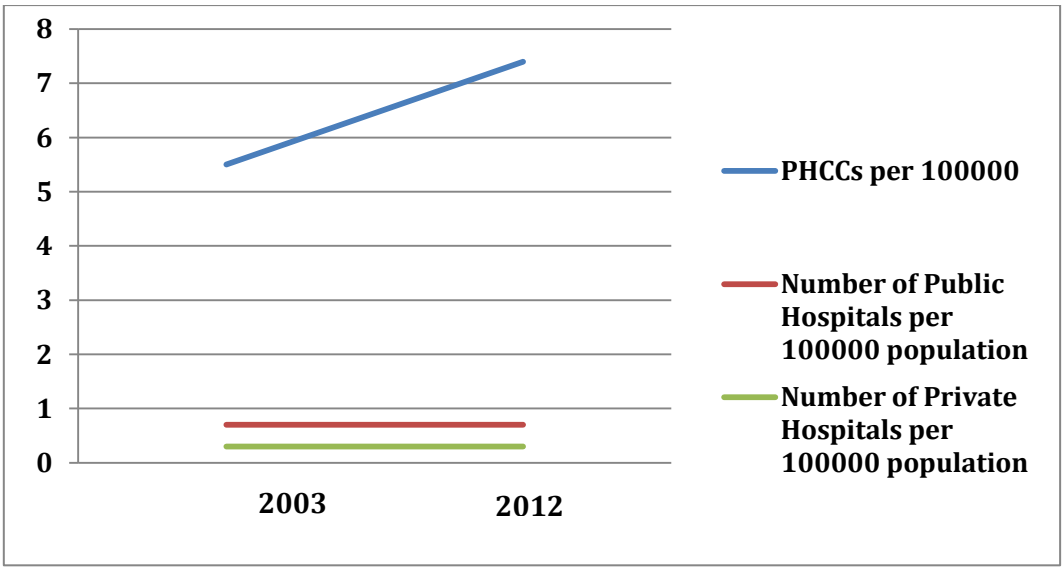
**Public Hospitals in Iraq per 100,000 Population (region wise):**




The number of private hospitals in Kurdish areas was thrice the number in rest of Iraq. Evidently, private hospitals have a limited presence and still they do not occupy major stakes in Iraq's health system.

On the whole, despite an average increase in health care facilities, the health services have remained restricted to few regions and most of the population has been deprived.

**Health care parameters per 100,000 population:**




The average number of PHCCs has risen during the invasion period (2003-2012), while the average ratio of public as well as private hospitals has not changed at all. Thus gaps are considerable and the proclaimed progress made by invasion forces in health sector remains questionable on these grounds.

## 5. UNDERSTANDING THE DIFFERENTIALS

The infrastructure of the health sector is not improved, let alone reconstructed. This becomes evident the regional analysis of health care expansion which shows a clear bias towards Kurdish areas and neglect of rest of the country.

In order to evaluate and understand the real state of health-sector progress in Iraq in post-invasion period, it is important to go beyond the statistical averages. While the averages suggest that improvement has taken place in Iraq in the post-

invasion period, it needs to be understood that the policies have had geographically localized impacts. As numbers indicate, there were significant differences in the extent of improvement within the country and in particular, the gap in the average number of PHCCs and public hospitals per 100,000 population between the autonomous Kurdistan region and the rest of Iraq widened. While the situation was more or less the same in pre-1991 period, the differences were stark in the aftermath of Gulf war. The relatively better status of health infrastructure in Kurdistan originated in the post-1991 period and especially in the years of the Oil for Food Programme (OFFP) between 1996 and 2003.

The UN agencies were directly managing the programme in the Kurdish areas, and the Iraqi government was in charge of the rest of the country. Thus Kurdish North benefitted from the investments made by UN bodies like UNICEF and UN-Habitat under which health facilities including Primary Health Care Clinics (PHCCs) were built, whereas government investments in health infrastructure in central/southern Iraq were very limited. Thus over the sanctions period, the differences between Kurdish region and rest of the country became stark.

## 6. EXODUS IN THE HEALTH SECTOR

The health infrastructure evidently has significant gaps and in addition, yet another factor constraining the healthcare in Iraq is the scarcity of health workforce. According to a survey done for The Lancet in February 2013, there was a general consensus that health care management has been a total fiasco and staff shortage is over whelming. Security conditions have forced a large number of the trained and experienced health staff leaving the country creating a situation of doctors' exodus.

In pre-Saddam Hussein Iraq, it used to be the norm for doctors to travel abroad, mostly on state scholarships to seek advanced medical training. Doctors had the liberty to settle down abroad and those who returned constituted the nucleus of Iraqi medical tutors for subsequent generations. Iraq's healthcare system used to be the envy of the Arab world; people came from all over the region to study medicine or seek treatment.[xvi] During the Hussein era, strict bans were imposed by the regime to restrict the emigration of doctors and thus relatively few doctors left Iraq. To ensure that mobility of doctors remains restricted, brutal penalties were imposed upon defaulters.

The fall of Saddam Hussein did not bring any relief to the medical practitioners. Iraqi intelligentsia in general and doctors in particular faced high levels of violence and systematic targeting. Health care facilities were looted and destroyed; doctors had to defend them with arms, sacrificing their personal safety. Response of Iraqi government and the occupation forces to the situation was poor. No special protection and/or compensation were offered, nor were any investigations done. It was only in 2010 that the Iraqi government offered immediate job placement for doctors upon their return to Iraq and promised to improve security measures and protect doctors, yet that was not enough to convince doctors to stay in or return to Iraq. Thus the compelling circumstances led to draining out of medical expertise and gradual movement of medical staff, particularly doctors to neighbouring countries as well as the Western nations like US, UK etc…

## 7. TRENDS IN MIGRATION

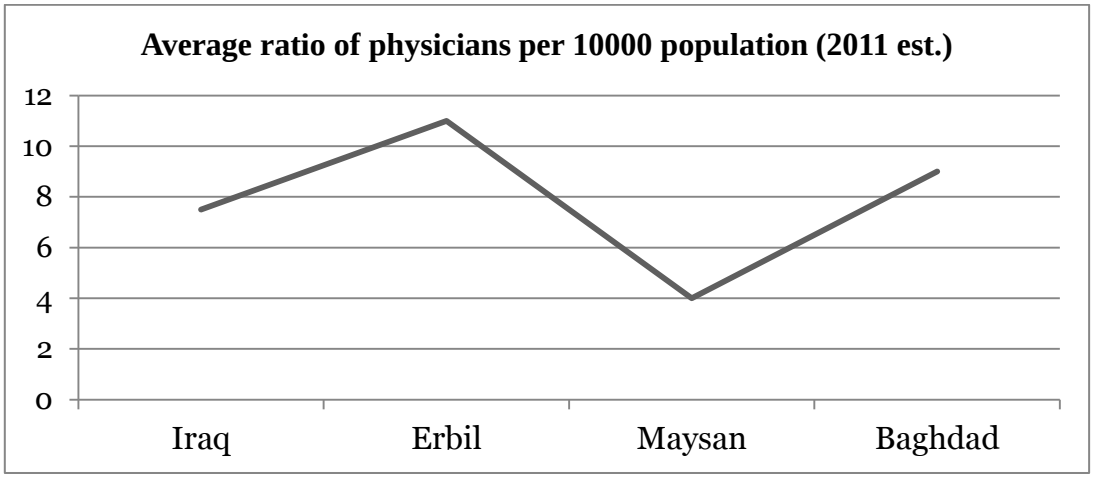
Before the 2003 invasion, Iraq had an estimated 32,000 medical doctors, many of whom were teaching faculty at country's 23 medical schools or in teaching hospitals.[xvii] However 70 percent of the qualified medical specialists in Iraq before 2003 left the wounded nation between 2003 and 2013 to seek asylum in other countries.

Mortality Study by MIT estimates that 12000 of the 34,000 registered physicians i.e. 35 per cent had left the country in first half of the war, by 2007 and up to 2000 had been murdered.[xviii] By 2008, the number of emigrant doctors had touched 20,000 reflecting a rise of 24% in one year. The exodus of highly competent and experienced professionals created serious gaps health system. According to the 2011 Health Sector Assessment, migration of health professionals is still a big concern and factors behind external migration are lack of political stability and security and better opportunities for quality education. This trend has further aggravated the situation.

According to a 2013 cross-sectional study by Nabil Al-Khalisi, the trends and patterns of movement show that Iraqi doctors' rate of emigration accelerated in 2003; peaked in 2006; these figures have since declined, but remain relatively high. It is also important to note that during the 1990s financial issues under sanctions were the main constraints facing doctors in Iraq. Under the effect of embargos, salaries of doctors witnessed a drastic fall due to impoverishment of the health sector. Doctors' salaries fell rapidly to only USD 30 a month, barely enough to buy the necessities of daily living.[xix]

However, in the post-2003 scenario, security and training concerns emerged as the most important factor leading to dispersion of the medical practitioners towards safer areas within Iraq and also abroad. While the salaries increased to USD 5100 per annum, thirteen times higher than pre invasion period, the emigration of doctors rather escalated in face of the mounting violence and unrest.[xx]

In 2010, according to the Ministry of Health's annual report of 2010, the total number of physicians was 24 745 and the latest figures also indicate the same numbers[xxi]. The average ratio of physicians to population was 7.5 per 10000 population, and as per a projection study the expected rate in 2018 is 8.7 per 10000 population. However, the regional distribution of physicians has been uneven across regions.




In 2013, the average ratio was highest in Erbil, capital of Kurdistan at 11 per 10000 population, and lowest was 4 per 10000 persons in Maysan, province in southeastern Iraq, bordering Iran, while Baghdad had the ratio of 9 physicians per 10000.[xxii]

In the post invasion Iraq, Kidnappings and assassinations have claimed the lives of hundreds of Iraqi physicians and prompted thousands of doctors to leave the country to avoid similar fate. For those few who remain, the opportunity cost of practicing the profession remains very high due to constant fear. Conditions for health workers remain grim throughout the Central and Southern Iraq. Besides the high levels of general violence, the incidents of targeted murders, kidnappings and revenge killings by relatives of patients escalate the amount of risk involved in the practicing the medical profession. In an interview to The Lancet, Dr. Nabil Al-Khalisi, a medical practitioner with Baghdad's Al-Kadhimiya Teaching Hospital, stated that, 'Patients can retaliate very badly. There is a tribal system of revenge and they will come after you. I have lost many colleagues this way.' The continued war in Iraq has propelled a mass migration and the flight of medical professionals has directly affected the quality of extant healthcare services and the scarcity has impinged on the process of primary healthcare development.

Migration of health professionals has shown two trends; firstly, Internal migration from Southern and Central Iraq towards Kurdish areas. This may be explained in terms of the relatively stable and safer work conditions for doctors in Kurdish areas vis-à-vis rest of Iraq. Inequitable distribution of health workers is partially explained by this trend. Secondly, there has been emigration of doctors and health professionals from Iraq to neighbouring countries and abroad. Unless the trained medical professionals are retained, the improved infrastructure will have little utility.

Moreover before the war, Iraq's health sector also employed foreign nurses. However in the aftermath of 2003 war, poor security situation and low economic remuneration pushed the foreign medical staff out of Iraq. However no proper policy mechanism has been put in place to fill the workforce gaps.

On the other hand, the public sector-private sector debate continues. At present the doctors work for a variable proportion of their time in the public sector but supplement their income through work in private clinics or hospitals. Expanding the role of private sector in Iraq's medical health in face of workforce scarcity is likely to affect the quality of healthcare by increasing the waiting time of patients. Given the workforce gaps, post-invasion strategy of privitisation, as preached and preferred by the invasion forces, has therefore been highly disputed. Privitisation of medical system might act as an incentive for retention of practitioners but at the same time, the hike in cost of medical treatments will put additional

burden on the patients. In absence of a sound medical or health insurance policy, privitisation of health sector might not be sustainable and the access to healthcare will likely limit itself to the high-income group. Thus the case for privitisation in absence of an established and extensive health insurance scheme remains weak.

## 8. CONCLUSION

There is a clear evidence of dual disequilibria in Iraq's case; in health infrastructure and health workforce. The statistical averages show that access to health care has not deteriorated. In case of public hospitals and private hospitals the access remains the same, while in case of Primary healthcare clinics it has improved. However, region-wise analysis exhibits a different, rather disturbing trend whereby most progress has been restricted to Kurdish areas. Thus health structure and infrastructure remains in a state of disequilibrium.

Given the security concerns and unfavourable circumstances, there has been a mass exodus of medical staff. In absence of any formal and institutionalised commitment to retention of doctors, the loss of expertise and trained workforce continue to remain a major impediment in the process of healthcare reconstruction. Enough funds have been allocated to the health sector; however most have been spent on repair rather than expansion. Interestingly, the health budget has been increased every fiscal year but the absorptive capacity of health system in Iraq is not enough for optimal absorption of the funds as over half of the health budget flows back to the Ministry of Finance. In implicit terms, the real investment in qualitative expansion of health services has been limited and evidently, Iraq's once proud and functional health system has been compromised.

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