

Physicians' Shortage in Iraq: Impact and Proposed Solutions

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Abstract:

Background: Physicians shortage is considered a major issue affecting the quality of health services, considerable attention has been focused lately on the apparent shortage of physicians in Iraq and this issue brings a lot of political and social concern.

Objective: To determine the current number of Physicians and future projection, its impacts, and the possible solutions.

Method: Data collected from Ministry of Health Ministry of Higher Education and Scientific Research, Ministry of Planning. The data was coded, analyzed, presented by tables, graphs and compared with the global and regional rates.

Results: In 2011, the rate physicians is 7.5 per 10000 population i.e. one physician per 1333 citizens and the expected rate in 2018 is (8.7 / 10000) i.e. one physician per 1149 citizens with unequal distribution over governorates. This rate is much lower than global (14/10000) and regional (16/10000).

Conclusion: Iraq is facing shortage of physicians during this decade. Health system reform and establishment of health education commission are essential solutions for shortage of physicians in Iraq.

Key words: Physician, shortage, Iraq

Introduction:

The history of health system in Iraq began in early twenties of 20th century. Ministry of Health was established, and after a couple of years was a part of Ministry of Interior until 1939, then Ministry of Health merged with Ministry of Social Affairs. This existed till 1952 when a new Ministry of Health was reestablished. ⁽¹⁾

During 1970s and early 10980s, Iraq experienced improvement in several critical health outcomes e.g. infant mortality rate decreased from 80 per 1000 live births in 1979 to 40 in 1989 ⁽²⁾. The capacity and performance started to deteriorate during 1980s; the decline was exacerbated as a result both of wars and political and economic sanctions. During this period, health policy choices were inappropriate, especially in relation to health care financing. The per capita spending on health was extremely low i.e. the fund available for health was reduced to 90%. ⁽³⁾

The health care system became increasingly politicized, centrally controlled and poorly suited to respond to changing population needs. The result was that, health indicators, at least in the center and south of Iraq. ^(4, 5) fell to the level comparable to some of the least developing countries. From 1990 to 1996, infant and child mortality more than doubled. ^(6, 7) The newest structure was adopted after the fall of last regime in 2003, which has a lot of modifications especially toward primary health care and clear improvement in the maternal and infant mortality was noticed. ⁽⁸⁾

The world health report 2006 ⁽⁹⁾ working together for health has brought renewed attention to the global human resources required to produce health. It estimated that 57 countries have an absolute shortage of 2.3 million physicians, nurses and midwives. These shortages suggest that many countries have insufficient numbers of health professionals to deliver essential health interventions, such as skilled attendance at birth and immunization programs. ⁽¹⁰⁾

Recently, considerable attention has been focused on the apparent shortage of health workers in Iraq especially physicians, but reports on human resources in health system in Iraq are scarce, therefore, this paper was carried out to focus on physicians, who serve a key role in health-care provision using the most updated information on the current number of physicians and future expectation up to 2018.

Materials and methods:

Requested information was number of physician in Iraq, their distribution on governorates and the outlet of physicians from Ministry of Health. The numbers of medical students in medical colleges were collected from Ministry of Higher Education and Scientific Research. Projections of Iraqi population were taken from Ministry of Planning; central organization of statistics (COSIT). Data was coded, analyzed, presented by tables, graphs and compared with the global and regional rates.

Table -1-: Expected midyear population

Variable	2010	2012	2014	2016	2018
Midyear population (in thousands)	19564	34207	36004	37883	39846

Results:

In 2011; the rate physicians is 7.5 per 10000 population i.e. one physician per 1333 citizens and the expected rate in 2018 is (8.7 / 10000) i.e. one physician per 1149 citizens.

Figure -1- shows the situation in Iraq in comparison to the regional rate (16 / 10000 population). A clear gap was noticed in the distribution between actual rates and the global rate (14 per 10000).

Figure-2- shows several peaks in the distribution of physicians on the governorates in Iraq. The peaks physicians were noticed in Basrah, Kerbala and Erbil. The distribution shows no equity between governorates

Table -2- shows the number of students in the colleges of medicine in governorates. Female students were dominating number in most of colleges; female to male ratio is 1.27:1.

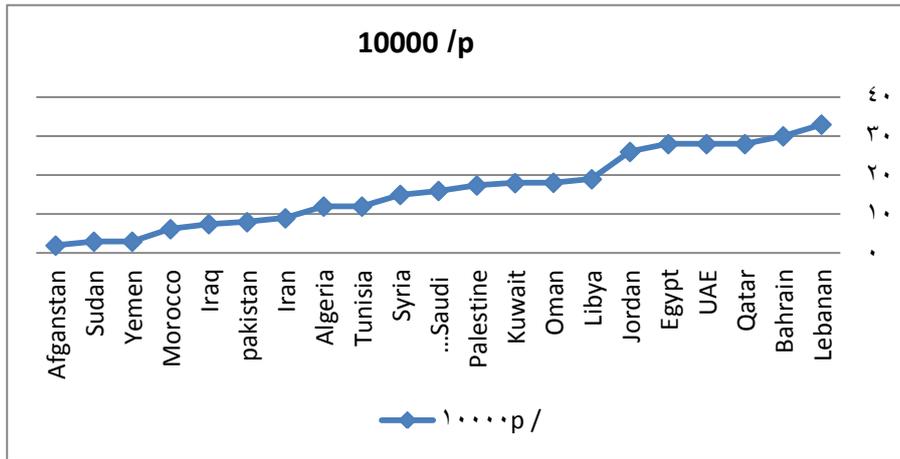


Fig 1: Situation in Iraq in comparison to the regional

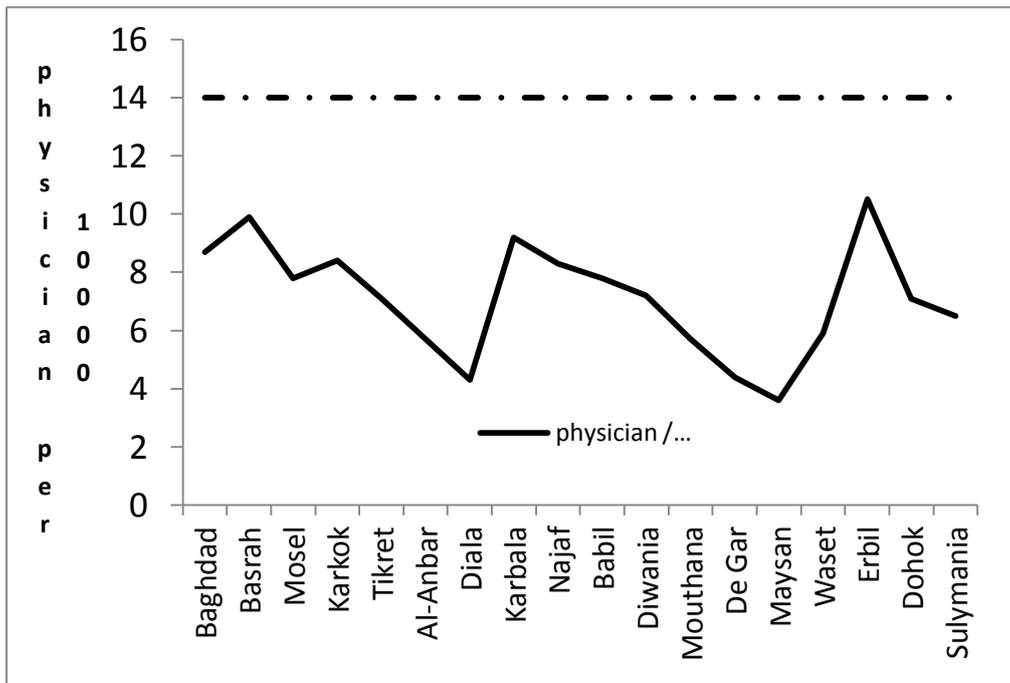


Fig.2: Distribution of physician/ 10000 populations of governorates

Table 2: Distribution of students on colleges of medicine (all grades) for the year 2012.

	Colleges of Medicine	Female	Male	Total
1	Baghdad	909	756	1665
2	Al Mustansiriya	581	404	985
3	Al Kindi	228	161	389
4	Al Nahrain	275	198	473
5	Al Mosul	450	505	955
6	Al Mosul -2-	196	196	392
7	Kirkuk	222	144	366
8	Tikrit	197	214	411
9	Al Anbar	270	270	540
10	Diayla	167	95	262
11	Wasit	166	119	285
12	Maysan	39	38	77
13	De Gar	367	185	552
14	Al Basra	488	354	842
15	Al Muthanna	60	40	100
16	Al Diwania	291	173	464
17	Babil	496	264	760
18	Kufa	372	279	651
19	Karbala	199	106	305
20	Erbil	456	425	881
21	Dohok	179	191	370
22	Al Sylmania	370	360	730
23	Al Iraq	39	30	69
Total %	23	7017 56%	5507 44%	12524 100%

Discussion:

The national rate of physician per population (7.5 per 10000) is much lower than the global (14 per 10000) and regional rate (16 per 10000). World Health Organization reported that Iraq is within countries that face a critical shortage, its ranked 95 globally and in bottom of the list of the regional countries⁽⁸⁾. Our projections suggest that, by the year 2018, the national rate of physicians per population still very low (8.7/ 10000), and lower than many countries in the region.

Health system in Iraq was severely eroded in wars, sanctions and last widespread violence^(11, 12). Several workers documented the deterioration of health system in Iraq^(13, 14). The deterioration in health system was one of many push factors of health workers out of Iraq⁽¹⁵⁾ which in turn, led the shortage of physician in Iraq, however, the system ran fairly effective, but despite the development of primary health care based services lately, the health system is still hospital oriented, capital intensive model that requires large- scale imports of medicine, medical equipment and even health workers is insufficient and access is inequitable.

Recognizing this shortages are interfering with the effort to achieves health system reform and in turn, contributes substantially to the weakness of health system and obstruct achievement of public health goals, such as reductions in maternal and child mortality; and delay the achievements of millennium development goals . This shortage leads

to low quantity and quality of medical care which compromises the patient safety. However, long term vision and plans are of utmost importance in ensuring fundamental solutions; scaling up physician production which mean not only increasing numbers of students, but their quality and competencies

Since the Gulf war, the number of medical schools increase dramatically in Iraq and the intake of students have increased, causing concern amongst many medical specialists who believe that quality has sacrificed for quantity. Iraq has 23 medical schools, 5 in Baghdad, 2 in Mosel and one in each governorate.

This study showed even with that increase in number in students, there will be a shortage in number of physicians in the next decades which compromised the health system needs and demands.

The existing capacities of medical schools for physician's production must be assessed carefully, exploring ways to rapidly scaling up. Reforming and up grading the existing schools, developing physical infrastructure (building classrooms ,laboratories), strengthening medical schools by increase number of staff through inducement of Iraqi immigrants physicians to return back for a semester to teach and help to prepare new generation of teaching staff and shares ideas , experience and researches. Seconded staff can be brought in for short time to increase the staff of medical schools, twining can strengthen capacity

over a longer period through a regular teacher exchange. Innovative approach of learning like information and communication technology (ICT) which has the potential to revolutionize medical education, some recent evaluation suggest that (ICT) based learning techniques have the potential to make medical education more readily accessible than traditional method, and enhance learning efficiency.⁽¹⁶⁾

Ministry of health must considered a variety of short term measures, for instance shifting some tasks from physicians to the nurses and medical assistants especially in the primary health care and in underserved areas.^(17, 18) A recent report issued by the Institute of Medicine USA, the top recommendation was that nurses be allowed to practice to the full extent of their education and training. , delivering primary care will not remain the sole purview of doctors. There are not enough of them, expanding the scopes of practice of medical assistants and nurses in primary health care are very important solution.⁽¹⁹⁾ Public education about the role of nurses and medical assistants are mandatory for the success of this measure and physician must support and supervise the new category.

Community health workers system was adopted in Iraq recently under the title of health visitor system which works as bridge between the community and the health system, their role is to increase the preventive services, health promotion, and health development and to provide local outreach health services. This system will compensate for some degree the shortage of physicians

Other important measure is aggressive retention policies, such as improving the remuneration and working conditions of physicians, protection, safety and using telemedicine.

Ministry of health need to adopt accurate scientific and applicable system of job description as well as accountability for the physicians and other health work force, which lead to maximum utilization of the available health work force in Iraq.

This study showed that to this day, the levels and distributions of human resources for health was inadequate, and there is many underserved governorates in Iraq.

Ministry of Health failed to overcome inequities in distribution of physicians on governorates. This may be due to the monopoly power of doctors in Iraq because of shortage ,that result in disproportion between supply and demand, making difficulties to the Ministry of Health to correct misdistribution in the near future .

This finding reflects a weakness on legislative and administrative levels at the level Ministry of Health. Incentive^(20, 21), protection and improving work condition may be attracting physicians to work in underserved areas.

New policy of recruitment of the new students from the underserved governorates to join the medical schools in their governorates to serve their community should be adapted to scaling up local physicians production.

This paper clarified the fact that there is no partnership between Ministry of Health and Ministry of Higher Education regarding the health work force management, each ministry has its own policy. A 2011 World Health assembly (WHA) resolution (Resolution 64.6)⁽²²⁾ on strengthening the health workforce highlights the strategic importance of addressing workforce shortages and asserts that because doing so will improve population health, it represents an essential investment in socioeconomic development. The resolution also urges countries to take measures to meet their health workforce needs — for example, to educate, retain, and sustain a health workforce with skills relevant to their population's needs.

The world health assembly fifty nine (WHA59.23) 2006 resolution⁽²³⁾; rapid scaling up of health work force production promoting the creation of planning team in each country facing health worker shortage , whose task would be to formulate a comprehensive national strategy for the health workforce.

Establishment a body (commission) including Ministry of Higher Education, Ministry of Health, Ministry of Planning and Medical Association; responsible for policy, strategy, planning and implementation of the health work force management in Iraq.

In conclusion:

Iraq is facing shortage of physicians during these decades. Health system reform and establishment of health education commission are essential solutions for shortage of physicians in Iraq.

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