

# **Challenges of Iraq Pharmaceutical Market Post-2003**

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#### Opinion

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#### **Opinion**

Iraq is a Middle Eastern developing war-torn country, based in Southwest Asia that is struggling to recover from long periods of wars and political turmoil [1]. It has a rapid continuous population growth estimated at more than 38 million in 2018; the country, after 2003, was considered as an upper middle-income one, with gross domestic product (GDP) per capita at 5,878 US dollars in 2018 according to World Bank [2-5]. During the decades of 1970s and '80s the health indicators in Iraq were continuously developing and healthcare services had achieved high standards across the Middle East, a fact that made Iraq one of the countries with the most luxurious healthcare services in the region. Unfortunately, the consequences of different wars, sanctions, shortfalls, insurgencies, political instability and corruption have led the country to a severe decline of health services and thus the healthcare in Iraq has shifted to the worse in the region [3,6-9]. Currently, Iraq is the country that faces by far severe considerable health and environmental challenges and the successive Iraqi governments in collaboration with several organizations have made a great effort to set plans to expand health service delivery, moving towards a modern decentralised health care model [1,3,10].

Aftermath of 2003, the country witnessed macroeconomic stability associated with reduced inflation to single digit due to prudent fiscal policy and increased oil revenues [11]. Although the country's total gross domestic product (GDP) has increased up to 111

billion US-dollars in 2019, only a small percentage, 4.5%, equal to approximately 5 billion US-dollars, is spent on the health sector; the above amount is considered one of the lowest percentages compared with other countries in the region or countries of the same economic class [3,12]. Approximately one third (36%) of the total health expenditure devotes for medicine and pharmaceutical products of sound origin in the public sector through the state company for marketing drugs and medical appliance (KIMADIA) [3].

Even though post-2003 the Ministry of Health (MoH), which is the backbone of the health system in the country, subsidizes the costs for treatment and dispensed medicine at the public health institutions only and not at the private sector, the public sector is still suffering from a long-term shortage in medicines associated with deteriorated healthcare services[1,3,13-15]. For example, 88% of the essential medicines and life-saving drugs were missing from public hospitals and primary health centers in 2018 [3]. Most severe shortage in medication is experienced in the camps and cities influenced by terrorism.

The objective of this article is only to delineate the pharmaceutical market situation in Iraq, post the US-led invasion (2003) until today and to shed light on the importance of the pharmaceutical market, an essential segment of healthcare system, but also on the problems arising of its expansion throughout the current period.

As the county's population is growing to unprecedental levels with an estimation of 50 millions by 2030, Iraq is considered as one of the top consumer markets in the Middle East with a potential of the import market to hit over 40 billion US dollars in the upcoming 6 years [1,2,16]. Indeed. post-2003. country's pharmaceutical market has been opened to all international companies which although must be registered with the MoH for marketing their pharmaceutical products [17,18]. As a consequence the pharmaceutical market has markedly grown, followed by a significant increase in the drug distribution chain. Drugs can be purchased from different entities, depending on the trading volumes, including manufacturers, scientific drug bureaus, wholesaler drug stores (Madkhar), and community pharmacies (the ratio of community pharmacies per individuals is at 1:2000) [17,19]. In parallel to the increase of the pharmaceutical market there is a significant increase in the number of Schools of Pharmacy and Pharmaceutical Sciences [20].

According to the report of Assessment of Opportunities in Iraq in 2018, regarding the Iraqi untapped opportunities, the potential growth in pharmaceuticals and medical device markets is estimated by 10-12% and 18-20% respectively of the compound annual growth rate (CAGR)<sup>1</sup> for the period (2018-2022) [16]. Business Monitor International (BMI) estimates that Iraqi pharmaceuticals market grows at a percentage of 10-15% per annum, and it is expected to reach up to  $\sim 2.4$ billion US dollars by the year 2020 [21]. Indeed, over the period 2006-2011, Iraqi's pharmaceutical market witnessed fast growth both on the generic and the innovative brand drug segment compared to other developing markets had the highest growth, among emerging markets in the Middle East, Africa and Eastern Europe with~17% CAGR [21]. It is worth mentioning, that medical device market, as well, is likely to considerably grow in Iraq, as a consequence of the increased rate of population with chronic diseases (e.g. diabetes, cardiovascular disease, chronic respiratory disease), obesity disability and injuries [22,23]. Therefore, demand for relative technology is considered essential.

On the other hand, the private pharmaceutical market is one of the markets that are out of state control and MoH has expressed a high concern describing the situation as *dangerous, uncontrolled and unregulated* [3]. Although there are no accurate data, about 80% of community pharmacies, wholesaler drug stores and scientific bureaus are not adhered to official pricing system set by MoH and the Syndicate of Iraqi pharmacists; furthermore a large percentage of drugs (60% to 70%) in community pharmacies and drug stores do not meet the requirements of circulation in terms of approval or registration or drug testing. According to reports by Alhilfi, et al. (2013) published in *The Lancet* and by MoH (2009) the private sector is largely out of the MoH supervision and regulation and according to World Health Organization Iraq requires an effective policy for medicine regulation [1,3,24,25]. The inability to control the cross border medication transaction by private companies due to poor state observational measures as well the weakness to control border outlets such as airports, ports and land trade points ending by flooding the market with counterfit medications, the irregular pharmacies and unlicensed drug stores and the entry of many nonspecialists in the process of supplying medications by non-regular pathways are among the responsible factors that contribute to the problem [3,19].

pharmaceutical market reform Thus. needs coordination at high level with multiple partners. The high mark-ups in the supply chain associated with the launch of new expensive pharmaceutical products increase the expenditures in contrast to other countries, with regressive mark-ups, that can restrict the additional costs [26]. The increased number of scientific drug bureau, wholesaler and pharmacy margins is associated with little/no penetration of electronic Point of Sales system data, especially in the private market, represents a major disadvantage for assessing this market and considers an important concern for the international pharmaceutical industries to step-up their contribution in the country [27].

In Iraq both public and private healthcare sectors are not based on cost-effective management [3,24]. MoH does not possess sufficient capabilities and expert staff in the field of health economics and the links between the Ministry of Health's economic unit and health priorities are not strong i.e poor prescribing guidelines, lack of electronic prescribing and prescribing-monitoring especially in the private sector, potential confusion among patients and many physician's belief that generics are not equivalent to branded originator medicines, uncontrolled promotion of drug companies through increased number of representatives trying to influence physicians to prescribe a brand name, substitution of prescribed medicines with innovate-brand medicine at community pharmacies (some physicians are unhappy with the substitution of prescribed medicine with generic one by the pharmacist), absence of centres for the study of bioequivalence [3,24,28,29]. Overall the irrational use of medicines in both public and private sectors and the noncompliance with the basic guidelines to prescribe and

<sup>&</sup>lt;sup>1</sup> Compound annual growth rate (CAGR) is the rate of return that would be required for an investment to grow from its beginning balance to its ending balance, assuming the profits were reinvested at the end of each year of the investment's lifespan.

disburse medicines in general and particularly specific categories, e.g. antibiotics, rare disease and cancer medications, negatively affect the patient provisions and lead to waste of scarce resources [3]. Education about prescribing generic medicine and cost effective prescribing is imperative for Iraqi medical curricula [29].

Despite the fact that MoH have set laws and regulations for circulation approval, registration and quality assurance of drug products, several barriers are impeding these processes, such as: lack of knowledge and inefficiencies in procuring quality pharmaceuticals, bureaucracy for foreign company registration, lack of proper regulations for importing medical equipment and pharmaceutical products, local Iragi representatives for foreign companies and the overall the widespread corruption [27]. According to corruption perceptions index, corruption at various levels of the public sector may have played a key role in this market, as Iraq ranked in the 168<sup>th</sup> place among 180 countries globally in 2018 [30]. The World Bank also showed that a significant percentage of the health sector budget and subsidies goes towards bureaucrats and corruption.

The collapsed public healthcare, the weak enforcement of existing regulations, the non-regressive pharmacy and wholesaler mark-ups, the non-existing policies and education for encouraging generic uptake in the country are part of the factors that have contributed to the increase in expenditures; as an example older, cheaper drugs have been replaced by newer, more expensive ones that have led to increased cost at the expense of public health services. According to global health database, WHO expressed its concerns about the high percentage of individual expenditure (out-of pocket) on health in Iraq that was more than 70% of healthcare cost in 2015, a high share of which was accounted for household spending on pharmaceuticals; according to WHO the above percentage should not exceed 30% in order to prevent exposure to the poverty [4,31]. Yet, there is no any health insurance entity in the country [1,3,15,24].

Not only public sector requires re-regulation and reform, but also the private sector, requires an efficient and urgent policy to be adopted in such respect, as well the enforcement of existing laws for fighting corruption without further compromising of the health outcomes in the country. In short saying, if the health system needs to be reformed and regain the lost momentum, the pharmaceutical market should be drastically regulated and balanced in terms of public and private sectors. Particularly, the pharmaceutical sector reform is substantial for health system reform and proper functionality. An efficient and prudent health policy needs to be taken to correct the weakness and repair the breakdown in the pharmaceutical market.

In conclusion, in this paper we tried to refer to a very small part of the problem that a war-ravaged although resource-rich, but conflict-driven, country faces with the pharma markets and medicines to implement the rules for an efficient healthcare system and to combat corruption. Following Rudolf Virchow's<sup>2</sup> famous aphorism "Medicine is a social science, and politics is nothing else but medicine on a large scale" politicians must resolve the problems arising from medicine.

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 $<sup>^{\</sup>rm 2}$  Rudolf Ludwig Carl Virchow (1821-1902) is founder of Social Medicine.

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