



Iranian Pharmaceutical Industry Opportunities in Iraq



Ahmed Hayder Mohsin Al Lami¹ , Saman Zartab¹, Mona Jaberidoost², Alireza Yektadoost¹, Shekoufeh Nikfar^{1,3}, Abbas Kebriaeezadeh^{1,3*} 

1. Department of Pharmacoconomics and Pharmaceutical Administration, School of Pharmacy, Tehran University of Medical Sciences, Tehran, Iran.

2. Food and Drug Administration, Ministry of Health and Medical Education, Tehran, Iran.

3. Pharmaceutical Management and Economics Research Center, The Institute of Pharmaceutical Sciences, Tehran University of Medical Sciences, Tehran, Iran.



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ABSTRACT

Background: The socioeconomic and political situation of Iraq has provided a wide and open market. Because of the weak pharmaceutical industry and war, Iraq has a huge demand for pharmaceutical and medical services; this country is a reliable market in the pharmaceuticals trade. Iran has a long border and good political relationship with Iraq, besides a great pharmaceutical industry. However, because of wrong policies and the lack of competition power, Iran failed to significantly impact Iraq's pharmaceutical market. We aimed to analyze Iraq's pharmaceutical trade market, address the factors affecting pharmaceuticals trade between Iran and Iraq, and provide suggestions to promote Iran in Iraq's pharmaceutical market.

Methods: Two questionnaires were designed based on the information obtained from articles related to the pharmaceutical industry. Questionnaires were completed by 10 Iraqi pharmaceutical experts. Then, we analyzed the obtained results by Simple Additive Weight (SAW) method. Based on the results of the analysis, we attempted to find the most important factors affecting Iran's role in Iraq pharmaceutical market and clarify its situation.

Results: The achieved results revealed 10 factors out of the 45 factors were more important and the majority of them were related to quality and marketing strategy.

Conclusion: The study has suggested that quality and marketing power are the most important factors that affect the Iran-Iraq pharmaceutical business.

* Corresponding Author:

Abbas Kebriaee Zadeh, PhD.

Address: Department of Pharmacoconomics and Pharmaceutical Administration, School of Pharmacy, Tehran University of Medical Sciences, Tehran, Iran.

E-mail: kebriaee@tums.ac.ir

1. Introduction

Iraq is located in the Middle East. It is bound by Iran, Turkey, Syria, Jordan, Saudi Arabia and Kuwait [1]. The Iran-Iraq boundary runs for 1458 km, and has a 58 km of coastline along the Persian Gulf. The Iraq population is more than 37 million [2]. The official language of Iraq is Arabic and the second official language is Kurdish. The common foreign language of the country is English [3]. Iraq's economy is tightly dependent on oil supply. Approximately 95% of Iraq's total income is obtained by the sale of the oil [4].

The planned economy of Iraq before its invasion by the USA, prohibited any commercial ownership by foreigners. Many large industries were governmentally running, and heavy taxes were imposed on foreign products [5, 6]. However, after the invasion of Iraq in 2003, the Iraqi Interim Coalition Government promptly issued imperative directives on the privatization of Iraq economy and its openness to foreign investors [5, 6].

The history of modern medicine in Iraq dates back to 1936 when the first pharmaceutical school in Iraq, i.e. the "Royal College of Pharmacy and Chemistry" was founded. From 1936 to 1991, Iraq had only one pharmacy school, but 16 pharmacy schools have been established since 1992 [3, 7]. Iraq had registered 8001 pharmacists in 2011. A total of 5336 urban pharmacies, 311 (a pharmacy that is equivalent to a wholesaler in the western country), and 29 "Al Maktab Alolmi" are registered at the Syndicate of Iraqi Pharmacists [3, 8].

Kimadia has been responsible for the import, storage, and distribution of medicines in public and private sectors since its establishment in 1964 until 2003. In early 2003, Kimadia took responsibility for purchasing and supplying medicines and medical equipment to public hospitals and healthcare centers. Kimadia can directly purchase medicines from national and international pharmaceutical companies, or through medical science schools in Iraq [9].

"Al Maktab Alolmi" is the main private source of medicine supply. "Al Maktab Alolmi" consists of the agents of international and national companies with the tasks of registering and marketing. They provide medicine for drug stores (i.e. equivalent to a wholesaler) and some private pharmacies. The Iraq medicine market comprises about 9093 registered trademarks in the medical affairs of the Ministry of Health [8]. Medicines registered in Iraq are produced by national and international pharmaceutical companies. Iraq has 23

pharmaceutical factories, the oldest of which is the Samarra Pharmaceutical Factory, established by the government in 1957 [10, 11]. Samarra factory possessed the largest pharmaceutical facility and covered the largest part of Iraq medicine market. In addition, there are about 1101 international companies registered by the Ministry of Health in Iraq [8, 10]. After 2003, the private pharmaceutical sector has flourished in Iraq, welcoming the presence of all international companies. All international companies that export medicines to Iraq should be registered by the Ministry of Health in Iraq [8, 11].

The population of Iran has become over 80 million since 2016. Iran, with a Gross Domestic Product (GDP) of over 3937 billion dollars, is the second largest economy in the Middle East and North Africa [12, 13]. The total worth of pharmaceutical market in Iran is equal to 5133 million dollars [14]. All the medicine policies, including importing, producing, distributing and pricing medicines in Iran is monitored by Iran Food and Drug Administration (IFDA). The first law governing food and medicine in Iran was approved in 1955, which is still being executed with some reforms [15].

In Iran, there are over 89 companies producing final medicines. More than 30 companies producing raw pharmaceutical materials are active in Iran. More than 55% of the domestic market share is given to the government- and semi government-owned companies. The analysis of Iranian drug market trend in recent years suggests that the pharmaceutical market has grown dramatically [16]. Between 2001 and 2012, despite the sanctions, the indices of competitive advantages of the pharmaceutical industry in Iran have grown. However, it is far from the industrialized countries. For example, the Grubel-Lloyd Index has raised from 5.97 to 19.58 [17].

The economic, political, and geographic situation of some of the neighboring countries of Iran has provided potential opportunities and capacities for the country. Such opportunity can be appropriately used to accelerate Iran's economic growth and development [1]. Because of its growing economic situation and geographical location, Iraq can be one of the best trading partners for Iran. Opportunities have arisen in this field given the upcoming political events and Iraq's supporting policies based on drug imports from some countries, including Iran.

Iran's small share in the world trade reveals the country's unfavorable situation in terms of production, efficiency, and competition at the global level. The lack of effective research and development in the target mar-

ket and poor activities and marketing strategies focused on price discussions have reduced the competition opportunities for Iranian companies in the target market [18, 19]. Recognizing business rivals in the target markets is essential and helpful for Iranian exporters. According to prior studies, Iran's business rivals in the Iraq market are Turkey, China, Jordan, Egypt, Saudi Arabia, Germany, South Korea, the United States, the United Kingdom, and Lebanon, which make a difficult situation for Iran [10].

This study aimed to analyze Iraq's pharmaceutical market. Moreover, we attempted to provide solutions for joining and competing in that market by focusing on the advantages and disadvantages of Iran's pharmaceutical industry, and addressing the factors affecting pharmaceutical trade between Iran and Iraq. We also aimed to provide suggestions to improve Iran's sales in Iraq's pharmaceutical market.

2. Methods

We collected the information on the export of pharmaceuticals by studying articles related to the pharmaceutical industry. We developed questionnaire No. 1 which consisted of 6 main groups and each group included a number of factors. The 6 main groups of questionnaire 1 are as follows: 1. GMP quality-related factors; 2. Factors affecting market and marketing; 3. Cultural factors; 4. administrative factors; 5. Economic factors; and 6. Miscellaneous factors. Because the questionnaires were researcher-made, their validity and reliability were evaluated [20].

As a result, several experts in the Iraqi pharmaceutical industry assessed the related questions and made the necessary revisions on the clarity and comprehensiveness of those. Then, 6 main groups consisting of 45 factors were developed. This questionnaire was provided to 10 experts in the pharmaceutical industry and influential persons not influential factors. Moreover, meetings were separately held with each expert in the field of medicine; they were thoroughly informed about the purpose of the study and the designed questionnaire.

The instructions on completing and scoring the questionnaire (Likert-type scale) were well explained to them. After providing the explanations, each expert was given 10 days to study and apply their opinions on this matter. In questionnaire 1, a Likert-type scale (1-10) was used to evaluate each factor. The experts individually assigned a score to each factor based on their experience and knowledge. After obtaining the results of

questionnaire 1, they were all merged and the mean score of each factor was considered (number 10 indicated greater importance of a factor and its effect on the import of drugs to Iraq; number 1 indicated the lower importance of a factor). After evaluating the factors, we performed a paired comparison of the 6 main groups. For this purpose, questionnaire 2 was designed. In this questionnaire, each group was compared with other groups separately and in pairs, using the Simple Additive Weighting (SAW) method, which is a hierarchical analysis [21, 22].

After designing questionnaire 2, we obtained a comprehensive assessment of the importance of groups affecting Iraq's pharmaceutical imports, by the experts. We analyzed the 10 filled questionnaires and merged them together. Then, we summarized and identified the most important groups affecting pharmaceutical imports into Iraq. In the SAW method, the appropriate sample size is between 8 and 16 individuals.

Our study population comprised 10 Iraqi experts, pharmaceutical industry managers, and companies importing pharmaceutical products. After merging the results of questionnaire 2, the value of each main group was achieved. The sum of the value of the 6 main groups was equal to 1, where the share of each group was a fraction of 1. Eventually, by multiplying the mean score of each factor in the value of the related group, the final weight was obtained. This weight indicated the high or low importance of it, compared to other factors. In the next step, each factor was ranked in terms of weight from z to a (from high to low).

3. Results

Questionnaire 1 consisted of 45 factors after evaluating its validity. Iraqi pharmaceutical experts scored each factor based on a Likert-type scale (1-10 scores). The average score of the obtained results was considered for each question; consequently, we proposed a general conclusion about the importance of the factors. In this questionnaire, number 10 indicated the importance of the factor and its great effect on exports, and number 1 indicated the limited impact of the factor on the development of Iran-Iraq pharmaceutical exports.

In questionnaire 2, each of the experts applied their comments. In this questionnaire, a paired comparison was made between the 6 main groups; each group was separately compared with the other 5 groups and the result was presented in the combined part.

Table 1. Comparison between six main groups

Main Groups	Related Factors for Quality of GMP	Factors Affecting the Market and Marketing	Administrative Factors	Cultural Factors	Economic Factors	Miscellaneous Factors
Combined	0.280	0.260	0.165	0.053	0.083	0.158

Inconsistency=0.02; With 0 missing judgment.



After obtaining the results of SAW, the weight of each main group was multiplied by the mean score of the factor; the final result was obtained and prioritized by the amount (Table 1). According to this study, the 10 main factors influencing the export trend are as follows, and the most important factors, are assigned to higher weights (Table 2):

4. Discussion

In this study, the effective components on the exportation of pharmaceutical products have evaluated comprehensively. For this purpose we have used the opinion of experts who are familiar with pharmaceutical policy and political issues. Based on the results of the study, factors related to quality and factors influencing the market and marketing were among the most important affecting groups of factors; other groups were of less importance, and this reveals that the quality of a medication is important for the emergence and sustenance in a foreign market.

Due to the long-term sanctions, the old structure and the lack of full presence in the global marketplace, the pharmaceutical industry of Iran lacks credible inter-

national certifications [23]. Iran’s several year of presences in Iraq and Afghanistan markets failed to provide the necessary driving force for international certificates and quality promotion. This is because of the low standards required to enter the market. Therefore, it is recommended that Iranian companies take the necessary steps to obtain international certificates to gain global credibility and participate in global trade. For the total credit of “Iranian drug”, it is recommended that more stringent standards be considered for exporters, compared to other manufacturers.

To achieve export goals, measures should be taken to prevent quality loss in case of medicine price reduction for export. The desired result is not achieved; this is the reason for the development and sustainment of Indian companies in the target countries market. Furthermore, Iran’s situation is weaker than other rivals in this field; however, Iran could improve due to Iran-Iraq close geographic and religious circumstances.

A continuous and active presence in the target country would help better identify and understand the market; however, many Iranian companies have had a discontinuous and periodic presence in the Iraq market. This

Table 2. Main factors influencing export

No.	Factor	Weight
1	GMP factory approval based on FDA pattern.	2.46
2	Obtaining international certifications of GMP approval.	2.364
3	Unhealthy competition between Iranian export companies.	2.314
4	The lack of taking the opportunities ahead to join the Iraq market.	2.262
5	Inappropriate marketing approach.	2.251
6	The lack of unity among Iranian companies in joining the Iraq market.	2.21
7	Liberalization of Iraq pharmaceutical market for the brands and powerful companies.	2.21
8	Specific and unreasonable conditions of brand companies to compete with other companies and their harmful interactions.	2.21
9	Providing high-quality products to Iraq market to create a positive attitude towards Iranian products.	2.156
10	The lack of specialized exhibition of Iranian products in the country.	2.08



leads to the reduction of trust and the waste of marketing costs, which has prevented export progress.

The selection of an inappropriate and unreliable science school from the Iranian company to track its registration and marketing activities in Iraq were among the factors affecting the reduction in opportunities of presenting in the target market.

Iranian companies should manufacture products with an export perspective; which means that the forms and doses or packaging kinds of interest of the target market may be different from the medicinal characteristics used internally. Therefore, it is recommended that for each product, the specific dose and form of market and specified manufactures for export be studied. Marketing strategies should be tailored to the objectives of the target market.

Initial marketing studies will reduce the final costs of marketing and sales and will increase market penetration likelihood. However, some Iranian companies in Iraq commit destructive competition with other Iranian companies which will unfairly lower the price and reduce the trust of Iraqi companies in Iranian ones.

Establishing the medicinal syndicate office in Iraq to conduct market studies and official and legal follow-ups and to accelerate the registration trend and to control the destructive competition of Iranian companies in Iraq would help solve many of the aforementioned problems. With the comprehensive governmental support of this office, it would lead to increased mutual trust and facilitate the entrance and sustainment in the target market.

Increasing the communications of this office with the specialized medical and pharmaceutical associations of the Iraqi Ministry of Health contributes to the holding of effective marketing conferences and expositions in marketing; thus, it will also facilitate the visit of Iraqi officials from Iranian production sites. Numerous Iranian pharmaceutical companies are governmental and semi-governmental, and lack the necessary flexibility in marketing. Therefore, it is recommended to leave this range of export and marketing in the target country to the private secondary companies to gain the further freedom of action in compliance with the rules of the private sector.

Administrative factors were also affecting the export inefficiency. One of these administrative factors is the lack of electronic infrastructure, the traditional nature

of the Iraqi administrative system; another administrative factor is the existence of multiple decision-making centers in both countries, which delay exchanging the required information and documents. Other problems of Iranian companies include exchange rate fluctuations, and the volatility of exchange laws and transportation problems, like the lack of nonstop transportation.

Considering the problems in obtaining international certificates and Iran's lack of membership in the World Trade Organization, the main pharmaceutical exports of Iran is limited to the underdeveloped or developing countries, such as Iraq and Afghanistan. Therefore, planning to maintain and sustain these markets plays a key role in Iranian exports. The establishment of a fund for supporting exporters provided from the government revenues from drug import tariffs for granting purposeful facilities and rewards are among the supports that can be provided by the government for exporters.

5. Conclusion

The study suggested that quality and marketing power are the most important factors that affect the Iran-Iraq pharmaceutical business.

Ethical Considerations

Compliance with ethical guidelines

There was no ethical considerations to be considered in this research.

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Conflict of interest

The authors declared no conflict of interest.

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