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# Sanctions and Medical Supply Shortages in Iran

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The pronounced role of sanctions in creating shortages of life-saving medical supplies and drugs in Iran may have been unintentional, but it is also irrefutable. Iran's own mismanagement of the situation has aggravated the problem, but it is not the root cause of it. While the list of issues leading to the supply crunch is long and complicated, at the heart of it all are the obstacles that sanctions have created in denying Iran the necessary banking operations and limiting its access to hard currency. Namazi presents findings based on a recent study that he and a number of Iranian consultants carried out.

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Reports from Iran that describe patients who are suffering from or dying of treatable maladies due to shortages of life-saving medical supplies are well established by now. As more and more news of medicine scarcity reached the press, a team of consultants with Iran expertise attempted to evaluate the scale and nature of the problem.

It is often forgotten that despite the humanitarian angle, the medical industry is a business, managed largely by for-profit companies. The pharmaceutical sector in Iran alone is estimated to be a more than \$3 billion-a-year industry, with roughly 30 percent of that figure coming from imported drugs. Dozens of private, semi-private, and governmental Iranian enterprises active in the manufacture, import, and distribution of medicine, along with a plethora of international pharmaceutical and chemical supply companies, are present in the Iranian market.

Through in-depth interviews in Tehran and Dubai with Iranian importers, manufacturers, and distributors of pharmaceuticals and medical equipment as well as their Western counterparts, our study team intended to find out whether and how sanctions on Iran were contributing to the existing shortages and if any solutions could be found.

## **Key Findings**

We learned that despite existing legal loopholes meant to facilitate humanitarian trade, sanctions are indeed causing disruptions in the supply of medicine and medical equipment in Iran. Procurement of the most advanced life-saving medicines and their chemical raw materials from the United States and Europe has been particularly challenging.

As a result, Iranian patients find it increasingly difficult and expensive, if not impossible, to obtain some of the medicines they need. When they do fill a prescription, they risk amplified side effects and reduced effectiveness because Iran is forced to import more and more medicines, or their chemical building blocks, from India and China, thereby replacing the higher quality products from Western manufacturers. Imports from American and European drug makers were down by an estimated 30 percent in 2012 and falling. In the highly patented world of pharmaceuticals, substitution is often unfeasible, particularly when it comes to advanced medicines used to fight diseases such as cancer and multiple sclerosis.

The outlook is bleak, and, without further targeted sanctions relief, the humanitarian predicament caused by these shortages will intensify.

Put plainly, Washington and Brussels' stated intention that sanctions "pressure the Iranian government...without contributing to the suffering of the ordinary [Iranians]," as former Secretary of State Hillary Clinton once put it, is not being reflected by the reality on the ground.

This paper aims to explain how sanctions have impacted the Iranian pharmaceutical and medical supply business, leading to the shortages we see today. It will also look at why the legal exemptions put in place to prevent such shortages from happening are ill-designed and insufficient at achieving that goal. The paper concludes by offering specific recommendations on necessary changes in the sanctions regime in order to ameliorate the situation and limit the unintended effects of the sanctions on Iranians in need of medical attention.

## **A Skeptical Viewpoint**

There are skeptics who have reservations about the root cause of the crisis at hand, pointing to Tehran's own mismanagement, along with other factors, rather than American and European sanctions, as the real culprit behind medicine and medical supplies shortages in Iran. Broadly speaking, the skeptics rest their conclusion on three pillars:

First, they refer to select news stories coming from within Iran itself – including the fact that luxury consumer products and even European sports cars were at one point somehow entering the country while there was a scarcity of humanitarian products.

Second, they are quick to point out that there is no *de jure* ban on humanitarian trade with Iran, and even the strictest sanctions put in place by the United States specifically provide provisions for waivers for exchanges of food and medicines. Indeed, some of the largest American and European drug and medical equipment manufacturers continue to supply the Islamic Republic with goods up to this day.

Finally, there is the flawed argument made by those who believe that Iran could solve its problem by importing even more medical supplies from India and China than it already does.

Adopting a scientific approach, our study team started by examining the skeptics' key arguments, setting them as our initial hypotheses, and then looked for evidence that would disprove or confirm their veracity. Each of the above arguments will be discussed in depth in the following sections.

## **Iranian Shortcomings**

There is no doubt that Tehran's general unpreparedness for and mismanagement of the sanctions imposed on it compounded and exacerbated the complex problem of medical shortages in Iran. In fact, Iran's own Minister of Health and Medical Education Marziyeh Vahid Dastjerdi recently lost her job after unambiguously rebuking the government for its maladroit handling of the medical shortage crisis.

Our study discovered even further problems than those mentioned by the cynical camp, including myriad deficiencies in Iran’s pharmaceutical sector itself, which, though advanced by developing country standards, is hindered by abundant shortcomings. But, there is no mistaking that the scarcity of medicine and medical equipment in Iran started with the tightening up of sanctions. Nearly every one of our interviewees – including senior officers of American and European companies that supply pharmaceutical and medical products to the country – attested to this fact.

For example, an American pharmaceutical company representative informed us that in the fall of 2012, sanctions-related banking complications deterred it from fulfilling a substantial Iranian order for a patented drug this company makes that prevents the body from rejecting a donated organ. Without a viable replacement for this drug, Iranian organ transplant recipients were left with no alternative. “Imagine the loss for the person who waited years for a donor,” explained the company representative. The sale was legal, and all the necessary licensing from the U.S. Treasury was in place.

Intuitive logic also supports the study’s findings. Remember, Iran had the same government and the same companies running the pharmaceutical and medical supplies business – all with the same deficiencies – prior to the ratcheting up of sanctions; yet Iranian patients did not lack in healthcare in the same way that they do today. Shortages began when the continuous tightening of sanctions eventually placed overwhelming obstacles in the way of humanitarian trade. There is no chicken and egg argument to be had in this instance since the timeline is clear.

While Tehran must improve its foreign currency allocation competence and transparency, as well as governance of the sector, the current crisis warrants a reexamination of the role that American and European sanctions play in creating shortages of medicine and medical products in Iran.

Ultimately, the West’s sanctions regime against Iran contributes to shortages of humanitarian goods by disrupting the supply chain from foreign manufacturer to the Iranian patient in need of medicine.

Two factors stand out and are more pronounced than the others: (1) Sanctions create a bottleneck in the banking facilities necessary for trade; (2) Sanctions cause scarcity of hard currency needed for trade with European and American manufacturers.

## **Banking Bottlenecks**

Presently, despite provisions of limited exemptions in American and European sanctions that are meant to facilitate humanitarian trade with Iran, the intertwined structure of the sanctions regime makes it nearly impossible to do so. As an American industry lobby group USA Engage explained in a letter to President Barack Obama in September 2012, “What is ostensibly permitted by license under one rubric is in fact ruled out by express prohibition under another.”

Blacklisting Iran's main banking infrastructure and cutting the Islamic Republic from the Society for Worldwide Interbank Financial Telecommunication (SWIFT) created obstacles for international trade; trade in humanitarian goods, including medicine, is no exception. By removing the larger Iranian banks—especially Bank Tejarat, which is the country's main trade bank—from the system, the banking circuit was cut between the Iranian importer of legal humanitarian goods and the seller.

Not only are the existing sanctions exemptions flawed and insufficient, but also the *de facto* implementation of these laws far exceed their *de jure* requirements. Draconian penalties for a potential U.S. sanctions violation are discouraging the involvement of international banks in humanitarian trade with Iran. Even when the most reputable American and European pharmaceutical companies are involved, and their lawyers have completed all the necessary paperwork from the U.S. Treasury's Office of Foreign Assets Control (OFAC), nearly all banks that Iran deals with prefer to err on the side of caution. Their hesitation is understandable given that a mistake could earn a bank the wrath of the U.S. Treasury Department and fines that exceed \$1 billion.

The recent experience of a reputable Iranian pharmaceutical group shows the magnitude of the problem. When a senior company representative flew to Paris to present a French bank with documentation showing that the trade was fully legal, he was told: "Even if you bring a letter from the French president himself saying it is OK to do so, we will not risk this."

With Iranian banks blacklisted and international banks hesitant, very few options are left for Western companies trying to sell their medicine and humanitarian products to Iran. In fact, the companies we interviewed gave reference to only a single banking channel being used for opening letters of credit in order to carry out pharmaceutical trade with Iran. Consequently, humanitarian trade is greatly reduced; what is taking place is delayed due to the extra checks involved that ensure the legality of every transaction and also because the volume of trade exceeds the said bank's capacity. These delays, in turn, play a prominent role in causing shortages of medical supplies.

A similar situation exists in terms of shipping, insurance, and other services needed for trade.

## **Hard Currency Shortages**

Western sanctions leave Tehran short of the hard currency it needs to pay American and European pharmaceutical companies. The pharmacy shelves are left empty as the Iranian importer waits for his turn to open a dollar or euro-denominated letter of credit.

"The banks in Iran tell me that they can provide me with Rupees, Won, Yuan, and *maybe* Turkish Lira, but the wait time for dollars or euros is impossibly long," explains the Iran country representative of a Western pharmaceutical company, echoing a testimony heard repeatedly during our study. European and American pharmaceutical companies do not accept those currencies, whereas the terms of Iran's oil sales limit its ability to convert funds from one currency to the other.

Making the cash crunch more pronounced is a decision by Western pharmaceutical companies and medical products manufacturers to reduce, or altogether eliminate, credit facilities given to their Iranian distributor. Seeing the growing challenges in finding a working banking channel to get paid by the Iranian side as a result of the sanctions, these European and American businesses are simply reducing their risk and exposure to bad debt. Today, with few exceptions, they only sell their goods to Iran under cash-advance terms.

It is true that despite drastic cuts in crude exports, Iran still sells over one million barrels of oil a day. But the restrictive requisites of these sales make them tantamount to a complex barter system, ultimately leaving Tehran short of dollars and euros. For example, Iran's oil sales to China earn Yuan, which it must keep in Chinese banks and which it can only use to compensate Chinese companies for exports to the Islamic Republic. The Iran Threat Reduction Act, which went into effect February 6, makes matters worse by reinforcing this virtual barter system.

### **Shortcomings of the India and China Solution**

As stated earlier, some casual observers dismiss the hard currency shortages as the cause of medical shortages and suggest that the Islamic Republic could simply purchase more products from India and China. But this reasoning is flawed, ignoring the fact that the pharmaceutical sector is highly patented; big drug manufacturers enjoy a 20-year patent protection on the most advanced medicines. For these drugs, there is a single seller in the world, which is most often a European or American company. No alternative exists.

Indian and Chinese medicine and chemical raw materials are indeed cheaper to obtain, and the for-profit Iranian importers or manufacturers need no external encouragement to lower their costs of goods sold. Even prior to the sanctions, Iran bought a significant amount of finished drugs, raw chemicals, and active pharmaceutical ingredients (APIs) from these countries, when it was possible and advisable to do so.

Because of the sanctions, Iran is left little choice but to expand its imports of Indian and Chinese medicines, including in cases where it had previously deemed them unsuitable. Iranian patients are experiencing reduced medical effectiveness and increased side effects as a result of the switch from American and European brands.

For instance, we were informed that Iran recently imported an Indian-manufactured drug used in chemotherapy to replace the same drug that it used to procure from a European pharmaceutical company prior to the sanctions. An Iranian doctor explained the results: "Our patients showed major side-effects after using it, such as many terrible cases of skin peeling, which didn't happen with the Western-produced version. So, there is now no interest by Iranian doctors in prescribing it, and if they do, the patient will avoid it and try to buy the original in the black market or through the help of friends and relatives abroad."

In addition to the problem described above, there are other limitations to substitution of medical molecules as well, such as those imposed by licensing agreements. If the Iranian company is manufacturing medicine under license from a European pharmaceutical company, quality control measures prohibit it from using cheaper, substandard chemical ingredients.

## A Vicious Cycle

Despite the involvedness of the picture described thus far, it is just a partial explanation of the vicious cycle that sanctions create, which is ultimately resulting in the scarcity of medicine in Iran. The more one digs, the more problems, complications, and challenges one will find.

Consider the complexities created by the economics of a multi-rate exchange system.<sup>i</sup> Since Iran resorted to this system in the fall of 2012, Iranian drug manufacturers and importers are dependent upon government allocations of foreign currency.

In the past, many importers avoided the hassle of opening a letter of credit and instead sometimes relied on the unofficial *hawala* system for getting a hold of the dollars and euros they needed. But that was only feasible before the collapse of the value of the rial, when the spread between the exchange rate obtainable at a bank and an outside exchange depot was negligible.

Today, it is exponentially more difficult, expensive, capital-intensive,<sup>ii</sup> and time consuming to get hard currency allocations from the government. However, the threefold differential between the “reference rate” of exchange and the unofficial-market rate means that legitimate medical supply imports must queue up and wait their turn. Due to the existence of price cap regulations,<sup>iii</sup> if an importer brings in a particular drug through Iranian customs without getting his subsidized currency allocation from the government, he will end up selling it at a major loss. If the price caps are removed, the medicine could become unaffordable to the majority of patients.

Meanwhile, traders of the chemicals that make up the building blocks of medical drugs are increasing their margins to cover the costs and risks of finding a creative channel to get their goods to Iran.

## Winners and Losers

Unfortunately, that is not where it all ends. Consider who stands to gain and who loses from the cycle described above. Corrupt practices and smuggling are on the rise, and the Iranian black market for otherwise unobtainable medicines is flourishing. Small, private pharmaceutical suppliers are going bankrupt while companies with strong connections to the government stand to benefit from unfair preferential access to the subsidized foreign exchange rate.

Every aspect of an Iranian drug maker and distributor is being tested since the tightening up of sanctions. Their costs of goods sold are rapidly rising; their working capital requirements have skyrocketed by an astonishing multiple of three or more; and they operate in an exceedingly cumbersome regulatory and legal environment that can change, for the worse, without notice. All the while, the Iranian regulator is pushing them to adhere to unrealistic price caps. To top it all off, their end clients – the hospitals and pharmacies – are also facing major cash flow issues and are paying late.

Clearly a business cannot tie up more capital – particularly capital that far exceeds its means – for longer periods of time, face greater risks and restrictions, endure higher input costs, get paid back later, and sell its goods with minimal price increases, if any.

The surge in working capital requirements alone has bankrupted some of the players and is sure to destroy more businesses with time. Also, as any manufacturer or importer can attest, a dramatic increase in required capital translates to a decrease in a firm's ability to produce and import.

The survivors are the better endowed companies, who owe their financial strength to bigger size and better management or, alternatively, to connections with the government.

For the private players, survival comes at a cost. In order to keep afloat, some manufacturers are forced to reduce the quality of the drug made by using lower-quality inputs. Others resort to eliminating some of their lower-margin product lines because it is no longer profitable to make that particular drug or because they can no longer find a particular chemical ingredient that is required.

The governmental and quasi-governmental players, meanwhile, are in a relatively better situation than the private players, though they, too, may have to resort to the described cost-cutting methods. Given their connections, however, these companies find it easier to maneuver through the red tape and may be able to access scarce foreign currency allocations more easily than their private counterparts do.

Then there is the issue of smuggling, which tends to go hand-in-hand with scarcity. Otherwise unobtainable medicine is procured using unsubsidized dollars on the open market and illicitly imported into Iran through the Turkish or other borders, literally on the backs of mules. It is then sold at a markup in the back alley drug markets of the country. Needless to say, this activity is not undertaken by reputable companies and is usually a job preferred by shady traders. The end consumer can easily fall prey to expired drugs, counterfeit products, or medicine that was corrupted due to improper transportation and handling. People are often aware of the risks but have no other recourse since the medication they need is not available on pharmacy shelves.

For the least scrupled among the black market traders, there is an arbitrage opportunity for anyone who can get their hands on the medicine brought in via a legal channel (i.e., with the subsidized exchange rate) and re-export it to neighboring countries. There are, of course, measures put in place to account for the imported medicines and to avoid exactly such a situation, but, given the size of the arbitrage, regrettably, there are some leaks.

## **Conclusions and Recommendations**

The pronounced role of sanctions in creating shortages of life-saving medical supplies and drugs in Iran may have been unintentional, but it is also irrefutable. Iran's own mismanagement of the situation aggravated the problem, but it is not the root cause of it. While the list of issues leading to the supply crunch is long and complicated, at the heart of it all are the obstacles that

sanctions have created in the way of humanitarian trade, namely in denying Iran of the needed banking operations and limiting its access to hard currency.

Consequently, Tehran is unlikely to wrestle open this Gordian Knot on its own, and the situation is expected to deteriorate further unless Washington and Brussels take action. Three important steps are immediately needed in order to make a substantial contribution to alleviating the problem:

First, existing contradictions in various U.S. and European sanctions laws must be resolved so that permissible humanitarian transactions can take place. Without the necessary financial transaction side working, humanitarian exports will simply fail. Most importantly, the United States must make it unambiguously clear that American and third-country financial institutions are fully authorized to participate in the transfer of funds related to the supply of humanitarian goods to Iran.

Second, after years of U.S. coercive engagement with governments and banks around the world to convince them to cease business activities with Iran, active diplomacy will be required to reassure financial institutions that no punitive action will be taken for the facilitation of humanitarian trade with the Islamic Republic.

For example, in the UAE, senior members of the U.S. Departments of State and Treasury must meet with the Governor of the Central Bank of the UAE and assure them that these transactions are indeed permissible. The officials should also request that this message is communicated to key Emirati banks, particularly Noor Islamic Bank and Emirates NBD.

A similar message must be communicated to providers of shipping and insurance services involving humanitarian cargo and, obviously, to the major pharmaceutical and medical supply companies.

Finally, the terms of the exemptions of the purchase of Iranian crude oil should be amended in a way that gives Iran access to the funds it needs for the purchase of life-saving medicines from American and European companies. For such trade, Iran should be able to convert its holdings in Chinese, Indian, and other banks around the world into hard currencies. Alternatively, Europe may buy a small quantity of Iranian oil and hold the funds in escrow in its banks to be used solely for purchasing life-saving medical products.

Drilling holes in the painstakingly-crafted sanctions wall around Iran may be a hard pill to swallow for Western policymakers. But unless action is taken, medical supply shortages in Iran will become more acute, and the West will fail to live up to its objective of “not contributing to the suffering of ordinary Iranians.”

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## About the study

To gain an understanding of the problem, we conducted detailed interviews in Tehran and Dubai with Iranian manufacturers and distributors of pharmaceuticals and medical equipment, as well as their international suppliers of raw and finished materials. We focused mainly on the largest, most reputable private players in Iran and on European and American pharmaceutical and chemical suppliers. All interviewees were guaranteed confidentiality so that they could speak openly. Importantly, no member of our team had any direct or indirect financial stake in the Iranian medical supply and pharmaceutical business and worked solely on a *pro bono* basis.



The opinions expressed herein are those of the author and do not reflect those of the Woodrow Wilson Center.

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<sup>i</sup> There are currently three rates of exchange in Iran. At the lowest rate of exchange (referred to as the “reference rate”), \$1 fetches approximately 12,260 rials and is reserved for essential imports, including humanitarian products. A second rate is used for other priority imports and is about twice as expensive as the reference rate. Then, there is a “free market” rate usually obtained through unofficial exchange depots, which fluctuates around 30,000-37,000 rials to the dollar.

<sup>ii</sup> Iranian banks are now requiring deposits of 120 percent from customers who need to open a letter of credit, as opposed to the 15-25 percent that was needed in the past. The reason for this phenomenon is complex and beyond the scope of this study, but ultimately has to do with the bank’s risk management, as they are not sure whether or not there would be changes in the official exchange rate declared by the Central Bank by the time the line of credit is cleared.

<sup>iii</sup> The Ministry of Health and Medical Education determines this price of imported drugs by taking the cost of the imported medicine and adding a certain margin for the importer, distributor, and pharmacy. The initial cost of the imported drug, of course, is translated into rials at the reference rate.

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