

Health Committee (SA3)

Promoting a Globalized Model of Collaboration In the Corporate Pharmaceutical Industry

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RESEARCH
REPORT



Forum: Health Committee (SA3)

Issue: Promoting a globalized model of collaboration in the corporate pharmaceutical industry

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Introduction

The pharmaceutical industry is the backbone of the health sector. Medicine constitutes the core of disease treatment, control and prevention, and health is a universal basic necessity. This makes the industry itself highly profitable. Thus the competition is extremely high and companies' priorities may include personal gains rather than the principal purpose of ensuring public health.



Figure 1 Prozac pills

The process of a drug being produced and offered to patients is complex. The release of a drug to the market requires many steps and can be prolonged with regulatory processes in order to make sure that it is safe and effective. In addition, although lucrative at the end, the prolonged timeline of developing a drug is approximately more than a decade and is costly for the producer (Dailey).

Through the years, the pharmaceutical industry has become a major field where large companies dominate the market and make much profit (Blumenthal). Whether the main aspiration of public health is put above personal gains is

uncertain. The high prices, prolonged development and release of drugs are global issues. Therefore, a solution can only be implemented through cooperation on an international level among companies within the pharmaceutical industry.

International collaboration is especially important amid the COVID-19 pandemic, where the world is in a global crisis (Press Trust of India). Therefore, in times like these, the global community, including the pharmaceutical corporations, should put collaboration above competition and work for aligned objectives of promoting public health in essence.

Definition of Key Terms

Research-and-development (R&D): Consists of all the efforts directed at discovering and producing a novel product within an industry. R&D can also be specialized as a department in a corporation.

Patent: Refers to the recognition of a corporation of a person by governments as the inventor of a certain product. Patents enable the owner to hold the rights to be the only one to produce, sell or market a certain product generally for a decided amount of time.

Brand-name drugs: Patented medication supplied to the market by only a specific corporation are called brand-name drugs.

Generic drugs: After the expiration of a brand-name drug's patent, the medically equivalent drugs of the medication are named as generic drugs.

Intellectual property rights: The owner of a creation of the mind holds the rights to her idea for a limited amount of time. These rights are protected under the intellectual property rights (World Trade Organization).

General Overview

The pharmaceutical industry's workings include various complex processes of mainly research and development (R&D), manufacturing, marketing and distribution (Dailey). Drugs constitute the essential substance for the treatment of patients whether this is a cure, vaccination or mitigating symptoms (Stringer). Since the entrance of an ineffective or even hazardous drug into the market would be catastrophic, governments enforce various laws and put forth regulations (Britannica Academic). This process includes clinical trials for proving the drug's effectiveness and safety.

Another fundamental aspect of the industry is the concept of patents. There are two types of drugs: brand-name and generic. After the development of a drug, the producer corporation may apply for a patent which enables the producer to manufacture and market it exclusively within a country. This averts market competition and enables corporations to increase the price tag and maximize profits through patented drugs. After the expiration date of the patent, the drug's generic version becomes available to production by any company, which gives way to competing corporations to produce and release it. These generic versions are usually much cheaper than the brand-name versions since they are less expensive to be followed through the development and approval process.

The problem is that pharmaceutical is a costly industry. Therefore, the leading firms are generally large pharmaceutical companies with abundant resources with presence in a variety of sectors from R&D, and distribution to sales and marketing. This results in smaller organizations remaining much weaker and a high tendency for the industry to turn into a monopoly. The costliness and high-profit margins set by corporations with patented drugs cause drugs to be expensive and inaccessible for a vast majority of the public and countries, who are in the most need.

A second major problem is the long time duration a drug takes to be authorized for sale. Not only does the R&D of a drug prolong this process but also the approval of it by the authorized government entities is a lengthy process too. Furthermore, only 12% of the drugs being researched make it to the

shelves at the end since a majority of medications fail in effectiveness and safety during clinical trials (Sullivan).

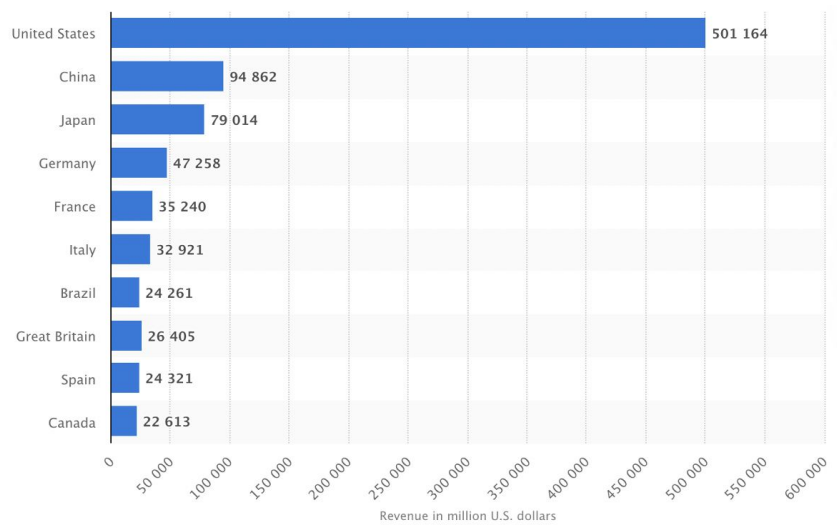


Table 1 Revenues of top 10 national pharmaceutical markets worldwide in 2019 (in million U.S. dollars)

The means to overcome these issues and shift the conditions of such a crucial industry is through global collaboration. Currently, such companies do make collaborations, some of which may merely fall into the category of outsourcing. However, the past competitive nature of the industry is still intact, and the collaboration within the industry is only to an extent. The collaboration is mostly in the R&D stage of production (Robinson). Drug discoveries usually come from universities and research institutions. Still, aside from academia, corporations also collaborate with biotech companies (Inova Software).

The R&D chief of Sanofi SA, a leading pharmaceutical company, Elias Zerhouni states “Diseases like Alzheimer’s and diabetes are looming tsunamis. Deciphering them could not be done by any single organization. And no one company can do it.” (Langley and Rockoff).

Collaboration would make innovation within the pharmaceutical industry possible. The development and manufacturing of drugs is already a time-demanding and expensive undertaking, and collaboration can provide a means to overcome these. In addition, collaboration would be key in accessing novel technology such in the case with tech companies (Team). Shortly, cooperation among companies within the pharmaceutical industry ensures innovation, less cost and agility in drug development. Data sharing is a major component of this collaboration and would be highly beneficial such in the case of improving research and making clinical trials both faster and more reliable (Team).

Evaluation of Previous Attempts to Resolve the Issue

One of the most influential and essential solutions that have been implemented on the issue is Global Health Progress led by the International Federation of Pharmaceutical Manufacturers & Associations (IFPMA). With over 1000 partners from a variety of different sectors, more than 250 health initiatives have been undertaken thanks to the efforts of the international partnership. Alongside serving

as a biopharmaceutical database, the initiative also offers partnership opportunities to its collaborators, which include numerous leading companies within the industry (United Nations). In addition, the Global Health Progress aims to further five of the United Nations Development Programme's (UNDP) Sustainable Development Goals (SDGs).



Figure 2 Global Health Progress Emblem

Led by various organizations invested in international health like the Wellcome Trust and the World Health Organization (WHO), one of the newest partnerships regarding collaboration in the pharmaceutical industry has emerged with the unprecedented times the coronavirus pandemic has brought upon the world. Called the Access to COVID-19 Tools (ACT) Accelerator, this collaboration aims to ensure that new ways to cope with the COVID-19 virus such as tests, medication and vaccines are accessible to the international community. Another goal of ACT is to stimulate the process of finding and developing such tools through collaboration on an international level, bringing NGOs, IGOs, governments, public and private corporations, leaders and academia together.



Figure 3 An illustration of a possible COVID-19 Vaccine

It should be recognized that rather than failed attempts, the aforementioned are successful initiatives with potential on making a change in the issue. However, it is a fact that the severity and the enormity of the issue remains. Therefore, rather than being discarded or totally ignored, these solution attempts should be seen as starting points or at least guidelines when approaching the problem and the aims they outline should be assumed when devising others.

Possible Solutions

When thinking about solutions, one of the major points would be to consider the costs and benefits of such collaborations to the corporations they aim to encourage. Aspects like shared risks, less expenditure and more innovations are aspects to promote collaboration. However, there are also the issues of aligning goals, personal gains and the difficulty of determining the agreed goals. The key to finding effective solutions should be based on thinking of ways to maximize these gains and minimize the downsides of collaboration.

Some of the things to pay attention to are intellectual property rights and the problem of patents that enable a corporation to be the market supplier of the drug. This is the basis of the way the pharmaceutical industry works and corporations cover their great expenses during the R&D stages, making profit through high drug prices. Extreme approaches like replacing patents with taxes and prizes as a way to fund the R&D stages do exist (Team). However, their viability in practice along with the ways to realize and execute such solutions should be thought of in detail.



Figure 4 Emblem of World Health Organization (WHO)

Non-governmental and intergovernmental organizations can also be considered as major parties in the goal of encouraging global collaboration within the corporate pharmaceutical industry. These agencies can act as intermediaries in finding a common ground for these cooperation efforts and offer large corporations aligned objectives. Furthermore, such middle ground can help with issues such as transparency and trust among companies. Transparency and making the information these large companies cultivate is crucial for innovation and development to be pushed forward. The more information is accessible to a greater audience, the more advancement can be fuelled in the pharmaceutical industry.

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