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EDITORIAL COMMENTS – OPEN ACCESS

Drug Patents: A Historical Look at a Controversial Subject

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The current coronavirus disease 2019 pandemic and other previous health crises, such as acquired immunodeficiency syndrome, have highlighted the problem of drug availability in countries with the lowest gross domestic product (1). Like all patents, drug patents protect inventors and reward them for intellectual and financial efforts they put into their discoveries. However, it is considered that the protection of drugs may limit patients' access to care and lead to costly monopolies for society, even if it lasts only a short time. A patent also prevents large-scale production by different manufacturers that are independent of the inventor.

This issue is not new. In 1791, at the time of the French Revolution, it was thought that the inventor could be remunerated in two ways: through patents and a financial reward given by the state. Some scientists voluntarily declined to patent their inventions or discoveries. For example, Pierre-Joseph Pelletier (1788–1842) and Joseph-Bienaimé Caventou (1795–1877), who discovered quinine in 1820, considered that their major innovation belonged to everyone; hence, they became known as the "benefactors of humanity" (2). Similarly, Marie Curie (1867–1934), the discoverer of radium, refused to patent the process of extracting radium in order to promote future work in this field free rein (3). In the United States, Jonas Salk (1914–1995) also declined to patent to the polio vaccine (4).

As a result of the idea that an invention in the field of medicine should be accessible to the highest number of people, France excluded medicine from patentable products in 1844 (until 1959). However, the generous idea of maintaining free access to new medicines ran into several problems. The most instructive example is that of Louis Pasteur (1822–1895) who, with regard to vaccination and all his scientific work, had an ambiguous attitude. He filed numerous patents that allowed sources of income for the Pasteur Institute and himself for future research, and yet he proclaimed the importance of the disinterestedness of scientists (5, 6). Since the time of Pasteur, patent laws and the fight against the manufacture of counterfeit drugs have been strengthened in all countries. Moreover, universities are taking more care to protect the inventions of their researchers in order to increase the institutions' financial resources.

Nevertheless, as a result of the dramatic health crises that have occurred since the last few decades, particular situations in the poorest countries have been considered. Since 1994, the international agreement on Trade-Related Aspects of Intellectual Property Rights has made it possible to issue a compulsory license for a patented drug in a situation of health emergency (7). This has led to the implementation of a few compulsory licenses, but above all, it has led to a significant drop in the prices of new drugs in the countries concerned (8). The compulsory license is not only complex to implement but also opens the door to unauthorized drug trafficking between countries. Between necessary exclusivity and legitimate sharing, is a new point of balance possible in the field of medicine?

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