

Research and Development (R&D): A Key to Solving Our Problems

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ABSTRACT: Research and development (R&D) hold the key to solving the problems of Thailand and other developing countries. R&D on neglected diseases, specific problems for the developing countries, are of special importance, since they are not of major interest of developed countries and transnational companies. By concentrating on this and other problems of special relevance, the developing countries can show the world that they are trying their best to solve their own problems. With co-operation from the developed countries, these problems can be solved in the long run.

KEYWORDS: R&D, developing countries, neglected diseases, compulsory licensing, pharmaceuticals.

The ongoing controversy over compulsory licensing has exposed many problems on international trade relations and intellectual property, with implications on research and development (R&D). Compulsory licensing forces drug companies owning patents of the drugs to license their manufacturing, resulting in generic competitors of such drugs. Such measures would lead to cheaper drug prices, beneficial for consumers but reducing the return for the companies owning the drug patents. The issue was raised when Thailand threatened to invoke compulsory licensing and parallel import of drugs considered to be too expensive in terms of public health burden, out of necessity of having to take care of seriously ill patients with the limited means available. Such compulsory licensing measures have been allowed in the so-called TRIPS (trade-related aspects of intellectual property) agreement of World Trade Organisation (WTO). In addition to Thailand, other countries which have invoked or threatened to invoke compulsory licensing include Brazil, India, South Africa and Mozambique. Central to this assertion is the argument that health is an integral part of human rights [1]. Insofar as there is an obligation for all countries to respect human rights to basic health care, compulsory licensing can be justifiable in the case of neglected diseases, or diseases of the poor, for which treatment and prevention are beyond the means of most people in the developing countries. However, it should be used only as a last resort, when it is clear that failing to do so would violate such basic human rights.

While negotiations are still ongoing to reach a mutually agreeable compromise for the current problems, the issue has brought into the open another important topic: the willingness and capability of developing countries like Thailand to embark on its

own R&D, so that it does not always have to rely on intellectual property from outside, or at least shows that it is devoting its best effort towards solving its own problems. In the long run, this topic is surely of more importance than the issue of what should constitute legitimate items for compulsory licensing.

Eventually, Thailand and other countries need to participate in the global effort to find cures or prevention for the neglected diseases. Neglected diseases include malaria, sleeping sickness, Chagas Disease, helminthic diseases, which are "neglected" because those afflicted are mostly poor people in developing countries, which do not have the financial means, nor access to public health measures, to fight the diseases. They should also include AIDS and tuberculosis, which threaten people in developing countries more, simply through lack of access to adequate health care. Drugs and vaccines against these neglected diseases are difficult to develop, and a global effort involving partnership between public and private sectors in developed and developing countries is needed for success. Rather than relying on compulsory licensing, which can provide only short-term benefits for the developing countries, it is better to build such partnership. By concentrating on the problems of neglected diseases, developing countries like Thailand can show that they are serious in the effort to solve their own problems, and contribute to the world at large.

Of course, co-operation and partnership is needed from developed countries. This co-operation and partnership is possible when the developing countries have some capability for R&D, in addition to only providing the clinical cases. Many developing countries, including those engaged in compulsory licensing, already have significant capability for R&D, both in the

private and public sectors. For example, Ranbaxy, a local firm in India, has 1,100 researchers and invests 7% of its turnover in research and development [2]. In recent years, it has gone from ignoring patents to defending them, since it now has inventions of its own that it wishes to protect. With increased R&D capability, therefore, we can expect the developing countries to be more willing to be engaged in voluntary, rather than compulsory, licensing.

Increased capability in R&D should lead to far more benefit than trade relations. Thailand and other “advanced” developing countries are at the transition point, where only entry to the knowledge-based community will allow them to survive and grow further. Pharmaceutical R&D is only one area among others, which also need to be strengthened. We can similarly consider R&D on alternative energy, environment, natural products and many other areas in manufacturing and services, which can gain from the synergy of international co-operation. Only when this is achieved can the competitiveness of Thailand and other similar developing countries be increased to the point when issues like compulsory licensing recede into insignificance.

REFERENCES

1. Hunt, P. (2007) Neglected Diseases, a Human Rights Analysis. Special Topics in Social, Economic and Behavioural Research Report Series, No. 6, TDR/SDR/SEB/ST/07.2. WHO, Geneva, pp 64.
2. Anonymous (2007) Pharmaceuticals. A Gathering Storm. Economist Print Edition 7 June 2007. http://www.economist.com/business/displaystory.cfm?story_id=9302864, retrieved 3 October 2007.