

THE VULNERABLE ASPECTS OF APPLICATION OF “HEALTH TECHNOLOGY ASSESSMENT”

doi:10.1017/S0266462315000288

Many countries in the world have tried to examine the possible methods for import and logical use of health technologies to manage their budgets on one hand and to prevent the entry of uncertain, inefficient, and insecure technologies on the other hand (1). The “health technology assessment” (HTA) is one of the dominant methods in most developed countries (2). HTA is a multidisciplinary field which studies the medical, social, and ethical aspects, as well as economic outcomes of production, diffusion, and application of health technologies (3).

However, the HTA as a key instruments in decision making and priority setting is an emerging and, of course, increasingly pervasive notion in most of developing countries. The critical value of this domain for policy makers of those countries is observable in increasing initiation of HTA organizations.

It is perhaps safe to say that there is a long way to reach to the standard levels. In this respect, providing a careful evaluation of the quality and activities of HTA systems would be highly rewarding. For instance, the recognition of how to import and how to cover several fields of technology are worthy to review, as these topics provide important points regarding the HTA’s unseen aspects in those countries.

In general, health technologies are divided into six main subdivisions including Drugs, Biologics, Devices, & Equipment, Medical and Surgical Procedures, Support Systems, and finally Organizational and Management Systems (4). Since the term technology, *per se*, is hardly referred to such soft sciences as management and support systems, the HTA studies have been mostly restricted to those areas such as drugs and equipment technologies. However, the significance and effects of a supportive or management system could be enormous.

In fact, the proper implementation of a suitable supportive or management system can provide adequate room and necessary infrastructures for the other technologies, so could have greater impacts.

Since its establishment in 2009, Iran’s Bureau of HTA, located at the Ministry of Health and Medical Education, has published twenty-two reports for policy makers. A cursory glance at those reports confirms that most of the HTA projects have been done on more technological fields, such as drugs and equipment technologies. The same procedure is observable in other developing countries, and seems that it takes a long time to implement HTA to soft sciences such as management studies. One explanation could be the lack of appropriate methodologies in assessments of supportive and management systems (5).

To accelerate the process of implementation of HTA to management systems, meticulous consideration of these two points is worthwhile. First, the absence of a specialty and professional knowledge: the scientific ability of doing HTA is so restricted in these countries; moreover, this restriction is more serious in the projects related to the supportive and management systems. For instance, although there are some graduate programs of HTA studies at Master’s level in Iran, these programs are oriented to study just drugs and equipment technologies. Second, the procedures of topic choosing to do HTA are also problematic. For example, logistics and management professionals usually are not invited to participate in decision committees.

It is suggested that the authorities of these countries make an effort to provide necessary conditions to achieve and transmit required knowledge and methodologies for doing HTA projects concerned with logistics and management systems. Additionally, management professionals should be asked to be engaged with topic selection processes.

Based on previously mentioned concerns, an important question is under which circumstances health technologies

should be selected and imported by developing countries. It seems that in most cases this process is regrettably superficial and these technologies are entered to developing countries just because of their efficiency and successful performance in developed countries. Although, today, it is highly advised to use HTA studies and scientific evidence in choosing these technologies, but the final decision is usually made just based on a partial HTA and not a complete one. In fact, in most cases, the main attention has been paid to the phases of costs and efficiency of these technologies and cultural, social, and infrastructural phases are usually ignored. Consequently, the imported technologies of support and management systems, regardless of their efficiency and security, are faced with improper culture and infrastructures, finally leading to a national health system with serious problems and incompatible technologies.

In this respect, using a comprehensive approach to HTA by developing countries, with particular attention to cultural and infrastructural dimensions of technology, is not an option but a necessity.

Reza Dehnavieh

Health Services Management Research Center, Institute for Futures Studies in Health, Kerman University of Medical Sciences, Kerman, Iran
rdehnavi@gmail.com

Somayeh Noori Hekmat

Health Services Management Research Center, Institute for Futures Studies in Health, Kerman University of Medical Sciences, Kerman, Iran

Sara Ghasemi

Social Determinants of Health Research Center, Institute for Futures Studies in Health, Kerman University of Medical Sciences, Kerman, Iran

Nadia Mirshekari

Medical Informatics Research Center, Institute for Futures Studies in Health, Kerman University of Medical Sciences, Kerman, Iran

REFERENCES

1. Dehnavieh R, Maleki MR, Rashidian A. Challenges of determining basic health insurance package in Iran. *Payesh*. 2011;10:273–283. [Persian].
2. Boos N. Health care technology assessment and transfer. *Eur Spine J*. 2007;16:1291–1292.
3. Kristensen FB, Lampe K, Chase DL, et al. Practical tools and methods for health technology assessment in Europe: structures, methodologies, and tools developed by the European Network for Health Technology Assessment, EUnetHTA. *Int J Technol Assess Health Care*. 2009;25:(Supp 2):1–8.
4. Goodman C.S. *Introduction to health technology assessment*. The Lewin Group. 2014. http://www.nlm.nih.gov/nichsr/hta101/HTA_101_FINAL_7-23-14.pdf (accessed October 20, 2014).
5. Dehnavieh R, Ebrahimipour H, Jafari Zadeh M, et al. Clinical governance: The challenges of implementation in Iran. *Int J Hosp Res*. 2013;2:1–10.