Growing Application of Pharmacoeconomics and Outcomes Research in Health-Care Decision-Making in the Asia-Pacific Region

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Resource scarcity in health-care delivery, as in other sectors of the economy, is a globally common phenomenon. Among the contributing factors to resource scarcity in health care, prime factors are the introduction of new health technologies (NHT), an individual’s growing awareness of better health status, and population aging. Resulting issues from resource scarcity raise deep concerns for Asian policymakers and stakeholders in health care.

With the recognition that market imperfection prevails with the use of NHT, a regulatory body may well intervene in the market of NHTs with the objective of establishing a standard for NHT adoption and the curtailing of nonrational use of NHTs. Based on the experiences of several Western economies, Asian communities have found much promise in the use of health technology assessment (HTA) as a policy tool for NHT management. Interest in HTA is significant in Asia, as was evidenced in the ISPOR 3rd Asia-Pacific Conference held in Seoul, Korea, in September 2008. With “Evidence-Based Health-Care Decision-Making in Asia-Pacific: The Application of Pharmacoeconomics and Outcomes Research” as the theme, the Conference was well-received by active participants from mostly Asian countries.

By and large, the attendees in HTA meetings can be grouped into two parties, one representing technology developers and the other representing those in research and policy. Interestingly, the two groups are coming to the meetings for the same reason—that HTA policy may well be adopted at their local settings sooner or later. Considering local resource constraints in health-care delivery in most countries, whether developed or developing, NHT can quickly be pinpointed as a promising area for resource management because unlike new technologies in other sectors, NHT are mostly cost-increasing rather than cost-saving. The majority in the field therefore believes that a type of rationing scheme with NHT is inevitable and should be implemented sooner than later.

Resource constraint in health care is becoming even more prominent an issue in Asia than in other regions. NHT developers view Asia as very attractive for two reasons: first, it is already a big market with a large population size, and second, it is a growing market with relatively higher economic growth rates and comparatively greater speed of population aging. As HTA policy has been formulated in parts of the region in recent years, NHT developers have become keenly interested in their policy contents and their impact on business. By attending HTA meetings and exchanging dialogue, NHT developers hope to learn how to cope with the changes brought on by HTA adoption. Researchers and policymakers attend meetings to see what can be done in the context of their own country and how to improve ongoing policy situations. The understanding they commonly share as they attend HTA meetings is that rationing is inevitable, and that HTA could be an option now or some time in the future [1].

The implementation of HTA guidelines in a few Asian countries including South Korea, Taiwan, and Thailand in the last few years marks the catching up of Asia with the Western counterparts at a remarkable speed in the generation and utilization of health economic data. With the world’s attention becoming more and more focused in Asia, a phenomenon which is likely to continue for decades to come, it is only natural and legitimate that an evidence-based approach should be adopted in deciding health-care resource utilization. This is of utmost importance in providing a favorable environment for both the adoption of new HTAs as well as improving the standard of health care across Asia.

The ISPOR Asia Consortium was established in 2004 and is now in its sixth year of operation. Under the unflinching support of the mother society, a number of major achievements have been made possible in a period of merely 6 years and it is now the largest regional chapter under the auspices of ISPOR. It began with a membership of around 10 and now over 70 individuals from research institutes; academia, consulting, and industry are listed either as executive or advisory board members. With the increased experience of the members concerned, the biennial ISPOR Asia-Pacific meeting has been increasingly well-attended and highly commended. For example, at the 3rd ISPOR Asia-Pacific Conference in Seoul, South Korea, more than 850 people from government, academics, research institutions, and private companies registered and exchanged research findings, ideas, opinions, and policy experiences during the 3-day event. Attendees came from 38 countries or areas, mostly from the Asian region. The number of attendees and participating countries have been significantly increasing with each Conference. Such growth would not have been possible without the vision of the founders and the enthusiasm and dedication of the members.

Yet behind the scene, it is not without worries. Although it is very encouraging to see an obvious trend of an increased use of HTA in decision-making, we should also admit that we are still falling behind in terms of skills level, appropriate data base, methodology, and manpower. In many occasions in Asia, for example, effectiveness and efficacy data from one’s own population setting are not available. It is also difficult for a party to carry out separate clinical experimentation to get such data from its own people. Under these circumstances, the responsible party (government, research institute, or pharmaceutical company) often relies upon foreign outcome data for domestic economic evaluation data construction. Nevertheless, it would not be safe to use foreign outcome-related clinical data without modifications, considering possible variations stemming from genetic differences. Differences in medical practice patterns among countries would also result in a different scale of effectiveness.
Another aspect of challenge is with the measurement of utilities of the Asians. For technical assistance in measuring utility, tools such as EuroQoL and Health Utility Index are often used. Nevertheless, as these tools have mostly been developed in Europe and North America, they may fail to reflect Asian cultural preferences, even after the reliability and validity of the questionnaires for certain Asian populations have been tested. Currently, economic evaluation studies in most Asian countries use the Western tools with no changes in preference measure. The corresponding utility estimates could therefore be a less accurate representation of Asian preference values.

Resources availability and support from individual local governments are still lacking. Doubt and hesitation in using health economic data are still common among government officials and major decision-makers. All these can be significant obstructions in leading our way forward. In short, we are only approaching the end of the beginning, lots and lots remain to be attended to.

Since ISPOR launched the 1st Asia-Pacific Conference, Kobe, Japan in 2003, we have witnessed enormous growth of health economics and outcomes research in Asia. For the journal of Value in Health, it was prominent progress to have the 1st Asia Special Issue published after the 2nd Asia-Pacific Conference, Shanghai, China 2006. Today, we celebrate another such event as some of the key deliberations of the 3rd Asia-Pacific Conference, Seoul, Korea 2008 are being published in the 2nd Asia Special Issue.

There are 24 articles in this special supplement. Articles were selected mostly from the ISPOR 3rd Asia-Pacific Conference held in Seoul. After going through the usual anonymous process of peer review, selected articles were grouped into two categories—“full” and “condensed” articles. Among the 10 full articles are three multi-country articles, covering HTA policies in a total of 10 Asian health-care systems (China, India, Japan, Malaysia, Pakistan, Philippines, Singapore, South Korea, Taiwan, and Thailand). The rest are articles developed from either plenary talks or parallel/poster presentations. The articles cover a wide range of HTA-related scientific issues such as societal burden of disease, cost effectiveness of various interventions, policy development, incremental cost-effectiveness ratio threshold, utility measurement tool, HTA attitudes among decision-makers and researchers, pharmacoeconomic submission guideline, and outcomes measurement. Published articles in the Asia Special Issue vividly show how actively and seriously the issues of HTA are being contemplated and pursued by stakeholders in the region. They showcase a wide range of application of economic evaluation and outcomes research and its territorial expansion in the region.

In the process of editorial efforts, we recognized some articles attained high standards of research, while others were questionable in terms of scientific soundness. As the multi-disciplinary sciences in health care are still developing in Asia, scientific research methods with high integrity must be adopted and enforced.

The use of HTA in health-care delivery is the track that every country in Asia is interested in and is contemplating following in the future. The adoption of HTA will likely occur on various timelines for the different countries in the region. The contents of policy actions could also be varied among countries, depending on the policy culture, the current health-care system, and public trust in government bureaucracy. In moving toward the direction of HTA adoption in Asia, we hope this special issue of Value in Health will provide researchers and policymakers in Asia with a higher level of motivation to engage in science-based research and evidence-based policymaking. We believe it will contribute to the mission toward a better future in Asia.

The 4th ISPOR Asia-Pacific Conference will be held in Phuket, Thailand, in September 2010. Planning and preparation for the Conference is already underway. It is, however, the support and participation of the members that is of core importance in guaranteeing another round of success. In a few years, we will be celebrating our 10-year anniversary and we hope that everyone’s efforts and dedication will allow us to look back together with great pride and sense of service.

Bong-min Yang and Kenneth Lee have no conflicts to declare.

Reference