Perceptions of health technology assessment knowledge translation in China: a qualitative study on HTA researchers and policy-makers

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Abstract: Although health technology assessment (HTA) has existed in China since the 1980s, the integration of HTA and policy-making is still in its infancy. Knowledge translation (KT) can play an important role in facilitating evidence-based policy-making. This study aims to describe the process of KT from researches to policy-makers and identifying the main determinants of the use of HTA evidence in policy-making in China. Researchers’ and health
policy-makers’ perceptions of HTA KT were identified, using a grounded theory analysis approach. A theoretical framework consisting of four domains emerged to represent researchers’ and policy-makers’ perceptions of KT from HTA to policy making. Health policy-makers and researchers identified several determinants of KT, including HTA KT processes, alignment between research and decision-making and features of HTA research and health decisions, communication between policy-makers and HTA researchers, and support and resources for KT (organisational support, researchers’ and health policy-makers’ personal relationships and macro environment support).

Keywords: health technology assessment; HTA; knowledge translation; policy-making; China.


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1 Introduction

Health technologies, to some extent, have improved the efficacy of prevention, diagnosis, and treatment. But there may also be negative impacts, such as high costs of some health technologies and potential ethical concerns. An appropriate health technology assessment (HTA) is a useful tool for assessing the safety, efficacy, cost effectiveness, and ethical and social implications of various health technologies. The RAND Corporation has recently recommended estimating the social value of health technologies by determining the difference between expected improvements in population health and the social costs attributable to the health technologies themselves (Garber et al., 2011).

In China, since the introduction of HTA in the 1980s, more and more HTA units have been established and a growing number of universities, medical organisations, and other agencies are getting involved in HTA (Chen et al., 2009), resulting in an increasing number of HTA studies. According to Yang (2012), however, in terms of HTA development China is still at an intermediate stage, because HTA is mostly regarded as academic research and has little impact on the real life. For instance, HTA is still recommended but not required before a product is put on national or provincial reimbursement lists of medical insurance schemes (Zhang and Tang, 2013).

Nevertheless, it has to be highlighted that the awareness of the importance of using scientific evidence to support decision-making is increasing in China, and more attention is being paid to the integration of HTA, knowledge translation (KT) and policy-making (Yang, 2012), though the research-policy integration process is still in its infant stage.

HTA-related KT is an attempt to transfer HTA-derived knowledge to potential users in a meaningful way, with a view of ensuring that policy-making or decision-making are based on the best available research evidence (Oxman et al., 2009; Landry et al., 2003). Some studies have identified the determinants of an effective KT, while others have analysed the barriers, including the insufficient capacity of researchers to disseminate
their research results and the lack of appreciation of the importance of research on the part of decision-makers. Clearly, there is an urgent need to bridge the chasm between HTA researchers and health decision-makers.

Although it has been shown that policy is shaped as much by the decision-making context as by research evidence (Oliver et al., 2014; Dobrow et al., 2006; Morrato et al., 2007), researchers’ and policy-makers’ perceptions of HTA KT are also an important factor. With this in mind, we have conducted a study using a qualitative approach to examine researchers’ and policy-makers’ perceptions of HTA KT.

This paper is based on an analysis of qualitative data collected from interviews with HTA researchers and health policy-makers. It aims to identify the main determinants of HTA KT in support of policy-making in China.

2 Research design and results

2.1 The research method

This study uses a grounded theory approach to guide the analysis of the qualitative data. Grounded theory has been recognised as a useful methodology when there is not a theory or an explanation about a phenomenon (Wuest et al., 1994). The core categories of KT were identified and relationships between them were then developed into a conceptual model.

For the interviews, as ‘HTA researchers’ we considered individuals working at HTA agencies/units who conducted research on the medical, economic, social, and/or ethical implications of the application of health technology. As ‘health policy-makers’ we considered individuals working in a senior-level decision-making position in national or provincial offices of the National Health and Family Planning Commission (NHFPC), Ministry of Human Resources and Social Security (MHRSS), National Development and Reform Commission (NDRC), and State Administration of Traditional Chinese Medicine (SATC).

Because there were no reliable lists of key HTA stakeholders in China, purposive and snowball sampling techniques were adopted: initially we interviewed those who were known to us as policy-makers and HTA researchers, who then, in turn, suggested other potential participants. This process was repeated till no more new potential participants were identified. The research has been reviewed and approved by the ethics board of School of Public Health, Fudan University (IRB Approval Number: #2012-11-0382).

In-depth, semi-structured interviews of HTA researchers and policy-makers were conducted by investigators (CY and WL), and the interviews typically lasted 60 to 90 minutes. Interviews were audio-recorded and then transcribed (YM and MT). Based on an interview outline, each interviewee was asked to describe his/her KT experience, the KT process, and factors that he/she thought would affect HTA KT. The researchers were also asked about the expectations of their HTA research, research topic selection, and the organisations in which they conducted their research. On the other hand, policy-makers were asked about their policy-making processes and policy-making mechanisms.

The analysis of data has then been analysed based on the three stages of grounded theory analysis identified by Glaser and Strauss (1967): open coding, axial coding, and selective coding. Based on these three stages, concept and determinants of KT were
categorised. Initially, open-coding was undertaken in which two authors (YW and JM) read each transcription line by line and independently assigned codes to each concept or idea regarded as factor that had an impact on how HTA KT influences decision-making. The concepts were then compared and an initial coding scheme was developed through a negotiated process. In the event of disagreements between the two coders, a third person would mediate in order to reach a consensus. Axial coding was used to develop a theoretical framework of KT and determinants considered to be effective by policy-makers and researchers. The purpose of linking categories was to begin reassembling the data to describe the phenomena under investigation more precisely (Strauss, 1998). Data were constantly compared, some categories were subsumed into higher-order categories, allowing a higher level of conceptualisation to emerge. The final stage of coding, known as selective coding was undertaken to expand on the relationships between the categories, explore the dimensions and validate the connections (Strauss, 1998).

2.2 Results

A sample of 21 HTA researchers and 17 policy-makers completed a 60-minute to 90-minute in-depth interview. About 52.4% (n = 11) researchers and 29.4% (n = 5) policy-makers were female. As regards HTA researchers, two-thirds (n = 14) were professors, 76.2% (n = 16) were from universities or colleges. Policy-makers interviewed were from the NHFPC (n = 11), MHRSS (n = 4), National Development and Reform Commission (n = 1), and State Administration of Traditional Chinese Medicine (n = 1), which were responsible for formulary selection and price setting of pharmaceuticals, surgical procedures, medical equipment and other devices, respectively. Most of them (n = 15) were from national-level government departments.

As our previous study (Liu et al., 2014) has revealed, HTA researchers tend to believe they produce high-quality research with great relevance to policy-making, but the policy-making process is not evidence-based. On the other hand, policy-makers tend to have different views. They believe that evidence guides much of their policy-making work, and that the main problem in this process is the poor quality of the HTA research. Some factors were identified as facilitators or barriers for a successful KT. For example, if the HTA research questions align with the decision-making needs of policy-makers, the research is more likely to be taken seriously. However, poor-quality HTA research, insufficient communication between key stakeholders, inadequate funding and policy support, and researcher’s lack of awareness of policy-making processes were likely to undercut KT effectiveness.

Through grounded theory-based analysis of the interview data, 154 concepts were identified, coded, examined, and categorised and several domains were identified.

2.2.1 Domain 1: KT and its process

The concept of KT emerged as a central domain. When HTA researchers were asked to describe what they thought KT was, they overwhelmingly described it as an application of HTA findings to the policy-making process. Policy-makers shared a similar perspective, as the following comments show:

“I think at present, KT is the transformation of HTA into policy. For instance, in the development of drug formularies, when HTA researchers have finished
reviewing and assessing a drug, the HTA outcomes could be used to guide policy-making. As such, I think KT is successful.” (Researcher 1)

“If HTA research is used as a reference in the policy-making process, I think there is a successful KT. In the long run, it could reshape the decision-making approach of policy-makers...” (Policy-maker1)

When describing the factors affecting KT, both researchers and policy-makers emphasised the central role of the four stages of the KT process:

a. identifying HTA questions
b. carrying out HTA research
c. making the results known
d. conducting an effective KT.

Generally speaking, there are two approaches in the identification of relevant HTA issues: based on their experience, researchers could come up with what they consider to be critical issues that need to be addressed or policy-makers could identify policy-relevant problems and ask researchers to conduct investigations.

Both policy-makers and researchers identified a variety of factors that were deemed important for enhancing the role of HTA evidence in policy-making. These factors were related to three aspects: knowledge of HTA translation, communication between policy-makers and HTA researchers, and support and resources for KT.

2.2.2 Domain 2: alignment between research and decision-making

Both policy-makers and researchers reported that they would have more confidence in HTA KT in China, if they knew more about the alignment between research and decision-making. Policy-making or decision-making tended to be in response to the need to deal with an urgent problem or a serious health issue. One researcher reflected:

“Oral and poster presentations at academic conferences have very little impact on the policy-making process. Policy-makers tend to be reactive. Only when something serious happens or when society is greatly dissatisfied, then will the government adopt HTA…” (Researcher 3)

However, for most HTA researchers, academic recognition and scientific significance of their projects are their top priorities, and they perceive KT as less important or not part of their responsibilities. The extent to which the research question aligns with decision-making demands has a crucial impact on the success of HTA KT. Therefore, it is important for researchers to have a good understanding of policy-making processes and policy priorities.

“So, I think the fact that knowledge translation is successful or not depends on whether the research conforms to the objective reality and whether it meets the needs of policy-makers. Researchers are the main obstacle since they often do not understand the reality and do not understand the needs of managers…” (Researcher 21) “Those using health technology assessment must use the perspective of a policy-maker, not the academic perspective…” (Researcher 1)

For researchers, scientific rigour, objectivity, and impartiality are some of the qualities they cherish. However, it has been pointed out that, although many HTA studies have been conducted in China, the quality of the research still needs to be improved (Chen
et al., 2009). Interestingly, our previous study has shown that scientific rigour of research was negatively associated with successful KT (Liu et al., 2014). As one researcher reflected:

“The perspectives of policy-makers and researchers are not identical. For researchers, studies based on scientific method or models mean high-quality outputs; however, for policy-makers, comprehensibility is the key to determine whether KT will be successfully…” (Researcher 3) So, “HTA researchers need to adopt the perspective of policy-makers and provide appropriate reports, as in the format of policy briefing…” (Researcher 20)

Another issue that was raised was the complexity of policy-making, especially in comparison with the relative simplicity of most clinical problems. To one interviewee, complexity of policy-making means that

“Researchers can’t replace decision-makers. As researchers, we only provide outcomes that are technical in nature, but decision-makers need to take other factors into consideration.” (Researcher 9) “Policy-makers may need to consider other factors, such as resources, feasibility of the proposal, administrative influence, and the influence of vested interest groups.” (Researcher 11)

2.2.3 Domain 3: communication between policy-makers and researchers

Communication is not a one-way street. Policy-makers and HTA researchers need to interact with each other. Most of the interviewed policy-makers and researchers felt that communication is essential in order to facilitate HTA KT:

“Policy-makers and HTA researchers need to establish a communication platform. Frequent communication might lead to better outcomes…” (Researcher 2)

Communication between policy-makers and HTA researchers might help remove barriers to KT, confirm HTA objectives, clarify interpretations of results, and then facilitate HTA KT.

“I think sometimes decision-makers and researchers use different perspectives, languages, and ways of expression. What we need is translation: researchers need to translate research questions into something that is understandable…” (Researcher 15) “If decision-makers take part in related training workshops, researchers could be influenced in a subtle way. Firstly, researchers need to consider the reality and practicality, not just the academic questions. Then, their research intentions must be understood by decision-makers. Only in this way the knowledge translation will be successful.” (Policy-maker 12)

A two-way communication means researchers presenting their research methods, models, and findings to policy-makers in an easy-to-understand language and policy-makers conveying their policy intentions to researchers.

“Every time after our field survey, we have provided feedback to policy-makers, and after our project most of our suggestions were adopted by policy-makers.” (Researcher 6)

Nowadays, a new means of communication between researchers and policy-makers has emerged, which is described as ‘knowledge brokering’:
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“I think decision-makers and researchers should actively engage in communication and discussions, and in the process, many problems will get solved.” (Policy-maker 4) “And this platform of communication and knowledge translation could be established by means of organizational intermediaries such as a ‘knowledge broker’.” (Researcher 9)

Some researchers and policy-makers believed that communication was more important in the stages of project design and result reporting. This could be because policy-makers’ inputs regarding research design might help shape the study and their advice on how results are disseminated might help bring HTA outcomes to bear on the policy-making process. However, few of the respondents reported having talked to one another during the HTA diffusion stage.

To gain a more in-depth understanding of the differences between policy-makers and researchers with respect to communication, we conducted a quantitative analysis of how policy-makers and researchers in different departments or institutions viewed communication and organisational support (see Table 1). Similar to what our qualitative analysis has revealed, communication between policy-makers and researchers regarding dissemination of HTA findings was generally deemed inadequate (except for government department-attached researchers). Concerning other matters, policy-makers at HRSS and HFPC reported better communication with researchers than their counterparts in State Food and Drug Administration (SFDA) and DRC ($p < 0.01$). However, generally speaking, researchers affiliated with government departments reported having better communication with policy-makers than those at medical institutions, colleges and universities, and research institutions.

The differences were statistical significant ($p < 0.01$).

2.2.4 Domain 4: support of and resources for KT

Both researchers and policy-makers believed that HTA KT would be enhanced if there were adequate support and resources for KT activities, including support from organisations, researchers and policy-makers, as well as a supportive research environment.

Interviewees included the organisational factors among the elements affecting HTA KT, such as the organisational capacity to undertake scientific research or to apply research evidence and the cooperation between policy-making departments and research institutes.

In China, most HTA units are located within universities and in other academic institutions. Most of them use as performance indicators the number of HTA projects, the number of publications, and the amount of research grants, as well as the impact factor of publications. The HTA influence on policies and clinical practice, as well as its broader social impact, tends to be not seriously taken into account.

“In China today, performance appraisal, to a certain extent, motivates researchers to apply for more research projects and to pay little attention to knowledge translation…This is the problem of the entire performance appraisal system.” (Policy-maker 8) “The main problem between academia and policy-making is the fact that HTA research is separate from practice… It is mostly research for the sake of research and has little application value.” (Policy-maker 10)
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<th>Domain/theme</th>
<th>Policy-makers</th>
<th>HTA researchers</th>
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<td>HRSS (N = 25)</td>
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<td>Communication between policy-makers and researchers concerning:</td>
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<td>Objectives of HTA study</td>
<td>3.20</td>
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<td>Methods of HTA study</td>
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<td>Implementation of HTA study</td>
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<td>Analysis of HTA data</td>
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<td>Preparation of research reports</td>
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<td>Dissemination of HTA findings</td>
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<td>Organisational support of and resources for HTA KT</td>
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<td>Training (HTA training for policy makers, KT training for researchers)</td>
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<tr>
<td>Support for HTA KT (financial support for researchers from government departments)</td>
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<td>Ensuring evidence-based policy-making</td>
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Policy-making organisations supported some HTA programs, but the level of support tended to be not adequate.

“Research funding is insufficient. Most of the projects commissioned by the health administrative departments were under 15,000$. Such inadequacies to some extent impede more in-depth investigation and to some extent affect the quality of the research and knowledge translation.” (Policy-maker 11)

As Table 1 shows, many interviewees believed that the organisations they belonged to did not provide sufficient support for policy-makers to have a basic understanding of HTA, and for researchers to know more about KT.

As regards the organisational capacity for scientific research, some respondents questioned whether researchers were adequately prepared to conduct policy-relevant HTA. As one interviewee opined,

“Research team members should come from different disciplines, but at present, most health researchers are from medicine. They lack a multidisciplinary professional background.” (Researcher 20)

As far as the cooperation between policy-making departments is concerned, in China, the main actors in health technology are the SFDA, MHRSS, and NHFPC. According to some interviewees, these departments lack collaborative policy-making mechanisms. As one researcher described:

“When researchers present their findings to one department, the decision-maker may say that it is not something his department could handle alone and needs the cooperation of another department. And when the researchers present their report and recommendations to the other department, that department may say they do not have the need for such research. Typically, researchers will then give up trying to convince the decision-makers.” (Researcher 18)

The educational background of policy-makers could also influence how HTA KT should be conducted or how effective it is. Improving policy-maker’s educational level, the decision-making process may change from experience- or hunch-based policy-making to evidence-based policy-making. A researcher reflected:

“Younger policy-makers are more inclined to use research evidence to guide policies” (Researcher 7)

Surprisingly, being better educated was seen by some as a barrier to KT:

“I think some decision-makers such as department heads now are better educated, like having master’s or doctoral degrees before entering government bureaucracies. They work in administration but may also dabble in some related research. They think they are experts and do not care to listen to the views of researchers.” (Researcher 4)

Other barriers were also identified, such as inadequate communication channels between researchers and policy-makers and researchers and policy-makers having different priorities. For example, it was pointed out that researchers were often under pressure to publish in academic journals, while policy-makers have to face different kinds of pressure. Furthermore, researchers’ or decision-makers’ personal qualities might affect KT activities or effectiveness.
“Some more pro-active researchers may take the initiative to show decision-makers the social values of their research… Through such actions, they may attract the attention of decision-makers and other stakeholders and thus advance evidence-based decision-making… It has a lot to do with the personality of the researchers. Personally, I am not like that. In reality, if there is motivation, we will initiate contacts with researchers.” (Policy-maker 3)

“I think what we have done in knowledge translation so far is not good enough… we have not made good use of evidence, let alone of having the capacity to conduct evidence-based decision-making … At present, we just think about it, but there are still many barriers between thinking and taking action.” (Policy-maker 8) “Perhaps because HTA is an emerging discipline in China, it is mostly a research activity at academic institutions. If we want HTA to have greater influence, it needs promotion.” (Policy-maker 10)

Some commented on the importance of contacts and good personal relationships between researchers and policy-makers in facilitating KT work.

“There is another thing about communicating with policy makers and it is whether decision-makers trust researchers… If decision-makers trust you, your ideas are more likely to be accepted.” (Researcher 14)

Although HTA should be conducted objectively, some interviewees commented on how economic, political, social, and cultural factors could impact on the policy-making process and on how evidence could be viewed differently by different policy-makers. As a participant pointed out:

“On the basis of my experience, I think there is nothing to prevent us from basing our decisions on evidence. Because I work in a government department, I believe HTA research needs to take government’s political thinking into consideration. In other words, KT can only be successful if it is consistent with decision-makers’ objectives and needs.” (Policy-maker 10)

On the other hand, HTA or successful KT required sustained social support and resources.

“Social needs and economic development of a society have a direct impact on the success of KT.” (Policy-maker 12)

Evidence-based policy-making takes place within existing policy-making structures, processes, and rules. Thus, the policy-making mechanism, among other things, can facilitate or impede the extent to which evidence is used to support policy-making or decision-making.

“HTA is the foundation for conducting science-based decision-making. So the precondition of science-based decision-making is to have effective mechanisms for making use of HTA results and for formulating policies.” (Policy-maker 12)

There are ‘top-down’ and ‘bottom-up’ models of HTA research in China. In the ‘top-down’ model, HTA researches were mostly launched by relative health administrative departments, and commit to HTA units to conduct these studies, while in the ‘bottom-up’ approach HTA researches were conducted by HTA units alone. Each one has its advantages and disadvantages. Bottom-up HTA, which is typically based on a researcher’s interest or expertise, is the most popular, particularly among academic researchers in China and possibly in other countries as well.

“The ‘bottom-up’ model of HTA has many disadvantages, like the fact that is very time-consuming. The launching of such research might also be affected by
other factors, which might result in unsatisfactory KT.” (Policy-maker 9) “The top-down model typically derives from the needs of decision-makers. Compared with the bottom-up model, the top-down model saves time and human resources, and, to a certain extent, affects the quality of research… But HTA based on the top-down model is more likely to be accepted by decision-makers.” (Policy-maker 6)

Although HTA based on the top-down model is more likely to be accepted by decision-makers, this model also has disadvantages.

“Policy-making in our country is changing from experience-based to evidence-based, but some decision-makers still have an experience-based mentality. In this case, top-down HTA is simply a means for decision-makers to find support for their decisions.” (Researcher 13)

3 Discussions

Enhancing the role of HTA evidence in policy-making and decision-making requires a deep understanding of the processes and determinants of HTA KT. This study examines the processes and determinants of HTA KT that policy-makers and researchers regarded as important. Both researchers and policy-makers regarded many of the determinants noted above as important, but they viewed some of the determinants differently. Interestingly, views regarding the determinants of KT effectiveness differed to some extent even among policy-makers in different departments.

Regarding the KT process, identifying the HTA questions, conducting HTA research, disseminating HTA outcomes, and undertaking KT emerged as key elements. Four domains – KT and its process, alignment between research and decision-making, communication between policy-makers and researchers, and support and resources for KT – were identified.

This study also confirms our earlier quantitative analysis (Liu et al., 2014) and other published studies (Oliver et al., 2014; Lavis, 2006), which suggest that contacts, collaboration and relationships are major factors leading to successful KT. As previous works have revealed (Greer, 1998; Jacobson et al., 2003), communication between producers and users of scientific evidence may increase the likelihood of resulting in an effective KT. Our findings confirm this observation. Communication, especially exchanges between researchers and policy-makers regarding research designs and HTA findings, is likely to promote trust between them and to develop more productive cooperation (Liu et al., 2014). Appropriate cooperation mechanism between policy-makers and researchers is needed for evidence-based policy-making in the long run, which will not only guarantee the objectivity of HTA research, but also improve HTA KT effectively. Moreover, possible commercial relationships between researchers and policy makers, like in the case of researchers hired as policy organisations consultants, may resolve the unaligned incentives. Managers may also be able to specify more clearly the kind of information needed, and researchers may feel rewarded if they produce useful knowledge. In this framework, it is also necessary to take the ‘macro environment’ into account. Policy-makers affiliated with MHRSS and HFPC were found to be more likely to communicate with researchers regarding HTA objectives, methods, implementation, results, and dissemination of HTA findings. However, those in SFDA and DRC were less likely to have linkages with researchers. These findings suggest that
rather than having a one-size-fits-all KT strategy, it may make more sense to adopt
different strategies, depending on who the target policy-makers are and where they are
organisationally located.

When investigators’ research interests align with decision-makers’ needs, KT is more
likely to find a receptive audience and to be successful. We also found, however, that a
‘top-down’ model of communication between policy-makers and researchers was more
likely to lead to HTA findings being considered for policy-making. It is undeniable that
governments, industries, etc. typically want researchers to focus on things that have
immediate practical applications or that can be turned into a product, which lead the
presence of ‘top-down’ model research. On the other side, researchers typically want the
freedom to pursue curiosity-driven or theoretically interesting research, which is called
‘bottom-up’ research model. For researchers, the balanced attributes between ‘top-down’
and ‘bottom-up’ research should being taken into consideration in this process, including
the research objectivity as well as the cooperation between HTA units and policy-making
departments. On the basis of the carried out research, it seems that to find ways to
effectively improve the performance of HTA KT may stand on the priority status in
China.

Another interesting finding is that while scientific rigor, objectivity, etc. were highly
valued by academic researchers, some interviews considered these as barriers to KT
success. This could be due to the fact that, not being scientists, many policy-makers may
find it difficult to understand academic research outputs that seem obscure, incomprehensible, and irrelevant, unless they have been transformed into something that is more ‘user-friendly’ and policy-relevant. Similarly, researchers need to realise that
scientific evidence is just one of the many factors that policy-makers typically take into
consideration when taking policy decisions. This suggests that in order to be successful,
KT practitioners, researchers need to have a better understanding of the policy-making
environment, structure, priorities and processes.

Regarding the organisational support needed for an effective HTA KT, policy-making
departments and HTA research units have not given enough training and financial or
incentive support, this leading to the inefficiency of some research teams in operating
HTA studies. With regard to personal level, this study confirms previous works according
to which more highly educated policy-makers were reported as a barrier to evidence
adoption and use (Larsen et al., 2012). This could be due to the fact that, although most
policy-makers being more highly educated or having studied abroad for a period are more
conscious of the importance of evidence-based policy-making, they also tend to act as
researchers. These double identity impedes ad effective HTA KT since these
policy-makers believe that they are experts themselves and that for this reason much of
their policy-making work is already guided by evidence. In the light of this finding,
further training programs for HTA researchers and policy-makers should be implemented
and great attention in the future should be paid to evidence- or HTA-based policy-making
mechanisms.

4 Conclusions and limitations

The findings of this study elucidated the views of policy-makers and researchers
regarding HTA KT. We have examined the HTA KT process and the major determinants
of evidence uptake. The findings of this study increase the understanding of the factors
supporting the development of strategies to improve HTA KT. Among these strategies it is possible to highlight the reinforcement of communication, the strengthening of related training in HTA KT, the improvement of the importance of HTA in evidence-based policy, and the enhancement of collaboration between HTA researchers and policy makers. These findings also can be used to inform strategies based on who the policy makers are and on the organisations to which they belong.

To conclude, our study has several limitations. The main limitation is the sampling method used to investigate researchers and health policy-makers, which is called purposive sampling method.

However, in reality, stakeholders in the HTA KT include not only HTA researchers and health policy-makers, but also many other stakeholders in China. Therefore, the determinants in this study may not examine the comprehensive factors that affect HTA KT effectively. Additionally, this study attempts to focus on the determinants of KT effectiveness. However, there was a lack of policy-maker’s feedback to researchers; researchers typically did not know whether their research had been used in the policy-making process and to what effect. Thus, in reality, researchers’ KT activities and their views of KT could have been more positive than what has been reported in this study.

Despite being somewhat limited regarding the method used, this study has allowed to collect and process a great deal of concepts recognised as determinants impacting on an effective HTA KT. This work was undertaken starting with a small group of policy-makers and researchers. It might be possible to gain further insights on these problems by conducting a mix-method study involving more stakeholders.

References


