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Title: Factors of Success for Health Impact Assessments in the Area of Transport

Introduction

Health is mainly determined by environmental conditions and economic and social circumstances which are formed outside of the health sector, therefore the health status of a country cannot alone be explained by health care and health-related behavior (Schweizer Plattform zur Gesundheitsfolgenabschätzung, 2010, S. 4). The Health in All Policies Approach (HiAP) formulates the claim to assess health cross-departmental (Kemm et al., o.J., S. 1). In order to convince other departments to consider health impacts in their activities, for example transport experts and spatial planners, practical tools are needed that enable decision makers to integrate health into their decision-making procedures (Wernham, 2011, S. 947-950).

A possible instrument to this is Health Impact Assessment (HIA). HIA enables the integration of health considerations in decisions that otherwise would not have included health (Wernham, 2011, S. 947-950). It highlights the consequences of political actions and decisions by identifying the health effects of projects, policies or programs as well as their distribution in the population (Kemm et al., o.J., S. 1). In Austria, conducting HIAs is not mandatory, however, a strategy for the implementation of HIAs was developed in 2010 and a national HIA-Support-Unit was established one year later. In Styria (province of Austria), HIA is part of the "Heath Promotion Strategy Styria" and is also mentioned as a possible tool for bringing HiAP in the "Health Targets Styria" (Amegah et al., 2013, S. 6).

Especially transport is accountable for a majority of the disease burden of populations. The continuing expansion of motorized traffic leads to questions of environmental and social implications of transport policies; this is why they have to be viewed in light of the health of populations. Politicians feel responsible for the introduction of measures that mitigate this burden. HIAs present a possibility for the promotion of sustainable, health-promoting transport alternatives that reduce negative health impacts caused by transport (Racioppi & Dora, 2005, S. 171-177).

This article aims at identifying the framework conditions that enhance the acceptance and successful implementation of Health Impact Assessments in the area of transport. In Austria, no HIA has been carried out on a transport topic yet. The research aimed at developing recommendations for future HIAs in this area. Because of the fact that many projects in the area of transport are subject to completion of Environmental Impact Assessments, the research aimed at identifying opportunities for cooperation. Environmental Impact Assessments (EIAs) are a tool that assess, describe and evaluate possible effects of projects on the environment and are mandatory in Austria for certain projects since 1994 (Klaffl et al., 2006, S. 8-10). The connection between HIA and Strategic Environmental Assessments (SEAs) is also highlighted, because the SEA protocol entered into force for all United Nations member states in 2010. The difference between EIAs and SEAs is that EIAs act on a project level, while SEAs assess the effects of policies, plans and programs (Sheate, zitiert nach Rella, 2009, S. 81).

Methodology

Theoretical and empirical methods where used in order to fulfill the aim of the research. First, a comprehensive literature analysis was carried out in library catalogues, databases, project databases, websites and a hand search as well as a search in reference lists. 70 documents were included in the research, based on defined inclusion and exclusion criteria.

The empirical research consisted of telephone interviews with Austrian experts and a commentary with international experts. A interview guide was developed and adapted after a pretest with one interviewee. Ten experts were chosen based on their field of expertise (HIA, transport, EIA).The interviews were conducted by telephone and recorded and transcribed. The analysis was carried out with the programs MAXQDA and Excel. The outcomes of the national expert interviews where sent to two international experts to comment on them, supplemented by some additional questions.

Results

Within the literature research, a variety of facilitating and inhibiting factors for HIAs have been identified. One inhibiting factor for HIAs is the narrow definition of health outside of the health sector (health determinants are not widely spread) (Wernham, 2011, S. 952f). Moreover, knowledge about HIA is still limited (Räftegard, 2007, S. 13-19). The two main critical factors for the successful implementation of HIAs are intersectoral cooperation (Dannenberg et al., 2008, S. 243-253) and sustainable political commitment (Knutsson et al., 2007, S. 193ff; Räftegard, 2007, S. 13-19). A legal framework for HIA is not a prerequisite for its successful usage (Bond, 2004, S. 138f). Furthermore, the consideration of health inequalities is a central value of HIAs and should be acknowledged (Gorman et al., 2001, S. 43-52). Often limited financial and timely resources are cited as a barrier to conducting HIAs (Gorman et

al., 2003, S. 19-23). The flexible framework and procedure of HIAs is both criticized and supported (Räftegard, 2007, S. 13-19; Gorman et al., 2001, S. 50ff). The usage of high quality evidence is another crucial factor for the successful implementation of HIAs (Harris et al., 2007, S. 198f). The steering group, which is installed in HIAs, should compose of intersectoral members (Birley, 2011, S. 43f). Comprehensive participation adds more weight to the results of an HIA (Gorman et al., 2001, S. 150-153). Documents that are produced during the HIA process should be reviewed for quality aspects and the implementation of HIA recommendations should be monitored (Bond, 2004, S. 138f). Furthermore, the correlation between HIAs and other forms of Impact Assessment (f.e. EIA, SEA) has to be clear (Birley, 2011, S. 117-120).

The literature analysis revealed that SEAs have the potential to integrate HIAs. But also the integration HIAs in EIAs (Morgan, 2011; Posas, 2011; Bhatia et al., 2008, Wright et al., 2005; Breeze et al., 2001; Vohra, 2005; Douglas et al, 2006; Human Impact Partners, o.J.; Hilding-Rydevik et al.,o.J.) is recommended. Only a few authors prefer the completion of a separate HIA (Horvath et al., 2010; Dannenberg et al., 2006).

The empirical research identified the big political interest in transport and the good descriptiveness of health impacts which are caused by transport (like air pollutants and noise annoyance) as success factors for transport HIAs. One international expert describes the already existing procedures in the transport sector as facilitating and inhibiting for HIAs.

Most interviewees support the idea of connecting HIAs and EIAs in the transport sector. Some interviewees think that is not realistic that two separate processes can gain acceptance in the transport sector. Through the coupling of the two instruments synergy effects can be used and EIAs could be supplemented by some additional steps. Most of the interviewees prefer the integration of HIAs into EIAs, not vice versa. The integration of HIAs into SEAs is also recommended, most interviewees think that this is a better link than with EIA.

Discussion

Both through the literature analysis and the empirical research in the Austrian context the connection between HIAs and EIAS is recommended (Morgan, 2011; Posas, 2011; Bhatia et al., 2008, Wright et al., 2005; Breeze et al., 2001; Vohra, 2005; Douglas et al, 2006; Human Impact Partners, o.J; Hilding-Rydevik et al., o.J.). A main reason for this, identified through literature and empirical evidence, is the so far limited consideration of health aspects in EIAs (Harris et al., 2009, S. 310-316). There are also barriers to connecting the two processes, for example limited resources or the controversial topic of EIAs.

For the connection between HIAs and SEAs, both the empirical research and the literature analysis shows that a connection is recommended (Kornov, 2009, S. 60-65). Uncertainty prevails about the legal circumstances of SEAs in Austria. One author (Kornov, 2009) argues that SEAs present a possibility for connections with HIAs as they are mandatory in Austria (Kornov, 2009, S. 60-65). Another author (Mittendorfer, 2008) states that the legal basis for SEAs in Austria is insufficient (Mittendorfer, 2008, S.6-7). Some interviewees said that SEAs are only rarely carried out in Austria and have no legal basis. One international expert does not judge a legal establishment of SEAs as a crucial factor in the connection of the two processes.

Concerning the factors of success for HIAs, intersectoral cooperation was stated as a prerequisite for the successful implementation of HIAs (Dannenberg et al., 2008, S. 243-253). Interviewees also stated that this is an important topic, but they think it is more inhibiting than facilitating at the moment in Austria. Both authors and interviewees think that political will is essential in order to successfully implement HIAs (Knutsson et al., 2007, S. 193ff; Räftegard, 2007, S. 13-19). Many similarities in the factors of success could be identified through literature and empirical research. One reason for this may be the universal significance of these factors for the introduction of any new instrument in the political context.

Both the literature and the empirical research identified Styria in a leadership role concerning HIAs on a regional level in Austria (Amegah et al., 2013, S. 6). In contrast to this there are also differences in the results of the interviews and literature. Through the interviews, EIAs are identified as an appropriate point of contact for HIA in Styria. The strategy for the implementation for HIAs in Styria, which was published in 2012, does not include this area (Antes et al., 2012). This can be traced backed to the fact that EIAs made up a big part of the interview section and therefore interviewees may have tended to judge EIAs as important in this context.

Limitations to this research are that the used literature is mainly published by HIA-experts, which may influence the results as HIA-experts tend to highlight the positive factors of HIAs and also support the idea of integrating HIAs into EIAs rather than other (transport) experts. Moreover, negative experiences with the HIA process are not well documented. The interview guide was adapted to the expertise of each interview partner, so the questions were not standardized. Two international experts participated in the international commentary, even though seven where asked for participation.

Conclusion

The research presents one of the first scientific papers in Austria on HIA and transport. Through the literature analysis and empirical research factors of success for transport HIAs were identified and the role of EIAs for HIAs was discussed. There is further need for research regarding the correlation of HIAs and SEAs and the practicability and applicability of the identified starting points for HIAs in Styria. In order to achieve this, it is recommended that pilot HIAs in the transport sector are carried out in Styria. Furthermore, capacity needs to be built for HIA in the Styrian regional government and administration. In addition, contact with international experts can enhance transfer of knowledge and help during the implementation of HIA in Styria.

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