

EXPERIENCES AND NEEDS OF LICENSED HEALTH RISK ASSESSORS CONDUCTING HEALTH IMPACT ASSESSMENT IN THE CZECH REPUBLIC

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SUMMARY

Objective: The main aim of this study is to discover and analyse the utilization of health impact assessment (HIA) among HIA certificate holders, and to ascertain their opinions on the current situation in the Czech Republic and on the possible future nationwide implementation of health impact assessment.

Methods: The target group of the research was identified as holders of professional competence certificates in the field of public health impact assessment. A structured questionnaire was developed. The first part mapped the recent use of HIA in the Czech Republic, the second addressed the issue of linking HIA to regional policies and to the national strategy, the third aimed to gain information about the preparedness of the Czech Republic for the full implementation of HIA, and the last part focused on quality assessment and capacity building for HIA.

Results: The results of the survey point to the inconsistencies in the perception of the whole concept of HIA in the Czech Republic by the professional public, and also to a shortage of experts in this area. There is only a narrow circle of experts, especially in the field of health care. It also lacks an informational base, which assist in the unification of processes in this area. As the results of the questionnaire showed, the problems are the lack of interest in the application of the HIA method and, subsequently, the lack of demand.

Conclusion: The collected data showed obstacles and gaps in the implementation of the HIA methodology in the Czech Republic. At the same time it has revealed possible ways to change the current situation, based on the opinions of those who practice this methodology in the Czech Republic.

Key words: certificate holders, health impact assessment

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<https://doi.org/10.21101/cejph.a5833>

INTRODUCTION

To avoid the potentially negative consequences of policies, strategies, programmes, and plans on the health of populations, the method of health impact assessment (HIA) is regularly used. HIA is a systematic and effective tool which aims to not only mitigate known risks, but also to increase the positive effects of a wide range of policies on the health of the population (1). The aim of HIA is to inform policy makers about the potential impact of their policies on health and on the determinants of health, including the impact on health inequalities. HIA is perceived as one of the most important ways to implement the Health in All Policies approach (2).

Across the world, HIA has been successfully implemented in different forms – mostly through legislation and the legal framework (the so-called top-down approach), or at the regional and local level (the so-called bottom-up approach) (3). For example, on the European continent HIA was implemented by: the Netherlands in the form of the HIA Action Plan (1995) and the subsequent establishment of a coordination unit; Slovakia

anchoring HIA in the National Public Health Act of Slovakia (2007); Denmark through the Network of Healthy Cities (2003); and Great Britain, where HIA is embedded in the government impact assessment process and is used by government departments (4).

The Czech Republic has committed itself to reflecting on the recommendations of individual EU legislative bodies in its policies, concepts and strategic materials. The Treaty of Amsterdam (5) states that a high level of human health protection should be ensured in all community strategy documents. Furthermore, the European Commission recommends the implementation of the health impact assessment methodology within the EIA process (Directive 2014/EC/52) (6) and at all levels of community strategies, concepts and policies in all member countries (7).

The first attempt to implement HIA at the national level in the Czech Republic was made in 2006 and 2007 when the first HIA publication was created and an initial meeting took place. However, the systematic implementation and development of the HIA method at national level has not yet occurred, although this requirement was included in the National Strategy for Health

Protection and Promotion and Disease Prevention* in 2014 (8). The specific part of the National Strategy is focused on some implementation strategies and emphasizes health impact assessment as a useful tool.

Within the Czech legislative system, HIA is included in the Environment Impact Assessment Act (Act No. 100/2001 Coll.) (9) and in the Amendment of Related Acts. The Act only regulates enumerated concepts or those concepts which are co-funded by the European Community. However, the law only addresses concepts that are expected to have an impact on the environment. Thus, it happens that some public policies are not evaluated, even though their impact on the health of the population is obvious. The areas of education, social, housing and health policy are among the notable examples.

The basis for successful implementation is human resources. In the Czech environment these are undoubtedly the holders of certificates of professional competence in the area of public health impact assessment, and they make up the expert base. The Environmental Protection Act and the Decree of the Ministry of Health (9) attempt to define who is authorized to perform health assessments, and provides more detailed conditions for obtaining a certificate of professional competence in the field of public health impact assessment. Certificate holders are primarily tested for their skills and knowledge in health risk assessments in the context of the environmental impact assessment (EIA) process and are authorized to assess strategic documents within the strategic environmental assessment (SEA). Qualitative and quantitative health risk assessments (HRAs) are part of the identification of impacts in the process of health impact assessment. The aim of HRA is to determine the hazardousness of a factor/chemical, evaluate the relationship between the dose of the factor/chemical and the body's response, evaluate the exposure (clarifying the forms of exposure) and characterise the risk, i.e. the probability of damage. In the Czech Republic health risk assessment is guided by the authorization guidelines published by the National Institute of Public Health in Prague. The perception of the HIA concept is rather based on the socioeconomic model of health and, especially, on the social determinants (10).

HIA certificate holders are a unique group of experts who have everyday practical experience with HIA implementation in the Czech Republic within the EIA and SEA processes, and these experiences are a unique source of information that should be used to set up an nationwide implementation.

The main aim of this study is to discover and analyse the utilization of health impact assessment among HIA certificate holders and to ascertain their opinion on the current situation and possible future nationwide implementation of health impact assessment in the Czech Republic.

MATERIALS AND METHODS

The target group of the research was identified as holders of professional competence certificates in the field of health impact assessment. The sample was created through the identification

of HIA experts from two lists of holders of the certificates. The first list is kept by the Ministry of Health and at the time of the survey it had last been updated on 30 June 2012 (11). The second is the List of Holders of the Certificate of Authorization pursuant to Act No. 258/2000 Coll., on the Protection of Public Health for Public Health Workers (12). This list is published on the website of the National Institute of Public Health in Prague and holders are automatically authorized to carry out health impact assessment (13). Both lists were combined and adapted according to the need of the research.

According to the database of certificate holders (30 June 2012), 43 people were registered as licensed to conduct HIA within SEA/EIA. After initial contacts, 15 people were excluded, because of inactive e-mail addresses, or they no longer worked in HIA/SEA/EIA, or they were unable to be contacted. The remaining 28 people were included in this study.

A structured questionnaire was developed by the authors of this manuscript and it consisted of 12 questions (7 open ended and 5 closed). It was possible to add comments for each question. Multiple responses were allowed in some questions. Respondents were informed about the aim and evaluation of the questionnaire. The questionnaire was not validated.

The distribution of the questionnaire and the collection of data was organized online using Google form during April and May 2016. After the first round of distribution, 3 people responded that they were not involved in HIA anymore and this meant that the final number of respondents was 25. The second round of distribution followed three weeks later and 12 respondents completed the questionnaire (response rate 48%) (Fig. 1).

The questionnaire was divided into four parts. The first part mapped the recent use of HIA in the Czech Republic while the second addressed the issue of linking HIA to regional policies and to the national strategy for health promotion and disease prevention within health. The third aimed to gain information about the preparedness of the Czech Republic for full implementation of HIA, and the last part focused on quality assessment and capacity building for HIA. This study shows the outcomes of the structured questionnaires. Microsoft Excel was used to analyse the data.

RESULTS

Current Use of Health Impact Assessment Concept in the Czech Republic

On average, the certificate holders complete approximately six HIAs a year ($n=12$, $\bar{x}=5.75$). However, the individual answers vary widely. Two respondents said that they did not really do "the pure form of HIA". In two cases the number is approximately 3–4 per year, and respondents pointed out that it is very individual, and depends on personal contacts and expert focus. One respondent commented on a significant decline in the demand for HIA in the past five years. In two cases the frequency of the evaluation is once a month. In two cases the experts said they often do not complete the whole HIA, but they use only some parts of the

*The National Strategy is a framework summary of the measures for the development of public health in the Czech Republic and it is also a tool for the implementation of the WHO programme Health 2020 (8).

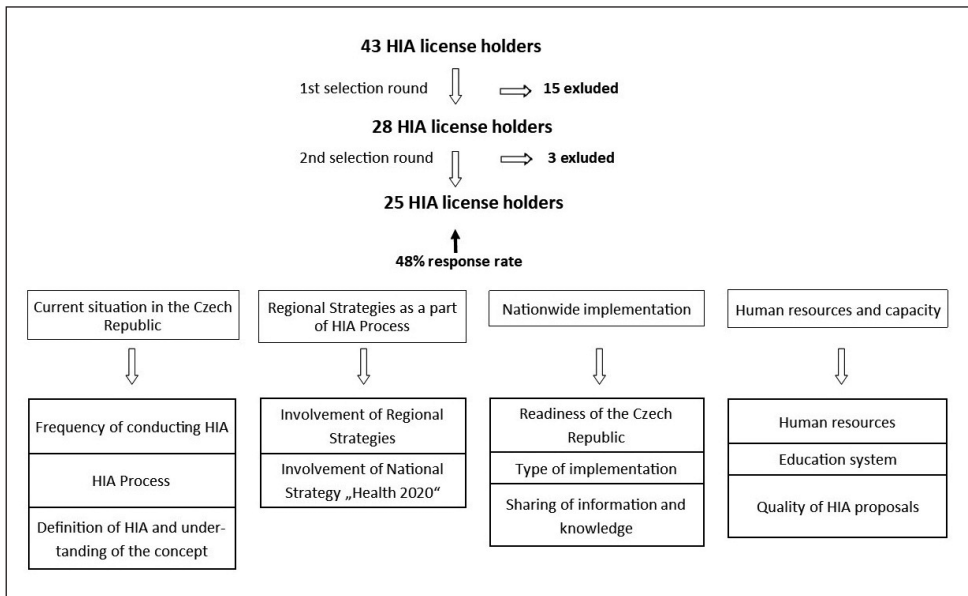


Fig. 1. Flowchart of the research.

assessment. This section also encountered the inconsistencies in the terminology and in the definition of the term in the Czech environment in relation to the international definition: “HIA is not a Czech term, in foreign literature it is used for health impact assessment in both the SEA and the EIA processes. In our country, HIA is considered to be a strategic assessment and part of the SEA”. Accordingly, four respondents said that they are following the HIA process exclusively within SEA. In six cases they mainly refer to the combination of SEA and EIA, and in two cases the respondents carry out the HIA methodology only within the EIA concept (Fig. 2).

Respondents also reported on the thematic areas in the Czech Republic where HIA assessment is used: assessment of mining projects, logistics, commercial, administrative and housing centres, livestock farming, paint shops, quarries, galvanizing plants, chemical plants, biogas stations, paper mills, wind power plants, and transport strategies.

The experts who took part in our survey use the internationally recognized procedure for HIA which consists of six steps. Our referenced experts agree in eight cases that in the Czech environ-

ment it would be most appropriate to particularly reinforce the last step in HIA evaluation, namely the impact monitoring, which is usually inadequate. The whole process usually ends with the evaluations, since follow-up monitoring seldom occurs, mainly due to the additional financial burdens. Subsequently, respondents included the need for Scoping and Impact Identification for further reinforcing their practical skills. According to the results of the questionnaires, at the stages of Screenings, Impact Assessments and Recommendations the respondents felt that there is the same need for reinforcement. However, they pointed out that Screening should be implemented and set up nationally.

Human Resources Capacity and HIA Quality Review

Human resources would play a major role in any future broad implementation of HIA. Key elements are the presence of trained professionals and adjustments to the training system. That is why the issue of education in this area is a hot topic. Three respondents agreed that the current state, in which there is a shortage of experts, is a response to the demand. Because the demand for HIA is low, there is no increase in newly certified applicants. This is also in line with a written statement by one expert who replied to our introductory email: “Unfortunately I have not renewed the authorization because of a total lack of interest (from potential customers; no requirement for two periods of validity).” However, this statement contradicts the opinions of three other respondents who did not feel that there is a lack of experts – they agreed that there is a sufficient professional base and a high demand. Despite these differences in opinion, most of the respondents (75%) agreed that there is virtually no education system focused on HIA. They recommended the re-introduction of training events and courses (also on a voluntary basis), as well as legal support and an appropriate amount of publicity. One comment summarizes the situation: “It will be tough; there is no systematic health education in basic risk assessment, let alone in HIA. The situation can only be changed by quality education in pregraduate, postgraduate and lifelong learning. All faculties lecture on EIA (within rel-

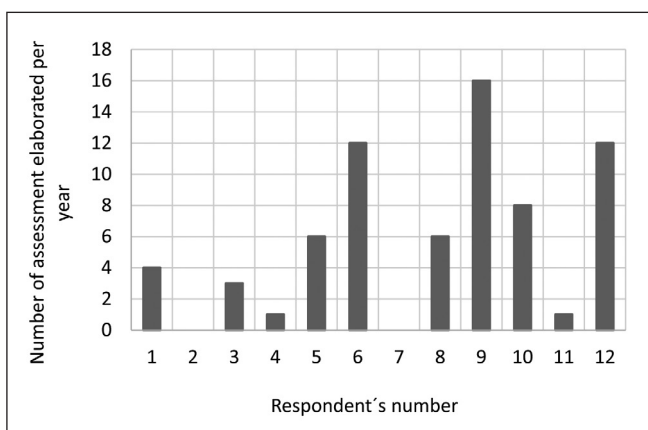


Fig. 2. Frequency of assessments elaborated by the HIA license holders per year.

evant fields), while HIA education is usually limited to the fact that it exists and that it assesses the impact of policy changes on health. The public health authorities, mainly the Ministry of the Environment and the control authorities, do not take the results of HIA seriously, which is demotivating ...” There was also one opinion which suggested extending the current authorization of HRA to HIA.

The quality of the assessments is closely linked to the set-up education system in the health impact assessment. According to 75% respondents, the regional hygiene stations should be checked. Only one respondent stated that the issue of control should be dealt with by the Ministry of Health. Three respondents supported the idea of establishing a new control body (reference laboratory) under the auspices of the National Institute of Public Health in Prague or the Ministry of Health. Unfortunately, the experts disagreed on the exemplary and on the quality assessment.

Experts’ Opinions (Holders of HIA Certification) on the Czech Republic’s Readiness for National Implementation

A majority (63.7%) of the respondents who gave their opinion agreed that the Czech Republic is not ready for broad implementation. The questionnaire further investigated the respondents’ views on the obstacles and challenges to be faced in the preparation of the Czech environment for national implementation.

Out of ten responses, the most positive respondent stated that based on their experience “It needs to start somewhere, even though the country faces many obstacles, but the step itself is very important; many of the problems will be solved during the process, as we can see because the implementation is already happening”. Three of the experts see the obstacles to implementation as being, primarily, the inadequate system of education in this field, as well as the need to build the capacity of HIA experts and the inconsistencies in HIA concepts. Two respondents saw the greatest opportunity for change in anchoring the process in legislation. The current concept of HIA in legislation seems inadequate and unclear to them. One respondent drew attention to the fact that “HIA has somehow become very formal in the EIA”; there are no alternatives and sometimes the assessments are written by using carbon paper. The best approach is to take the results of HIA seriously as well as having the support of the competent authorities. This comment was followed by another contribution that highlighted the topic of political support: “The conviction of the professional public and in particular the politicians, about the usefulness and the meaningfulness of this assessment”. A similar problem was highlighted by another of the experts who emphasized the need for an understanding of the meaningfulness of the whole concept, and the respondent warned against a situation where HIA becomes merely an administrative act.

The issue of public and political beliefs regarding the necessity and usefulness of the HIA concept has also emerged in matters concerning the dissemination of information: “It is necessary to stop underestimating the prevention of health risks. Until then, even the HIA will not be taken seriously.” Respondents recommend spreading information about the HIA concept through implementation on two levels, the general public and the professionals. Effective collaboration with the media (television, radio, and the Internet) would help introduce the concept and explain

why it is necessary. Among the experts, information would be best disseminated at expert (and interdisciplinary) forums, training sessions and meetings.

The questionnaire included the question of what would be the best way to implement HIA in the Czech Republic. A total of 12 respondents replied and ten of them made reference to implementation, as stated in Act No. 100/2001 Coll., on Environmental Impact. Seven respondents refer to Act No. 258/2000 Coll. on the Protection of Public Health. However, from the comments it is clear that in at least half the answers the respondents are inclined to anchor HIA in both the aforementioned laws, and note: “So far the effort to promote HIA voluntarily into practice has failed” and “since it is not law, it does not matter”.

One expert also stated, with reference to the HIA’s inclusion in the SEA: “Most people, including public health workers, place strategic documents in the ‘politics’ arena, which is mostly uninteresting and is considered to have a negative effect. So people see it as unnecessary and pay the topic little attention. The opposite is true if people believe that HIAs have some value.”

Reflection on Regional Strategies and National Strategy for Health Protection and Promotion and Disease Prevention – Health 2020 in Health Impact Assessments

Most of the experts (83%) agreed that the Regional Health Policy or Health 2020 – National Strategy for Health Protection and Promotion and Disease Prevention should be reflected in the HIA process. Comments on this group of questions respond primarily to the fact that the projection of regional policy into HIA should be a matter of course, according to the HIA methodology. One respondent comments on the situation: “For HIA evaluators, health policy is binding. Well-educated public health professionals (HIA processors) know that health policy objectives will be reflected in evaluated strategies and from this perspective strategic documents will be also evaluated. Thus, the missing public health policy objectives will be in the HIA of the official documents added. That is why the HIA process exists. But it depends on how they defend this position in the SEA-HIA assessment.”

Another respondent agreed with the statement and gave their opinion as to why it is not in practice: “In my opinion an emphasis on regional hygienic stations requiring proof of entitlement under the law etc. is missing. I see the biggest problem here. This is a lack of so-called enforcement in the field.” Two other comments are devoted to the National Health Strategy 2020 but in different ways. One respondent considered whether the Health 2020 strategy is not too general for its specific use in HIA, while another respondent pointed to the common theoretical basis of HIA and Health 2020, which is the model determinant of health.

DISCUSSION

The results of the survey also show that the Czech Republic has a shortage of experts in this area. There is only a narrow group of experts, especially in the field of health care. Furthermore, there is no evidence of the existence of multidisciplinary teams with representatives from the relevant areas. However, human resources and capacity building in the area of HIA are essential

prerequisites for its practical implementation, its effectiveness, and for discussions and the sharing of experiences. That is one of the building blocks of the HIA implementation process. HIA also (unlike the method of evaluation of health risks) lacks any informational basis, which would facilitate the unification of processes in this area. This base should also form a platform for discussion and the sharing of best practice, recommendations and lessons learned. HIA currently uses as its source the Strategic Environment Assessment database, which is available on the website of the Ministry of the Environment of the Czech Republic and the Czech Environmental Information Agency (CENIA) (14).

The results of the survey further point to the inconsistencies in the perception of the whole concept of HIA in the Czech Republic by the professionals. Among license holders for health impact assessment there are differences of opinion on how widely HIAs are involved. The definition of HIA is often confused or merged with the definition of a health risk assessment or is perceived to be the name of the assessment of the effects on public health, created within the framework of notification or documentation of the EIA process. The basic premise for understanding the concept is to see health as a large multidimensional system where no individual aspect can be disregarded. The inconsistency of the concept of HIA has also been manifested in the frequency of studies. The responses to many studies could have been distorted mainly through inconsistent understanding of the concept.

The main outputs which resulted from the survey are problems with the lack of interest and the lack of demand for the application of the HIA method. Three e-mail respondents stated that demand had been not sufficient in recent years, the concept was not innovative in the Czech Republic and its attractiveness is considerably decreasing. A possible explanation may lie in the fact that there is little awareness of the concept among professional and the lay public. We can agree with O'Mullane and Guliš (15) who state that "increasing awareness and use of the HIA method leads to the support of mutual sharing and dissemination of information and the exchange of standardized instruments assessment within a single country, as well as between countries". To help make it more attractive a central HIA unit should be established to cover this concept. It would act as a contact point for experts, as well as a private sector representative and a policy maker for HIA implementation. The central HIA unit would coordinate awareness-raising activities among a broad audience and create a platform for sharing examples of good practice. It could monitor international standards and trends, share them with Czech practitioners, and support the development of a comprehensive Czech-language guidebook which would include world-wide trends and help establish the missing education system. The largest demand for training events is from certificate holders. However, such events are also needed for public audiences, employees of public health authorities and students of relevant universities. University-level education does not pay HIA sufficient attention and it is not being specifically taught. There are also no separate courses.

After unifying the definition, clarifying the benefits of the concept, building enough human resources and setting up a training system, the Czech environment would have a better starting point for full implementation. Building the HIA system must go hand in hand with raising awareness of the benefits of the concept and taking care of all possible risks in order to achieve a routine process.

Limitation

The authors admit that the size of the sample is small and this limits the strength of the results. However, this is also evidence that there are not enough active certificate holders and that there is an obvious need to improve this area.

CONCLUSION

The motivation to create a survey was to obtain up-to-date information which would help the Czech Republic move forward with the implementation of the HIA method. A broader implementation of the HIA methodology as a tool seems expedient because it enables non-health conceptual materials to be evaluated from the point of view of health, as well as allowing the promotion of the positive impacts and a reduction or elimination of the negative impacts, and in that way avoiding health inequalities and reducing health risks. As a result, there will be overall support and an improvement in the health of the population, through which considerable healthcare costs will be saved, all of which will contribute to the promotion of a balanced and sustainable future for society.

The collected data from the questionnaire showed obstacles to and gaps in the implementation of the HIA methodology in the Czech Republic. At the same time, it has revealed possible ways to change the current situation and those means have come from the point of view of those who practice this methodology in the Czech Republic, in the context of evaluating concepts, strategies and policies. Outputs served as the basis for prioritization in the established working group.

Recommendations:

- To highlight respect and the importance of the HIA concept;
- To introduce the added value of HIA to policy makers and public audience;
- To clarify a definition and specification of the HIA concept;
- To strengthen the screening process of policies and plans;
- Raise awareness and attractiveness of the concept and involve young professionals;
- Create a relevant education system for experts, employees of the Public Health Authority and public health students, and support capacity building;
- Create a comprehensive Czech-language guidebook including world-wide trends;
- Establish a central HIA unit;
- Legislative support.

It is now possible to state that there has been a shift in this area in the Czech Republic since the reopened discussion has gradually moved toward the implementation of the individual steps that should push the use of the HIA method in a wider context, whether by setting the terminology, creating a more detailed manual or implementing one of the abovementioned recommendations from the questionnaires. All these steps should lead to a fundamental change in society's approach – not only professionally – to this method, including an increase in the use of HIA, and for all policies particularly to understand and reflect its importance as a globally respected health tool.

Conflict of Interests

None declared

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Received May 23, 2019

Accepted in revised form April 1, 2020