

SHORT THESIS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY (Ph.D.)

**Health impact assessment as a tool
for healthy public policy**

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Introduction

Health as a value in policy making

Health has central importance in people's lives, recognized as a precondition of good life since ancient times. The rise of medicine made a number of deadly diseases curable in the 20th century but it was only a partial answer for the question of how health is created. Increasing scientific knowledge about disease and health and their interconnectedness with a range of social, economic and community factors contributed to the understanding that health, for the largest part, is created outside of the health care sector. This recognition raised a number of ethical, legal and economic questions, and led to heightened political interest in health. The *Lalonde-report* of 1974 in Canada was the first governmental policy document which opened up the perspective of health policy well beyond medical care onto other fields by defining human biology (genetics), the environment and lifestyle as main determinants of health and well-being. In terms of weighing the responsibility of individuals and societies in the 'production' of health, a balance must be aimed for. On one hand, given the evidence on the relationship between health behaviour, disease burden and health care costs, it is sensible to hold individuals responsible for their health-related choices. On the other hand, factors such as the living and working environment, economic conditions and the lack of social capital render healthy choices of the individuals more difficult or even impossible. If health is the foundation of well-being, that is, a state in which biologically possible and chosen goals can be achieved, then public policies must provide conditions conducive to this state (health) for the majority. The Lalonde report paved the way to a new concept of health, that is, health promotion, the foundation of which was laid down in the *Ottawa Charter* of the World Health Organization (WHO). The Charter defined public policy as first of five main activity areas that greatly contribute to the creation of health.

Policy making outside of the health sector with the aim of influencing determinants of health occurred first in the field of occupational and environmental health, food safety and tobacco and alcohol policies. Health as a political issue was codified 11 years after the Ottawa Charter in the European Union in 1997 in Article 152 of the *Amsterdam Treaty*, stating that a high level of health protection shall be ensured in connection with the formulation and implementation of all Community policies and all Community measures. The Finnish Presidency of the EU further underlined the importance of healthy public policies – such as agriculture, education, environmental, economic, housing or transport – and popularized it in the principle of *Health in All Policies* in 2006.

Housing as a prerequisite of health

As a physical setting, the residential environment is critical for human well-being the importance of which is reflected in international and European declarations and national constitutions recognizing housing as a human right.

Health can be influenced by a wide range of housing-related factors. Housing policy from a wider social perspective is concerned with affordability and access to housing, social and temporary housing, housing investment and urban planning. Housing need on the national scale is an important indicator of overall quality of life and development of society. The socio-ecological aspects of the local environment include features such as spatial composition, neighbourhood safety and social capital, access to local infrastructure and facilities (such as health and social services, recreational areas, etc.), as well as ecological characteristics (quality of air and water, noise level, access to green areas). From an individual perspective, housing conditions can be characterised by factors such as indoor air quality, temperature, dampness, mould, rodents and parasites or the level of noise and asbestos.

Social status and low income in particular are strongly linked to substandard housing and increased exposure to environmental risks at home or at the residential location outdoors. Poor housing conditions are associated with a wide range of health risks including infectious diseases, chronic illnesses, injuries, poor nutrition and mental disorders. Sustained experience of housing deprivation over time further increases the probability of ill health that may negatively affect an individual's housing opportunities.

Interventions in the field of housing have plausible beneficial effects on inequalities and on the health of disadvantaged groups. However, due to the currently germinating evaluation practice, only limited information on the effectiveness of certain categories of housing interventions are available.

Housing and health of marginalized Roma in Central-Eastern Europe

The European Roma community constitutes the largest ethnic minority of the EU, the majority lives in Central and Eastern European Countries. Large proportion of Roma has been identified as living in segregated colonies characterized by severely substandard conditions that contributes to their worse health status.

Scientific studies on Roma health are hindered by a number of issues such as methodological problems the most serious being the definition of who is Roma and who is not; and ethical problems, namely historically based distrust of Roma towards 'official' data collection and means to overcome it. Nevertheless, a number of studies described serious inequalities in health status between Roma and non-Roma reflected in lower life expectancy and higher infant mortality, higher prevalence of certain infectious diseases, unhealthy lifestyles (such as high levels of smoking and poor nutrition) and worse subjective health status. The reasons are manifold, including wider socio-economic determinants of health (poverty, unemployment,

low educational level), worse environmental conditions, limited use of health care, especially of preventive services, cultural factors, social exclusion and discrimination.

The situation of Roma poses great challenges to their integration, is destructive to the social cohesion and well-being of European societies in spite of it having been addressed by numerous international and EU-level documents aiming to foster their socio-economic integration. National goals and activities were formulated to achieve social inclusion of Roma in the frame of a major European initiative, 'Decade of Roma Inclusion' in four priority areas including housing, education, employment, and health that brought together governments, intergovernmental and nongovernmental organizations as well as civil society. The recently adopted European Roma Strategy, priority of the Hungarian presidency, spells out the same four crucial areas through which Roma integration should be reached.

Monitoring of results is of crucial importance for national Roma strategies and programmes; however, implementation has been lacking adequate monitoring and evaluation measures as well as assessment of impacts on the health of the Roma population.

Health impact assessment as a tool for health promoting policies

According to the utilitarian theory, good policies cause "the greatest good for the largest number of people". The right choice from a health point of view can be defined as the one that produces the most gain, for example, the largest reduction in terms of burden of disease. In order to tell right from wrong decisions, their impact should be measured on well-being.

The potential consequences of policies can be identified and evaluated by impact assessment tools) which support evidence based decision making. These tools have been extensively used for environmental, social, and economic impact assessments. Health impact assessment is a relatively new tool by which a policy, programme or project may be judged as to its potential effects on the health of a population and the distribution of those effects within the

population. The first and still widely used guideline of HIA is the Gothenburg Consensus Paper published by the WHO in 1999. According to it, health impact assessment informs decision makers on the actions that can enhance positive effects and reduce or eliminate negative ones in order to reduce health inequalities and improve health state of the population. HIA is based upon four core values. *Democracy* emphasises the right of the individuals to participate in the formulation, implementation and evaluation of policies in a transparent and accountable manner. Consideration of both short and long term impacts follows from the value of *sustainable development*. *Ethical use of evidence* requires assessments to be based on qualitative and/or quantitative evidences gained by rigorous scientific methods. The value of *equity* calls for assessing the distribution of impacts within the population with particular attention to vulnerable groups.

The methodology of HIA has been continuously developing and depends on the area of application. HIA can be carried out regarding decisions taken by those with responsibility for a particular area at various levels of governance (intergovernmental, governmental or regional/municipal policies), strategies, programmes or projects.

The process of HIA is composed of several steps in a defined sequence: screening, scoping, appraisal, decision making, evaluation and monitoring. *Screening* is the first essential step to decide whether there is a potential link between the planned policy, programme or project and health, and what aspects of health of the affected population and its subgroups they might affect. *Scoping* aims to identify and agree on the methods, resources and timeframe for the HIA as well as to size up the stakeholders to be involved. Actual health impacts are identified and estimated during *appraisal* based on various sources of information using complex methods of analysis. Appraisal itself may fall into one of three broad categories based on time frame and resources: rapid, standard or comprehensive HIA. The results of the appraisal including all potential impacts are reported along with options for enhancing the positive and

minimizing the negative impacts. The next essential step is *decision making* which ideally aims to act according to the HIA recommendations. The consequences of HIA on the decision making process and the outcomes of the implemented decisions are considered during *monitoring and evaluation* which also enables the comparison of previously predicted and actual impacts.

The **timing** of HIA affects the likelihood of influencing the decision. HIA can be classified as prospective, retrospective and concurrent depending on its relation to the implementation of the policy.

Implementation and institutionalization of HIA widely differs in countries around the globe. HIAs for projects and policies may be required by laws or regulations independently, as part of other impact assessment, or may be conducted on a voluntary basis. Legal requirements for environmental or regulatory impact assessment in many countries already include health impacts as a compulsory element.

In spite of the lack of explicit legal prerequisite of HIA at policy level, a number of health professionals – officers and experts – took proactive steps to introduce HIA in Hungary. Case studies were initiated and conducted by the public and academic sector, local governments and private companies as well. Several HIAs were conducted in Hungary between 2005 and 2010 in which the Faculty of Public Health of the University of Debrecen took a leading role.

Aims of the research

Considering the unfavourable health status of the Hungarian population compared to the EU average, and the alarming extent of regional and social inequalities in Hungary, improvement of the health of the population by efficiently tackling social and economic determinants of health inequalities should be fundamental for sustainable economic and human development. HIAs would be helpful for making decisions to improve health inequities. However, at the start of the research no published health impact assessment was identified in the literature that specifically targeted Roma people. The overall aim of the author was to test the applicability of HIA in the field of housing for disadvantaged population groups, primarily Roma.

The research questions included the following:

- 1. What are the potential and observed impacts of housing interventions at national and local level aiming at Roma?*
- 2. Is health impact assessment on Roma housing policies feasible and relevant?*
- 3. What are the policy implications of promoting health through housing programmes aiming at vulnerable groups?*
- 4. What are the essential elements of planning and implementing sustainable housing projects?*
- 5. What are the strengths and weaknesses of HIA and its potential future on the agenda of Hungarian governance?*

Methods

Background of health impact assessments

The following assessments were carried out according to the aims of the research based on the broad model of health considering the complex system of health determinants and their interactions to assess health impacts and their distribution in the affected population.

At programme level:

1. HIA of national housing programmes aiming at Roma in CEE countries

Research was coordinated by the HIA Workgroup of the Faculty of Public Health, University of Debrecen in the framework of an EU project (Health Impact Assessment in New Member States and Accession Countries, HIA-NMAC). HIAs of two national (Bulgaria, Slovakia) and one local (Lithuania) programmes were carried out.

At project level:

2. HIA of a housing project vs eviction of a Roma community in Debrecen

The aim of the HIA was to assess the health effects of eviction in comparison with that of a housing project for a Roma community in Debrecen. The prospective HIA was embedded in a community development project and intended to inform decision makers on the potential consequences of alternatives.

3. HIA of the Hungarian housing and social integration programme in Hencida

Hungary launched a comprehensive national programme to improve living conditions and promote social inclusion in segregated Roma habitats in 2005. 9 villages were invited in the first round of the programme, Hencida being one of them. 12 Roma families were relocated to new houses; another 56 houses were renovated. Right after the implementation a retrospective HIA and 3 years later an evaluation of long-term health

outcomes was carried out, the latter aimed to judge the accuracy of predictions gained by the HIA.

4. Evaluation of a housing project in Kiskunhalas

20 houses were built for 12 Roma and 8 non-Roma disadvantaged families with small children in 1997 in a locally initiated housing project in this small town of Hungary. Long term evaluation of the project was carried out in 2010 and 2011.

A tool developed by our HIA workgroup was used for screening, based on international guidelines and the workgroup's own previous experiences. Stakeholders and experts from relevant scientific areas such as epidemiology, health promotion, sociology, law, environmental health and general medicine were involved in the scoping step. Several data sources and methods were used to identify and assess health impacts that were detailed in the following chapters of appraisal:

- The *community profile* helped to identify socio-economic, environmental and health characteristics of the affected population. The community profile included the following dimensions: general attributes of the population (size, age and sex distribution, ethnicity), health status of the population (disability and morbidity data, health behaviour indicators), levels of education, employment/unemployment status, environmental conditions (settlement structure, housing, transport, public utilities), and access and quality of services.
- *Analysis the proposal* of the policy/programme/project aimed to investigate legal, political, economic and cultural context of the proposal based on information gained from stakeholders and from policy documents.

- *Review of the literature* aimed at searching for evidence on the health impacts of similar proposals from the scientific literature and HIA evidence base.
- *Participatory, qualitative approaches* were used to gather evidence from the experience, knowledge, opinions and perceptions of the stakeholders. Methods included field work, focus groups, workshops, interviews and questionnaire surveys.

Decision making took place only in case of one prospective assessment (Debrecen); other HIAs were carried out concurrently or after implementation. Evaluation was performed in addition to one retrospective local HIA (Hencida) along with the independent evaluation of another local housing project (Kiskunhalas).

Results

Predicted health impacts of housing programmes/projects

Lifestyle

Prospective case studies have not found explicit connection between improved living conditions and change of risk behaviour, such as smoking or alcohol consumption. Certain beneficial health effects on nutrition can be predicted due to better cooking and storage conditions. Coping with stress is predicted to improve due to adequate living conditions, which consequently results in advanced mental health.

Socio-economic environment

Individuals of higher socio-economic status are healthier. This holds true regardless of whether income or education are used as indicators of socioeconomic status. Therefore, any intervention that has an impact on education, income or employment is likely to have an indirect impact on health.

Education Inhabitants of segregated settlements are much less likely to have completed primary and especially secondary education due to the above mentioned geographical isolation and difficulties in accessing urban centres, low quality segregated schools with inadequately qualified staff, and other factors, for example difficulties in doing homework because of lack of electricity, crowdedness, etc. School attendance is expected to be improved among children with easy access to school. Performance can be predicted to improve if conditions for studying at home improve based on earlier studies.

Employment Adults living in segregated housing sites have difficulties to find work locally, fewer opportunities to learn about potential work, and limited access to public transport to get to work. Lack of permanent address of the candidate can be a major barrier to

the employment. Improved housing may improve access to urban centres and more frequent use of means of public transport through which increased employment may be predicted. In addition, work opportunities can be created during the housing project for adult beneficiaries.

Income Increased income has an indirect positive impact on health. However, income is necessarily linked to employment and should be taken into account when selecting beneficiaries for housing projects. Household maintenance requires a certain level of disposable income: the higher the quality of the home with more utilities, the higher the expenses.

Social network and inclusion Housing projects are expected to have positive impact on occurrence and fear of crime with important benefits for mental health, physical functioning and quality of life. Housing development potentially results in numerous additional beneficial health effects through strengthened social network and emotional safety, which may reduce stress. Improved conditions of leisure and recreation were also found to have beneficial effects on coping with stress. However, in case of relocation to a new area, mental health can also deteriorate if the accompanying stress and loss of community is not addressed by the establishment of new social ties. Discrimination and racial harassment against the Roma community fundamentally determines the success of housing development projects.

Physical environment

Indoor conditions Improved housing conditions have important benefits on health status. Adequate indoor air quality, temperature and lack of dampness have positive health consequences in terms of cardiovascular, malignant and respiratory diseases, particularly amongst children and elderly people. Decreased crowdedness, elimination of rodents and parasites may contribute to a decreased rate of infectious and allergic diseases, as well as improved mental health. Improved housing design is expected to improve safety and decrease

the number of accidents at home; indoor electricity and safe domestic appliances may reduce burn accidents due to the use of inflammable substances for cooking and lighting.

Outdoor conditions Segregated and/or substandard housing complexes, in many cases, can be recognized by their unsightly characteristics featured by illegal waste dumps, abandoned industrial buildings, etc. Properly designed housing projects address these problems as well: soil and water quality will be improved due to decreased industrial pollution, whereas human and animal contamination will decrease due to installation of public sanitation and sewage draining systems. Rehabilitation of urban centres or removal of communities from industrial areas may have beneficial impact on air pollution and road traffic accidents. A planned settlement structure with safer road network and green spaces provides a better quality of living environment, increased level of safety and health.

Access to and quality of services

One reason, among others, for the inadequate access of Roma to health care is their geographical isolation and/or lack of proper roads on the margins of urban settlements or in remote rural areas. Positive impact on the access to health services subsequent to housing development can be due to easier contact with helping agencies, more frequent contact with GPs, and improved conditions for house calls. Improved physical access to urban centres will facilitate access to other public services as well, such as educational and administrative facilities, fire service, police, etc.

Actual health impacts of housing projects aiming at Roma

In contrast to the mostly positive predictions of the prospective and concurrent HIAs, the retrospective HIA conducted right after the implementation of the housing project in Hencida revealed equivocal impacts, moreover, profound negative effects were also explored mainly in terms of social network, housing expenses and safety.

Four years after the end of the Hencida project, outcome evaluation of the HIA uncovered the long term effects of the housing project including manifest negative consequences in terms of increased expenses of housing maintenance, difficulties in terms of building relationship with neighbours, discrimination, slackening of social ties, crime, and deteriorating indoor safety due to the inadequate use of housing equipments. Long term positive impacts could not be explored on employment or health.

In contrast to the above results, the evaluation of the Kiskunhalas housing project resulted in numerous positive long term effects on nutrition, social network, housing satisfaction, indoor and outdoor conditions and access to family help services, among others. The single negative impact related to the decreased level of employment and subsequent loss of income among beneficiaries. No unequivocal improvements in terms of health could be proven though beneficiaries reported improved subjective health.

In summary, predicted impacts of the prospective and concurrent HIAs both at the policy (Bulgaria, Lithuania, Slovakia) and local level (Debrecen) contrasted markedly with the observed impacts of implemented housing projects at the local level in Hungary, explored by evaluation. Prospective HIAs tended to predict many more positive impacts than what was actually achieved.

Conclusions

1. Housing interventions may improve the health of the Roma population by positively influencing the natural and built living environment, housing conditions, socio-economic determinants, and access to services, resulting in a decreased rate of chronic cardiovascular and respiratory diseases, infections, accidents and injuries and improved mental health. Negative impacts were only predicted in terms of housing expenses and maintenance due to higher-quality homes. However, the predicted favourable health impacts of national level strategies and programmes contrasted markedly with the observed impacts of completed housing projects at the local level, primarily in terms of socio-economic determinants of health such housing tenure, neighbourhood satisfaction, and social networks. Mid-term improvement of health can be more expected from increasing educational accomplishments rather than as a short-term outcome.

2. Health impact assessment is a relevant decision making tool the application of which may mitigate negative effects of housing interventions and enhance positive ones. However, until evaluations of national strategies become available, HIA of Roma housing should be carried out at the local level to increase its reliability, in accordance with the principle of subsidiarity, and involving all stakeholders directly, not the least the involved community. The use of HIA is contingent on the importance that decision-makers attribute to it.

3. Sustainable improvement of housing conditions can be optimally targeted by complex interventions including measures on wider socio-economic determinants of health. Even in case of limited resources, employment and housing should be linked at local level and adapted to local features with the involvement of local communities, based on ex ante assessment.

4. Local project plans should be based on previous information on individual and community capacities of the potential beneficiaries. Representatives of the beneficiaries along with all

other stakeholders should be included in all bodies that make any decisions from planning through implementation to evaluation. Inclusion criteria should be publicly stated based on socio-economic and/or demographic conditions rather than on ethnic identity in line with the EU principle of explicit but not exclusive targeting. Transparency and accountability should be ensured regarding financial dealings and quality standards. Housing projects planned for vulnerable groups, particularly Roma, should be rigorously evaluated and results disseminated not only in terms of their impact on health but on its socio-economic determinants as well. Successful projects may decrease negative majority attitudes towards the Roma, whereas failed projects do the opposite.

5. HIA can increase concern for health as a value in decision making. Its cost effectiveness and standardized methodology represent strengths in those countries where HIA is integrated in the decision making process. Additional benefits include the added values generated by the participation of beneficiaries contributing their specific local knowledge and understanding, and the complex analysis of a scenario in which all stakeholders should be heard. Its participatory approach, when conducted properly, allows community concerns to surface and be resolved hereby preventing them to become major obstacles later in the process. In terms of weakness, HIA requires time, capacity, and financial resources in the policy process, and consequentially, usually slows decision making. If not legally regulated, its application is opportunistic, depending on the interests and understanding of actual decision makers.

The creation of the legal and institutional background for HIA along with quality standards is a condition for its smooth integration into governance practice that in Hungary – in spite of recent efforts – still has to happen. Nevertheless, until the legal framework for HIA is in place, rapid HIA should be applied as a feasible and cost-effective tool to facilitate the planning of local level housing projects for Roma people.

Summary

An outstanding feature of marginalized Roma communities of Central-Eastern European countries is their severely substandard living conditions which contribute to their worse health status compared to the majority. Several efforts have already been taken at the international and local level to tackle housing problems, but health consequences of the implemented measures in most cases have neither been assessed in the decision making process nor evaluated after implementation though health impact assessment (HIA) as a tool could be applied to identify and optimize health effects of policies for disadvantaged populations.

The thesis investigated the applicability of HIA in relation to housing policies and projects aimed at vulnerable populations. Various approaches were used to assess health impacts of national housing interventions in an international context, and local level housing in prospective and retrospective timing along with the evaluation of a successful housing project that enabled the comparison of predicted and actual impacts of the programmes and projects.

National and strategic level HIAs pointed mainly to beneficial health effects of housing by improving indoor and outdoor conditions, access to services, and socioeconomic conditions. Negative impacts were predicted only in terms of maintenance expenses and housing tenure. In contrast to these results, retrospective HIA conducted right after the implementation of a housing project revealed equivocal impacts, moreover, unexpected and profound negative effects were also explored mainly in terms of social network, housing satisfaction and safety. Evaluation of a successful housing project for vulnerable people revealed positive and sustainable long-term impacts of a properly designed and implemented housing intervention. Based on the case studies recommendations are made on housing interventions subsequent to HIA, a useful tool to mitigate negative and enhance positive effects of housing interventions if certain specific features of deprived communities are taken into account. HIA should be

carried out at local level, as close to the citizens as possible according to the principle of subsidiarity, and by using participatory approach directly involving beneficiaries. In this case HIA can effectively support decision-making and successful implementation contributing to the integration of Roma into majority populations.

List of publications

Publications related to the thesis

Molnár Á, Ádám B, Antova T, Bosak L, Dimitrov P, Mileva H, Pekarcikova J, Zurllyte I, Gulis G, Ádány R, Kósa K. Health impact assessment of Roma housing policies in Central and Eastern Europe: a comparative analysis. *Environ Impact Assess Rev*, in press

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Kósa K, **Molnár Á**, Mckee M, Ádány R. Rapid health impact appraisal of eviction versus a housing project in a colony-dwelling Roma community. *J Epidemiol Community Health* 2007;61(11):960-965.

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Total impact factor of publications related to the thesis: 9,138

Conference presentations related to the thesis

Molnár Á, Makara P, Ádány R. Integrating health impact assessment in everyday governance practice in Hungary. European Public Health Conference, Amsterdam, 2010. Eur J Pub Health 2010;20 (Suppl. 1):202. (abstract)

Molnár Á, Ádám B, Gulis G, Ádány R, Kósa K. Egészségthatás vizsgálat és értékelés egy helyi szintű Roma lakhatási projekthez kapcsolódóan. (Health impact assessment and evaluation of a local level housing project). 4th National Conference of Public Health Training and Research Institutions, Szombathely, 2010. Népegészségügy 2010;88(3):189. (abstract)

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Ádám B, **Molnár Á**, Bárdos H, Ádány R. A hazai minőségi bortermelés egészségthatás vizsgálata. (Health impact assessment of the quality wine production in Hungary). 3rd National Conference of Public Health Training and Research Institutions, Győr, 2009. Népegészségügy 2009;87(3):156. (abstract)

Molnár Á, Kósa K, Ádány R. Hátrányos helyzetű populációkat érintő intézkedések egészségthatás orvostani vizsgálata - Kilakoltatás versus házépítési projekt egészségthatásainak vizsgálata egy roma telep esetében. (Health impact appraisal of eviction versus a housing project in a colony-dwelling Roma community). 12th Congress of the Public Health Scientific Society, Siófok, 2006.

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Ádám B, **Molnár Á,** Ádány R. Kvantitatív kockázatbecslés integrálása az egészséghatás vizsgálat folyamatába. (Integrating quantitative risk assessment into the process of health impact assessment). 5th National Conference of Public Health Training and Research Institutions, Szeged, 2011. Népegészségügy 2011;89(3):256. (abstract)

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Item Number:

Subject: Ph.D. List of Publications

Candidate: Ágnes Molnár

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List of publications related to the dissertation

1. Molnár, Á., Ádám, B., Antova, T., Bosak, L., Dimitrov, P., Mileva, H., Pekarcikova, J., Zurlyte, I., Gulis, G., Ádány, R., Kósa, K.: Health impact assessment of Roma housing policies in Central and Eastern Europe: A comparative analysis.
Environ. Impact Assess. Rev. "accepted by publisher", 2011.
IF:1.944 (2010)
2. Molnár, Á., Ádány, R., Ádám, B., Gulis, G., Kósa, K.: Health impact assessment and evaluation of a Roma housing project in Hungary.
Health Place. 16 (6), 1240-1247, 2010.
DOI: <http://dx.doi.org/10.1016/j.healthplace.2010.08.011>
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3. Ádám, B., Molnár, Á., Bárdos, H., Ádány, R.: Health impact assessment of quality wine production in Hungary.
Health. Promot. Int. 24 (4), 383-393, 2009.
DOI: <http://dx.doi.org/10.1093/heapro/dap024>
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4. Molnár Á., Ádám B., Ádány R.: Az egészséghatás vizsgálatok módszertana.
Népegészségügy 87 (1), 20-30, 2009.
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6. Kósa, K., Molnár, Á., McKee, M., Ádány, R.: Rapid health impact appraisal of eviction versus a housing project in a colony-dwelling Roma community.
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