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Review

Time for a paradigm change? Tracing the institutionalisation of health impact assessment in the Republic of Ireland across health and environmental sectors

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ABSTRACT

This paper presents a critical analysis of health impact assessment (HIA) in the Republic of Ireland (ROI) in the context of institutional policy and practice. It begins with a brief background to the origins and aims of HIA. Core developments in health and environmental sectors pertaining to HIA in the ROI are then considered. A series of significant developments have taken place in these sectors over the past decade that are positively associated with the promotion of HIA in the ROI. However, it is argued that in spite of various institutional facilitators, the practice of implementing HIAs in the ROI is significantly underdeveloped, and it continues to lag behind several of its European Union counterparts. It is contended that a paradigm change is required in order to address the current policy–action gap. An organisation theory framework is used to assess the implementation problem and a number of suggestions are highlighted as potential facilitators of this process.

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1. Introduction

The formal origins of health impact assessment (HIA) can be traced back to articles in two European Union (EU)

treaties, the 1992 Treaty of Maastricht, Article 129, and the 1997 Amsterdam Treaty, Article 152, both of which refer to the responsibility of the European Community for health protection in all community policies and activities [1–3]. More specific reference to HIA features in the World Health Organisation's Health 21 policy document [4] which outlines the need for multisectoral responsibility and accountability for the health impact of policies and programmes, and states that HIA must be applied to any social

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and economic policy or programme as well as development projects, likely to have an effect on health.

The overarching objective of HIA is to provide a set of evidence-based recommendations to influence or modify a policy or project in order to maximise health gain and minimise negative outcomes and health inequalities [5,6]. It can therefore aid the development of healthier public policy [7]. However Metcalfe and Higgins have noted that even if evidence is used to inform policy, the policy-making process itself will not yield results in the absence of implementation [7]. Utilising an organisation theory framework, this paper presents a critical analysis of the institutionalisation of HIA in the Republic of Ireland (ROI). It argues that there is evidence of responsiveness, with HIA embedded at the strategic policy and structural levels. However, there has been a considerable time lag in implementing HIA across the two policy areas – health and environment – both of which have been given clear strategic remits for HIA at the macro-level. The following section presents a policy overview of HIA in the ROI, with particular reference to core developments within these sectors. A discussion of the institutional environment of HIA is then set out. It addresses the policy and structural arenas conducive to the facilitation of HIA on the one hand, and the factors contributing to the slow implementation on the other. It concludes that a paradigmatic change is required if the policy intentions of HIA are to be actioned at regional and local level within the relevant organisations with remits for HIA.

1.1. International and national policy developments for HIA in the health and environmental sectors

The determinants of health conceptual framework has been influenced by the fields of public health, health promotion, health needs assessment, and evidence-based medicine [5,8–11]. All policy development could potentially be subjected to some method of HIA, with consideration of categories of potential impacts on health including, socio-economic, cultural, environmental, and economic factors, as well as living and working conditions, lifestyle, biological factors and health services [5].

Internationally, important strategic developments have taken place in the field of health policy over the past two decades that have influenced developments within the Irish policy arena of HIA. A key development in this regard was the adoption of the Ottawa Charter for Health Promotion in 1986 [12]. The Charter recognised that promoting health goes beyond health care. It urged health to be included on the agenda of policy makers in all sectors and at all levels, directing them to be aware of the health consequences of their decisions and to accept their responsibilities for health. Another salient policy development was the European Environment and Health Action Plan (2004–2010) [13] that set out the European Commission's responsibility for both environmental and health monitoring. This Action Plan was designed to give the EU the scientifically grounded information needed to help its 25 Member States to reduce the adverse health impacts of certain environmental factors and to endorse better cooperation between actors in the environment, health and research fields. According to the Council of Europe [14]

many policies now articulate the requirement for a Health in All Policies (HiAP) approach.

A number of key international policy developments set the context for addressing health within a socio-environmental framework at national and local levels. The United Nations Action Plan to achieve global sustainable development in the 21st century, Agenda 21 [15], was a key outcome of the Earth Summit in Rio in 1992. Agenda 21 has been considered an important strategic blueprint for meeting the contemporary global challenges of environment and development. It established a global partnership based on national, regional and local efforts to achieve a more sustainable future, and recommended that local authorities should develop a consensus on a localised version of Agenda 21 for their communities by 1996. It linked developments in the environment with health outcomes, stating that 'human health depends on a healthy environment' [16].

Another noteworthy international policy development associated with a socio-environmental and socio-economic model of health is the WHO Healthy Cities programme (1987). It promotes developments in health policy and planning at local government level with a special emphasis on health inequalities and urban poverty, the needs of vulnerable groups, participatory governance and the social, economic and environmental determinants of health. It also strives to include health considerations in economic, regeneration and urban development efforts.

At a national governmental level within the ROI two core departments have responsibility for health and environmental policy, monitoring and protection; the Department of Health and Children (DOHC), and the Department of Environment, Heritage and Local Government (DEHLG). A number of key statutory bodies are associated with these governmental departments including the HSE, the Institute of Public Health, and the local authorities. In addition to national and local government, another important institutional actor is the EPA, an independent public body established under the Environmental Protection Agency Act, 1992 [17]. It has statutory responsibility for protection of the natural environment and human health.

1.1.1. HIA in the Irish health sector

The conceptualisation of HIA from a determinants of health perspective is evident in a number of relevant policy and structural developments over the past decade in the ROI. A particularly noteworthy development was the publication by the DOHC in 1999 of a proposal for a National Environmental Health Action Plan (NEHAP) [18]. It noted that the efficacy of the health, social and economic systems are contingent on the core environmental media of land, air and water, and the protection of such is an overriding priority [19]. Such a plan was considered to be an essential element in helping government departments not directly involved in health services to recognise and assess the potential impact of their policies on the health of the population [20]. It therefore represented an important cross-departmental, intersectoral development bringing health and non-health agencies together in the policy arena to address impacts on health. In line with one

of the objectives of the Health Service Executive's (HSE) Corporate Plan 2005–2008 [21] to protect, promote and improve the health and well-being of the population, the Plan stated that it would 'Work with relevant government departments and agencies to assess the potential impact of their policies in keeping with the NEHAP and framework'. A key deliverable was to review NEHAP, in conjunction with the DOHC. However, such a review has yet to be published.

Significantly, the current Irish national health strategy [20] published by the DOHC prioritised the introduction of HIA as part of the public policy development process. It proposed that HIA be carried out on all new government policies in relevant government departments with effect from June 2002. The strategy identified various regional level structures such as local authorities and County and City Development Boards (CDBs) as playing a role in implementing public policy locally and considering the impact of their decisions on population health in their area (see also a later section of this paper on local government). More recently, the HSE published a Transformation Programme 2007–2010 [22] containing six high-level priorities, one of which was to implement a model for the prevention and management of chronic illness. The development of a framework for HIA was named as one of the projects to be undertaken in order to achieve this priority. In addition, the HSE's Health Intelligence sub-directorate within the Population Health service delivery unit listed one of its roles as:

'focusing on the methodology of HIA, assessing and reviewing current and potential future tools used in conducting and evaluating HIAs, and offering guidance on the appropriate use of HIA' [23].

In a similar manner to most other European countries, an important symbolic gesture pointing to the State's commitment to the development of HIA was the establishment of a lead agency, namely the Institute of Public Health in Ireland (IPH). The IPH acts as a focal point promoting the implementation of HIA across the Island of Ireland. It receives an annual budget for HIA from the DOHC in the ROI and the Northern Ireland Department of Health, Social Services, and Public Safety for this purpose. The Institute's core role is the provision of HIA training and resources such as guidance manuals and reviews on the conduct of HIA. It has produced a HIA guidance manual [24] on behalf of the Ministerial Group on Public Health to assist practitioners to conduct HIA. The Institute has also contributed to the evidence base with the publication of literature reviews to support HIA in the areas of employment, transport, the built environment and health [7]. It acts as a communicative and networking conduit through a number of media including its dedicated website (<http://www.publichealth.ie>), HIA forum, network, training, workshops, and quarterly newsletter. In 2007, the 8th International HIA Conference was hosted by the IPH in Dublin [25].

Finally, Galway is currently the only city in the ROI to have attained WHO Healthy Cities status, which it acquired in July 2006. During the fourth phase of the programme (2003–2008) HIA comprised one of the three core themes of this phase, the other two being healthy ageing and healthy

urban planning [26]. The theme of the current programme, now in its fifth phase (2009–2013), is 'health and health equity in all local policies'. Designated WHO Healthy Cities are focusing on three core themes: caring and supportive environments, healthy living and healthy urban design. At a local level Galway Healthy Cities, operating under the auspices of the Department of Health Promotion, HSE West, has been active in building capacity for HIA implementation within Galway city and county. The Healthy City status has also built momentum in terms of networking amongst relevant partners within the local city and county councils, the HSE West and National University of Ireland, Galway.

1.1.2. HIA in the Irish environmental sector

The endorsement of HIA through various policy and structural developments is similarly evident in the Irish environmental sector. In particular the role of local government with regards to health monitoring and protection has been set out nationally in Local Agenda 21. An intersectoral perspective was endorsed in the Guidelines on Local Agenda 21 [27] whereby local authorities were encouraged to co-operate with the former health boards to increase awareness of the links between environment and health, and help formulate and implement relevant strategies in their areas. Another important development was the publication by the Department of the Environment and Local Government of a national sustainable development strategy in 1997 [28]. The strategy set out a firm recognition of environmental improvements as the basis for preventative health care, and their beneficial effects on public health. The current DEHLG continues to provide annual funding to the local authorities for their Local Agenda 21 Environmental Partnership Funds. Indeed Milner [29] argues that it is local government organisations that are instrumental in controlling the determinants of health. Thus, local authorities have the most influence over factors affecting health and well-being of their local communities. One of the reasons for this is that health and environmental impacts are generally conceptualised in public policy as closely inter-connected.

In the past local authorities were encouraged to co-operate with the former health boards to increase awareness of the links between environment and health, and help formulate and implement relevant strategies [27]. This process became more formalised following the legal establishment of CDBs under Section 129 of the Local Government Act, 2001 [30]. The CDBs comprise representatives from the four key sectors, local government, local development, the social partners, and State agencies. This intersectoral partnership represented a significant structural development to enable cross-collaboration between a multiplicity of stakeholders on various health and environmental issues. In particular, a key role for the CDBs was the requirement to prepare and oversee the implementation of a ten year County or City Strategy for Economic, Social and Cultural Development, in effect bringing more coherence to the planning and delivery of services at local level. Entire or parts of these ten year Strategies are required by Statute [30] to be assessed with respect to their impact from a wide range of perspectives including health. Significantly, the CDBs were identified as potential conduits for HIA in the current national health strategy [20].

An obvious consideration then, is in what form HIA could operate within local government. The debate generally centres on the conduct of HIA as a stand-alone assessment versus its integration into other impact assessments [1,31–33]. The reason for this is that many of the questions explored in HIA are common to other assessments [33]. Mindell et al. [5] has pointed out that a number of organisations are working to develop guidance on integrated impact assessment [34,35]. In this vein, major efforts have been made to include HIA as an integral part of Strategic Environmental Assessment (SEA) across Europe [36]. Nonetheless, the debate continues with regards to the pros and cons of the move towards integrated impact assessment [1,31,37,38]. The agency with responsibility for this in ROI is the EPA whose key objective is to complement the initiatives and activities arising from The European Environment and Health Action Plan 2004–2010 [13]. At an operational level, one of the core ways the EPA assesses the impact of plans and programmes on the environment is by the monitoring of and compliance with Environmental Impact Assessments (EIAs) and SEAs.

2. Discussion

This paper has examined the institutional environment of HIA through a review of the policy and structural milieu relevant to the development and implementation of HIA in the ROI. Based on Nonet and Selznick's [39] concept of responsiveness it could be argued that new developments in the social and environmental sectors have led to the adaptation and alteration of public policy pertaining to health. Evidence of such a trend is the increased recognition of the need to consider the health impacts not just of specific projects in the health arena but also of broader programmes and policies across the wider socio-environmental and local government arenas. Indications of such responsiveness can also be found in terms of the plethora of international and national frameworks, structures and initiatives across a number of institutional layers at international, national and local levels that facilitate HIA. Internationally, key strategic frameworks guiding health and environmental policy making include the Ottawa Charter for Health Promotion [12], the UN's Agenda 21 [15], the WHO Healthy Cities Programme [26], the Gothenburg consensus paper [40], and the European Environment & Health Action Plan 2004–2010 [13]. Moreover, core national policies pertinent to HIA include the NEHAP [18], the National Health Strategy [20], and the HSE Corporate Plan [21]. Such strategic developments set out vision and commitment, linked with aims and objectives with regards to assessing the impact of health and environmental policies. The HSE and the EPA are two core institutional actors with statutory responsibility for public health monitoring and protection in the ROI. From a structural perspective two specific conduits for the development of HIA have been outlined, the Institute of Public Health and the HSE's Population Health Directorate. At local government level, local authorities are similarly charged with significant responsibilities with regards to impact assessments including health, in particular via the CDB structures. The Galway Healthy Cities programme is another conduit for HIA at the local level.

It is clear that policies, systems and structures exist within both the health and environmental sectors to facilitate HIA in the ROI. In contrast to several of its EU counterparts, however, Ireland remains at an early stage of HIA implementation. Policies depend on institutional action [41]. Notwithstanding the policy context underpinning statutory commitment to HIA, the actual practice of HIA in the Irish public sector continues to be underdeveloped, and widespread uptake has not occurred [7]. For instance, latest data from a mapping exercise conducted by the European Observatory on Health Systems and Policies on 21 national entities across Europe indicate that a total of eight HIAs were conducted on the Island of Ireland between 2000 and 2005. This is in contrast to significantly higher numbers in other EU countries including Finland, England, Wales and the Netherlands [42]. In terms of potential role models, Ireland can look to other countries such as Sweden and Finland, where HIA procedures are included in regular decision-making at the local level, while the Netherlands and Finland have successfully institutionalised HIA at a national level [38].

Despite the strategic policy and structural developments at the macro-level with regards to HIA in the ROI, a core challenge remains, namely, the translation of policy intentions into practice. A major paradigm change is required in order to facilitate the embedment of HIA within relevant organisational structures at the meso and micro-levels in the ROI. In particular, the organisation theory literature discusses a number of aspects of policy implementation [41,43,44] and institutionalisation [45] relevant to this change process. These include: cause and effect relationships; top-down versus bottom-up models, macro-micro-implementation; single versus multiagency debates; statutory power and authority; organisational culture; and sustainable time and resources. A critical assessment of these factors shall now be applied to the institutional arena for HIA in ROI, in order to account for the possible reasons for the limited practice of converting HIA policy into action.

The importance of having a valid theory of cause and effect relationship between the efforts of policy actors, action, and ultimate outcomes is an important criterion for successful policy implementation [44,46]. HIA operates from a sound theoretical basis underpinned by the socio-environmental model of health [47,48] and clear international guidelines [49]. While there is evidence of an understanding of the complex pathway regarding the social determinants of health by those operating in the health and environmental policy sectors, nonetheless the actual conduct of HIAs by these sectors has been minimal.

A number of prominent contrasting perspectives dominate the relevant policy literature with respect to the translating the intentions of policy makers into action; top-down and bottom-up approaches [43], macro- versus micro-implementation [50]; and single- versus multi-agency perspectives [41,44]. An important question about such institutional arrangements is: What are the forms through which most implementation action develops? [41]. In the ROI, many different agencies have been given responsibilities and remits for various aspects of delivering HIA. It is unclear which, if any, have a lead role. Key stake-

holders in the environmental, health and local government divisions of the public sector appear to be working in parallel rather than collaboratively with respect to HIA. In order to progress HIA in the absence of a lead agency, these divisions require greater inter-governmental, inter-agency and cross-departmental working. Collaboration could be facilitated by partnership working [5] and communication amongst health professionals, decision makers and other relevant stakeholders in the design and conduct of HIA [37,51]. Such change could contribute not only to the institutionalisation of HIA but broader intersectoral actions for health, thereby promoting the ethos of healthy public policy more generally [2].

Another important implementation criterion is the degree of administrative power and authority to seek the cooperation of and demand compliance from relevant agencies and actors with responsibility for the policy [44]. Banken [2] and Elliott and Francis [51] note the importance of statutory legal frameworks which provide permanent rules and legitimacy for HIA within the policy process. A significant weakness of HIA in the ROI to date is the lack of a regulative environment comprising a mandatory legal framework, in contrast to other impact assessments such as EIA and SEA. Furthermore translating such a legal framework into practice depends on the existence of administrative frameworks that bind different procedural levels both within and between institutions [2].

Recognition of the significance of organisational culture with regards to radical, strategic, and long-term change is widely recognised in the relevant literature [52–56]. Institutions constrain individual actions through a complex arrangement of different ‘rules’ including beliefs, paradigms, cultural codes and knowledge [57]. In the absence of addressing the unique cultures and sub-cultures within organisations, the ‘deep structure’ of basic values and beliefs inhibit anything but marginal change from occurring [45]. Recent work by O’Mullane [58] on the role of HIA in policy formation in Ireland analysed a number of case studies of HIAs conducted on the Island of Ireland. She examined contextual influences on the utilisation of HIA in the decision-making processes and highlighted the importance of institutional culture and political will as key factors in the implementation process. The need for greater cognisance of the role of the ‘softer’, informal dimensions of organisations, such as culture, is therefore crucial in facilitating change among multiple actors in the health, environment, and local government sectors in order to build momentum at both national and local levels for the implementation of HIA.

Finally, policies cannot be implemented without sustainable resources in terms of time and funding [44]. The development of a rigorous knowledge base to support HIA is critical. It is recognised that HIA can be constrained by the lack of adequate knowledge capacity in terms of training, guidelines, time, and resources [5,37]. In the ROI, the IPH has played a significant role in supporting capacity through the provision of practical training, assistance and a repository for HIA literature. While such input has assisted in the development of a research based community and in extending understanding to undertake HIA, further capacity could be enhanced by dedicated time and resources

for the implementation and evaluation of HIAs across relevant sections of the public sector. Limited funding has been made available by relevant statutory agencies including the EPA and HSE for HIAs within research projects. However, the two Departments responsible for health and environmental policy, monitoring and protection, the DOHC and the DEHLG, currently have no designated funding for routinely conducting HIAs.

3. Concluding remarks

A critical analysis of the current status of HIA institutionalisation in the ROI has been presented through an account of the developments in the international and national strategic policy arenas. HIA is framed under the healthy public policy rubric, the merits of which are widely accepted across the health and environmental sectors. The paper highlighted a plethora of developments in the policy and structural arena of HIA that appear to be conducive to its institutionalisation. Despite this the widespread implementation HIA in practice at regional and local levels has not occurred to date in the ROI. The challenges to successfully institutionalising HIA in the ROI are indeed significant. What is now required is the translation of this policy and structural capacity from national to local government level, and intersectorally, across the health and non-health sectors, in order to bring about a more extensive use of HIA. Based on an organisation theory perspective, key facets associated with policy implementation have been outlined as a means of highlighting current weaknesses and possible solutions towards instigating the necessary paradigmatic change in the ROI to convert the policy intentions and principles associated with HIA into tangible action.

References

- [1] Bekker M. The politics of healthy policies: redesigning health impact assessment to integrate health in public policy. Delft: Eburon; 2007.
- [2] Banken R. Health impact assessment discussion papers: strategies for institutionalising HIA. Brussels: WHO, European Centre for Health Policy; 2001.
- [3] Kemm JR. Can health impact assessment fulfil the expectations it raises? *Public Health* 2000;114:431–3.
- [4] World Health Organisation. Health21: the health for all policy framework for the WHO European Region. European health for all series no. 6. Copenhagen: World Health Organisation Regional Office for Europe; 1998.
- [5] Mindell JS, Boltong A, Forde I. A review of health impact assessment frameworks. *Public Health* 2008;122:1177–87.
- [6] Parry JM, Kemm JR, on behalf of all participants of the Evaluation of Health Impact Assessment Workshop. Criteria for use in the evaluation of health impact assessments. *Public Health* 2005;119:1122.
- [7] Metcalfe O, Higgins C. Healthy public policy – is health impact assessment the cornerstone? *Public Health* 2009;123:296–301.
- [8] Ahmad BS. Integrating health into impact assessment: challenges and opportunities. *Impact Assessment & Project Appraisal* 2004;2–4.
- [9] Birley M. A review of trends in health-impact assessment and the nature of the evidence used. *Environmental, Management and Health* 2002;13:21–39.
- [10] Kemm J, Parry J. What is HIA? Introduction and overview. In: Kemm J, Parry J, Palmer S, editors. *Health impact assessment*. Oxford: Oxford University Press; 2004. p. 1–13.
- [11] Mindell J, Joffe M. Health impact assessment in relation to other forms of impact assessment. *Journal of Public Health Medicine* 2003;25:107–12.
- [12] Ottawa Charter for Health Promotion. *Health Promotion International* 1986;1:i–v.

- [13] European Commission. The European Environment & Health Action Plan 2004–2010 COM (2004). Official Journal C 2004;49.
- [14] Council of the European Union. Council conclusions on health in all policies (HiAP). In: 2767th Employment, Social Policy, Health and Consumer Affairs Council Meeting. 2006.
- [15] United Nations. Earth summit Agenda 21: the United Nations programme of action from Rio. Accessed on: 14.12.09, <http://www.un.org/esa/dsd/agenda21/>.
- [16] Lock K. Health impact assessment. *BMJ* 2000;320:1395–8.
- [17] Environmental Protection Agency Act. 7 of 1992; 1992.
- [18] Department of Health and Children. National environmental health action plan. Dublin: Department of Health and Children; 1999.
- [19] Department of the Environment and Local Government. Making Ireland's development sustainable. Review, assessment and future action. In: World summit on sustainable development, national report for Ireland. 2002.
- [20] Department of Health and Children. Quality and fairness: a health system for you. Dublin: The Stationary Office; 2001.
- [21] Health Services Executive. Corporate plan 2005–2008. Naas: Health Services Executive; 2005.
- [22] Health Services Executive. Transformation programme 2007–2010. Naas: Health Services Executive; 2006.
- [23] Health Services Executive. Health impact assessment. Accessed on: 01.12.2009, <http://www.hse.ie/eng/About/Who/Population.Health/Health.Intelligence/Health.Intelligence.Work/Health.Impact.Assessment/>.
- [24] Metcalfe O, Higgins C, Doyle C, McDowell S. Health impact assessment guidance. Dublin: The Institute of Public Health in Ireland; 2006.
- [25] Institute of Public Health in Ireland. 8th international HIA conference: healthy public policy – is HIA the cornerstone? Accessed on: 25.11.09, <http://www.publichealth.ie/internationalhiainconference>.
- [26] World Health Organisation. Healthy cities and urban governance. Accessed on: 26.08.09, <http://www.euro.who.int/Healthy-cities>.
- [27] Department of the Environment and Local Government. Local authorities and sustainable development guidelines on local Agenda 21. Dublin: Department of the Environment and Local Government; 1995.
- [28] Department of the Environment and Local Government. Sustainable development: a strategy for Ireland. Dublin: Department of the Environment and Local Government; 1997.
- [29] Milner SJ. Using HIA in local government. In: Kemm J, Palmer S, editors. Health impact assessment concepts, theory, techniques and applications. Oxford: Oxford University Press; 2004.
- [30] Local Government Act. 37 of 2001; 2001.
- [31] Dora C. HIA in SEA and its application to policy in Europe. In: Kemm J, Palmer S, editors. Health impact assessment concepts, theory, techniques and applications. Oxford: Oxford University Press; 2004.
- [32] Environmental Protection Agency. Guidelines on the information to be contained in environmental impact statements. Dublin: Prepared by CAAS Environmental Services Ltd; 2002.
- [33] Kemm J. What is HIA and why might it be useful? In: Wismar M, Blau J, Ernst K, Figueras J, editors. The effectiveness of health impact assessment: scope and limitations of supporting decision-making in Europe. Copenhagen: WHO, European Observatory on Health Systems and Policies; 2007. p. 3–13.
- [34] Kwiatkowski RE, Ooi M. Integrated environmental impact assessment: a Canadian example. *Bulletin of the World Health Organization* 2003;81:434–8.
- [35] Morgan RK. Health impact assessment: the wider context. *Bulletin of the World Health Organization* 2003;81:390.
- [36] Wright J, Parry J, Scully E. Institutionalizing policy-level health impact assessment in Europe: is coupling health impact assessment with strategic environmental assessment the next step forward? *Bulletin of the World Health Organization* 2005;83:472–7.
- [37] Bond A. Lessons from HIA. In: Kemm J, Parry J, Palmer S, editors. Health impact assessment concepts, theory, techniques and applications. Oxford: Oxford University Press; 2004.
- [38] Wismar M, Blau J, Ernst K. Is HIA effective? A synthesis of concepts, methodologies and results. In: Wismar M, Blau J, Ernst K, Figueras J, editors. The effectiveness of health impact assessment: scope and limitations of supporting decision-making in Europe. Copenhagen: WHO, European Observatory on Health Systems and Policies; 2007. p. 15–33.
- [39] Nonet P, Selznick P. Law and society in transition: toward responsive law. New York: Harper & Row; 1978.
- [40] World Health Organisation. Health impact assessment: main concepts and suggested approach (Gothenburg consensus paper). Brussels: WHO Regional Office for Europe, European Centre for Health Policy; 1999.
- [41] O'Toole Jr LJ. Research on policy implementation: assessment and prospects. *Journal of Public Administration Research Theory* 2000;10:263–88.
- [42] Blau J, Ernst K, Wismar M, Baro F, Blenkus MG, von Bremen K, et al. The use of HIA across Europe. In: Wismar M, Blau J, Ernst K, Figueras J, editors. The effectiveness of health impact assessment: scope and limitations of supporting decision-making in Europe. Copenhagen: WHO, European Observatory on Health Systems and Policies; 2007. p. 37–55.
- [43] Matland RE. Synthesizing the implementation literature: the ambiguity-conflict model of policy implementation. *Journal of Public Administration Research Theory* 1995;5:145–74.
- [44] Hogwood B, Gunn L. Why 'perfect implementation' is unattainable. In: Hill M, editor. The policy process: a reader. London: Prentice Hall; 1997.
- [45] Howlett M, Ramesh M. Studying public policy: policy cycles and policy subsystems. Toronto: Oxford University Press; 1995.
- [46] Mazmanian D, Sabatier PA. Implementation and public policy. Scott, Foresman; 1989.
- [47] Commission on Social Determinants of Health. Closing the gap in a generation: health equity through action on the social determinants of health. In: Final report of the commission on social determinants of health. Geneva: World Health Organization; 2008.
- [48] Dahlgren G, Whitehead M. Policies and strategies to promote social equity in health. Background document to WHO – strategy paper for Europe. Stockholm: Institute for Futures Studies; 1991.
- [49] World Health Organisation. Health impact assessment: short guides. Accessed on: 28.06.2010, <http://www.who.int/hia/about/guides/en/>.
- [50] Berman P. The study of macro- and micro-implementation. *Public Policy* 1978;26:157–84.
- [51] Elliott E, Francis S. Making effective links to decision-making: key challenges for health impact assessment. *Environmental Impact Assessment Review* 2005;25:747–57.
- [52] Kanter RM. The change masters. *Management Review* 1983;72:18–23.
- [53] Kanter RM. The new managerial work. *Harvard Business Review* 1989;67:85–92.
- [54] Tichy N. Managing strategic change: technical, political and cultural dynamics. New York: John Wiley and Sons; 1983.
- [55] Nadler DA. The effective management of organisational change. In: Lorsch JW, editor. Handbook of organisational behaviour. Englewood Cliffs, NJ: Prentice-Hall Inc.; 1987. p. 358–69.
- [56] Ferlie E, Ashburner L, Fitzgerald L, Pettigrew A. The new public management in action. Oxford: Oxford University Press; 1996.
- [57] March JG, Olsen JP. Rediscovering institutions: the organizational basis of politics. New York: Free Press; 1989.
- [58] O'Mullane M. An investigation of the utilisation of health impact assessments (HIAs) in Irish public policy making. Cork: Government Department, University College Cork; 2009. p. 465.