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**Title: Health information and advocacy for ‘Health in All Policies’: A research agenda.**

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HiAP - Health in All Policies

HIA - Health Impact Assessment

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## **Abstract**

Placing health in the agendas of all policy-makers remains a challenge. Finding new ways to boost Health in All Policies (HiAP) should be a continuous process. Currently, health information initiatives gather core health statistics, indicators related to health care, along with individual level risk factors such as smoking or obesity. However, there is a lack of identifiable information showing the effect of non primary health policies on population health. We propose a research agenda focused in three related areas that would frame health information in such a way that the implications for decision makers from non-health sectors are clear: a) research in order to provide solid and quantitative evidence linking the social and environmental determinants of health with their ultimate health outcomes; b) research that shows and quantifies the effect of policies and specific interventions on these determinants; and, c) the development of policy linked indicators which provide a quantitative estimate of the health that would be gained (or disease burden that could be avoided) by adoption of a specific policy.

## **Introduction**

It is well recognised that relevant factors which ultimately contribute to health lie out with the domain of the health service. Nevertheless, encouraging non-health sectors to accept responsibility for health and be aware of the health consequences of their actions has proven to be challenging. Recognising health effects of non-health policies may prove useful not only in avoiding the adoption of detrimental policies but in advocating for the adoption of certain policies. Consider, for example, a policy aimed at reducing traffic congestion, and the ancillary health benefits linked to the reduction in air pollution,[1] or through encouraging active commuting to school[2] or the workplace.[3]

'Healthy public policies' were originally called for in the 1986 Ottawa Charter for Health Promotion,[4] and these concerns were revisited in the 2006 Health in All Policies (HiAP)[5] proposal from the European Union Finnish presidency. In 20 years of experience, there have been several attempts to promote the interconnection between health and other spheres of society, among the most successful the healthy cities movement.[6] Nevertheless the extent to which health concerns are currently integrated into non-health policies is far from complete and finding new and innovative ways to promote HiAP should be a continuous process.

We propose here that among the barriers to progress is the shortage of indicators which clearly illustrate the connection between key health problems and non-health sectors. Health information should be framed in a way that the policy implications are clear and the parties that should be held accountable are identified. We acknowledge that there is a vast myriad of competing interests which actually influence policy decisions, and that these political determinants of policy evaluation may play an important role in identifying what constitutes a policy consequence and in defining accountability.

Furthermore, the link between scientific evidence and the development of public health policies is complex, as has been considered from diverse points of view.[7-10] Its analysis, however, is beyond the scope of this paper which focuses in exploring what information would be useful in the process of shaping non-health policies that are relevant to health, and how best to provide this information to policy makers and the public at large. We discuss the potential for more policy-relevant health indicators, which, as tools for advocacy, could help to bring health considerations into the aims and priorities of policy makers from all sectors.

Currently, there is a great wealth of health statistics available and the actors involved in their collection are wide ranging. These include inter-governmental agencies such as the WHO, OECD or UNICEF; national governments in their annual health reports, and public or private agencies reporting specific indicators of interest, at regional, national or local level.

Furthermore, the academic field of health metrics is increasingly playing a more important role.[11] With this myriad of efforts, we hold that data is not scarce but that a gap exists between the information on hand and the data framed and delivered to policy-makers. In what may be referred to as the *information age*, it is not uncommon for important health statistics to become lost in the competition for limited information space.

Here, we present a proposal of where research efforts might best be focussed: a) research in order to provide solid and quantitative evidence linking the social and environmental determinants of health with their ultimate health outcomes; b) research that shows and quantifies the effect of policies and specific interventions on these determinants; and, c) the development of policy linked indicators which provide a quantitative estimate of health that would be gained (or disease burden that could be avoided) by adoption of a specific policy. The objective is to frame health information in a way that is applicable to the context of non-health policy-makers, and can be used as a tool for advocating health considerations in all policies.

**The proposed agenda is directed at, but not limited to, researchers and funding agencies in an effort to stimulate the production of this type of information. In addition, it is intended**

**to persuade policy officials to solicit more policy specific health indicators for decision making and policy appraisal.**

### **Social and environmental health indicators**

Research on the social and environmental determinants of health is fundamental for promoting health in all policies. Firm evidence on the different pathways by which policies affect health is a requisite for health impact assessment (HIA)[12] and would be an essential step for the production of policy-linked indicators discussed later. HIA calls for the explicit consideration of health in the evaluation of all policies and programmes, and has been proposed as an opportune approach to promote HiAP.[13]

The procedures and methods of HIA are universally applicable, and as such can be applied to proposals from any sector in order to minimize detrimental effects and maximize benefits on population health.[14] The systematic integration of the approach as part of the rules and procedures involved in policy appraisal is debated and currently the level of implementation across Europe varies.[15-16] Although institutionalisation of HIA may restrict the scope for political advocacy by requiring impartiality of the HIA practitioner, the provision of a sound evidence base for evaluating health impacts would be greatly welcomed.[17]

Appropriate application of HIA relies on solid, quantitative data on causal relationships between the determinants affected by the specific policy and health.[18-19] Identifying and monitoring health determinants that are the target of non-health policies yet have an established effect on health will encourage stakeholders to see the relevance of health in their policies, and could allow them to track policy performance through improved indicators.

Currently most health information initiatives are heavily focussed on core health statistics (such as life expectancy or morbidity statistics), indicators of health care provision and health systems accessibility, along with individual level risk factors such as alcohol or tobacco consumption or body weight.[20] There is no doubt that core health statistics are essential, but the absence or scarcity of information on distal or medial health determinants in current proposals of sets of indicators will jeopardise the evaluation of policies that address social and environmental determinants of health.

Most current health indicators are difficult to link to any specific policies and for some health indicators it may take years for any discernable changes to occur after policy implementation. Measuring the social or environmental determinants of health may be more appropriate to monitor non-health policies because they are more sensitive to change in short to medium term. For example, planting trees or increasing city green zones may have various health related benefits, such as reducing childhood asthma,[21] improving mental health [22] or those secondary effects brought on by increasing exercise among the population.[23] Reiterating these potential health benefits and indicating the proportion of the population living in tree dense areas may be a more appealing approach to encourage city planners to act on behalf of the health of the population.

Notably there are some initiatives which incorporate advances in population health research and consider diverse health determinants. The Swedish Public Health Policy has among its objectives ensuring ‘participation and influence in society’.[24] Indicators chosen to monitor this objective include employment, gender inequality and turn-out in municipal elections,[25] all of which involve actors from outside the health sector.

In order to encourage such initiatives, it is necessary to gather solid, quantitative information linking the social and environmental determinants of health with their ultimate health outcomes and illustrate how these determinants can be affected by policies or interventions. The regular

reporting of key determinants as indicators of public health should fuel a healthy and dynamic debate about social and environmental issues and help raise public health in the agenda of policy-makers from all sectors.

### **Avoidable burden of disease by policy**

We also suggest an innovative approach to reframe health information in a way that makes it useful for policy makers. The launch of the Global Burden of Disease project [26-27] saw a major advance in population attributable risk revealing that a large proportion of global health can be attributed to a relatively small number of factors. Although a major innovation in the identification of important health risks, the information provided is limited because it provides no insight into the processes involved in reducing the identified risks. Moreover, the initiative is predominantly focused on individual risk factors and so far distal determinants of population health, including policies, are omitted.

We propose that current models of comparative risk assessment should be expanded and linked to policies, to estimate the disease burden that could be avoided by adoption of a certain policy ('avoidable burden of disease by policy').[20] Similarly, HIA could be applied in a more proactive way, not only in the appraisal of potential policies, but from researchers and public health professionals to assess the health consequences of inaction or omitted policies.[19] The final statement of this type of HIA could be transformed into indicators of 'avoidable burden of disease by policy', presenting a variety of outcomes, such as deaths, hospital intakes, disease cases, that could be averted by a particular policy action.

Development of indicators linked to policy is grounded on the availability of information provided by research on health determinants as previously proposed. For instance, we need information of the quantitative effect that a specific traffic policy has on pollution and the precise effect that these changes in pollution levels have on mortality and morbidity. Only then

we can develop an indicator of health gain through policy or burden avoided by policy. For example an HIA carried out to assess the public health benefits of reducing air pollution in the Barcelona metropolitan area found reducing current levels of air pollution to the WHO standards would result in approximately 3,500 fewer deaths annually.[28] By linking this with a specific policy aimed to reduce air pollution it would be possible to estimate the number of deaths avoided annually by the implementation of the policy.

Furthermore, some non primary health policies such as educational policies have diverse effects on health, at different time periods, some of which develop throughout the whole life course.[29-30]. We acknowledge the challenge this poses for developing policy linked indicators. Nevertheless, research efforts aimed at deciphering the causal pathways by which social or environmental factors affect health and their complex interactions through out ones life course is progressing [31-32] and could allow at least approximations to frame this information as policy linked indicators and then boost HiAP.

The strength of this approach is that the indicators can be adapted to any level of decision making. It can provide information specific to the context of the decision-maker, be it for the introduction of a community program or for a national policy change. In such, the decision-maker would be provided with an estimate of the disease burden avoided, or health gained in his/her population by implementing the policy in question. Furthermore this type of calculation can be carried out at regular intervals, and may provide timely indicators for taking advantage of windows of opportunity for policy change. We think that their potential for advocacy is extensive.

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