Health impact assessment and inequalities

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An early definition of health impact assessment (HIA) described it as "any combination of procedures or methods by which a proposed policy or program may be judged as to the effect(s) it may have on the health of a population" (1). The World Health Organization's Gothenburg consensus paper extended the definition to cover distributional equity, stating that HIA is "a combination of procedures, methods, and tools by which a policy, program, 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" (2).

Health impact assessment has much in common with the longer-established environmental impact assessment(3). It is an aid to decision-making that draws on a scientific knowledge base and not a scientific method in itself. Health impact assessments are specific to the context of the policy or project being assessed. Although methods of HIA still need to be further developed, its potential use as a tool for promoting sustainable development has been recognized (2). Current thinking also suggests that it should include a commitment to the ethical use of evidence (2) and that it should be based on a number of key principles (4):

- an explicit focus on equity and social justice
- a multidisciplinary, participatory approach
- the use of qualitative as well as quantitative evidence
- explicit values
- an openness to public scrutiny

HIA is therefore based on a holistic, social model of health that recognizes that the health of individuals and communities is determined by a wide range of economic, social, and environmental influences as well as by heredity and health care. This definition is much broader than (and encompasses) the traditional medical model, which defines health as freedom from clinically diagnosable disease and which is primarily concerned with treating symptoms rather than their underlying causes (5).

Equity plays a major role in the explicit value system that underpins health impact assessment. In this context, equity has a moral and ethical dimension relating to avoidable and unjust disparities in health status. As a World Health Organization (WHO) document on equity and health stated, "Eq-

uity is concerned with creating equal opportunities for health and with bringing health differentials down to the lowest possible level" (6).

The focus on equity represents a new approach to the evaluation of social, environmental, and economic policies, programs, and projects. In the United Kingdom, the importance of applying HIA to all public policy has been acknowledged by the Government (7), and the first recommendation of the Acheson report on inequalities in health (8) is that all Government policy should be assessed for its impact on health inequalities. The need for some form of HIA is also recognized by Article 152 of the European Union's Amsterdam Treaty, which states that "a high level of human health protection shall be ensured in the definition and implementation of all Community policies and activities."

Ideally, HIA should be carried out prospectively, to ensure that steps are taken at the planning stage to maximize the positive health impacts of a policy, program, or project and to minimize the negative effects (9). In practice, it is not always possible to undertake a comprehensive HIA entirely prospectively because of the wide range of factors affecting the policy development process. Indeed, HIA is increasingly being carried out concurrently or retrospectively in order to inform the ongoing development of existing policies. HIA can be performed at varying levels of detail—as a rapid process or a more in-depth study—depending on the resources available.

There is no single definitive methodology for HIA, and various methods are currently being used and developed (10, 11). The Merseyside Guidelines for Health Impact Assessment (9, 12), or variations of them, are the most widely used model in the United Kingdom, where they have been applied to a range of policies, projects, and programs. In summary, this approach to HIA involves the following stages:

- applying a screening procedure to select policies or projects for assessment
- defining the scope of the HIA in terms of depth, duration, spatial and temporal boundaries, methods, outputs, and other parameters
- analyzing policy
- profiling the areas and communities likely to be affected by the policy
- collecting qualitative and quantitative data on the types and distribution of potential impacts from stakeholders and key informants, using a predefined model of health impact
- evaluating the importance, scale, and likelihood (and, if possible, cost) of potential impacts
- searching the evidence base to validate data
- undertaking appraisal of options and developing recommendations for action
- monitoring and evaluating impact after the policy or project is implemented

HIA AND URBAN POLICY

Much of the focus of HIA work in England in recent years has been related to urban regeneration (renewal) programs and other initiatives designed to tackle inequality and "social exclusion" that have been set in motion since the election of the new Labour government in 1997. These initiatives include the Single Regeneration Budget, the New Deal for Communities, and Healthy Living Centers.

The Single Regeneration Budget (SRB) was first introduced in 1994 to bring together a number of programs from several Government departments in order to focus the resources available for regeneration. It provides funding to support initiatives by local regeneration partnerships to enhance the quality of life of people in disadvantaged areas by reducing the gap between those areas and others and between different population groups. SRB partnerships are expected to involve a diverse range of local organizations in the management of their schemes. SRB programs commonly include a range of objectives (13):

- promoting equal opportunities through enhancing the employment prospects, education, and skills of local people, especially young people and those who are most disadvantaged
- encouraging sustainable economic growth and wealth creation by improving the competitiveness of the local economy and supporting existing and new businesses
- protecting and improving the environment and infrastructure and promoting good design
- improving housing and living conditions for local people through physical improvements, better maintenance, improved management, and greater choice and diversity of housing options
- addressing social exclusion, for example by promoting initiatives to benefit ethnic minority groups
- tackling crime and improving community safety
- enhancing the quality of life of local people through improved health, cultural, and sports opportunities

The New Deal for Communities (NDC) initiative was launched in 1998 as part of the Government's strategy to focus resources on small disadvantaged areas (usually comprising around 6 000

households), some of which are among the most deprived neighborhoods in the country. Each NDC program has four themes:

- economic activity (employment)
- health
- community safety (crime prevention)
- educational attainment

The programs are delivered through partnerships among local people, community and voluntary organizations, public agencies, local authorities, and businesses, all of which are required to be committed to long-term sustainable development. Because they are areas of disadvantage and deprivation, the places where NDC partnerships have been established tend to attract funding under a range of initiatives. Therefore, the partnerships are also required to work with other organizations that are delivering services and running programs. Each partnership is funded for a period of up to 10 years.

The Healthy Living Center (HLC) initiative, which began in 1999, is funded through the national lottery. The program aims to promote health in its broadest sense and targets the most disadvantaged areas and groups of the population. It is anticipated that 20% of the population will eventually have access to Healthy Living Centers.

The Centers are intended to complement existing initiatives by supporting national and local health strategies and contributing to the reduction of health inequalities. In order to encourage local innovation there is no single model for HLC projects. For example, they may not necessarily be based in a building or be attached to an existing health service. All HLCs, however, must aim to promote local partnerships between a range of organizations and interest groups.

Owing to the potential impact of these and similar initiatives on health and on the wider determinants of health, HIA is being applied to a growing list of regeneration programs and to individual projects within them (14, 15). In addition, HIA has been applied to broader regional policy issues and initiatives, such as the impact of globalization on the population of London (16) and the regional transportation strategy in Merseyside (17).

HIA AND THE IMPACT OF PUBLIC POLICY ON INEQUALITIES

Equity-focused public policy is a strong theme in many of the health impact assessments that have been undertaken in the United Kingdom. There are three main reasons: first, because equity is a value underpinning HIA methodology; second, because HIA methods clearly point to distributional equity as a health determinant; and third, because HIA has been carried out on many regeneration programs that focus on disadvantaged areas or on aspects of public policy that address issues of social cohesion and exclusion.

However, while regeneration programs and policies may explicitly target groups that are disadvantaged in terms of income, education, or other factors, the equity component of those policies, programs, and projects often remains only implicit. As a result, some equity issues may be overlooked in framing the policy or program, and thus when it is implemented, questions of inequality within the target population or between that population and other groups may not be addressed. Worse still, inequalities within and between populations may even be exacerbated by the regeneration initiatives. Examples include situations where the most disadvantaged residents fail to accept or benefit from the policy or where a policy that is locally effective (e.g., crime reduction) displaces the problem to a neighboring area.

It is therefore crucial that HIA methods explicitly assess existing health inequalities and the distribution of the potential impacts, in accordance with the first recommendation of the Independent Inquiry into Inequalities in Health: "All policies likely to have an impact on health should be evaluated in terms of their impact on health inequalities" (8).

TWO CASE STUDIES

In order to define the scope of an HIA, it is important to determine whether the policy, program, or project being assessed is aimed at the current population of the target area or at the area itself and its future residents. In addition, the population groups that are compared to evaluate inequalities must be clearly defined, as must the time scale—that is, whether the HIA looks at short- or long-term impacts or both.

Two regeneration initiatives that were the subject of HIAs—an NDC program in south London (18) and an SRB program in west London (19)—focused on, among other things, developing education and training programs. The stated aim was to improve people's opportunities for employment, thereby increasing average income levels and reducing unemployment rates in the target areas.

In both cases the assumption was that the entire target population living in the disadvantaged areas would be affected equally by the initiatives. However, if this assumption is incorrect and there

are differential uptake rates of education, training, and employment opportunities within the population, several possible future scenarios may result. (When undertaking HIAs such scenarios may be useful for identifying inequities, along with more familiar qualitative methods such as interviews and focus groups.)

In one scenario, most people in the current population may remain in the area, but some will benefit disproportionately from the regeneration initiatives. As a result, the average income level for the whole area may increase, the unemployment rate may fall, and overall health status may improve, as indicated by changes in a range of factors related to health determinants. These changes, pointing to an overall improvement in the area, will be tangible and quantifiable using routine small-area statistics. However, what may be less apparent and not easily measurable is the increase in inequalities within the population and a related decrease in social cohesion.

An alternative scenario identified by these two HIAs does not result in an apparent improvement of the area as a whole but rather in maintenance of the status quo or even its deterioration. With differential uptake of the new opportunities offered by education, training, and employment programs, some members of the original population may benefit to such an extent that they are able to move out of the area, leaving a core of the most disadvantaged, hard-to-reach groups. The gap left by this migration may then be filled by people with a socioeconomic profile similar to the remaining population.

In these scenarios, education, training, and employment programs were considered in isolation from the wide range of other activities encompassed by most regeneration initiatives. In reality, the west London regeneration program was also designed to improve the environment, the local infrastructure, and housing around Heathrow Airport by enhancing opportunities for businesses in the area, primarily those based on new technology.

The HIA found that the timing of the program, and of the component projects within it, was crucial to its success in improving the health and quality of life of the current population. If the education and training elements lag behind the other parts of the program, or even if they run concurrently, local people will not be equipped for the new kinds of employment that are brought into the area. If, at the same time, the supply of government-subsidized rented housing is reduced and new houses are built for private purchasers—as is likely to happen—some of the current population, being unable to afford the new homes, will have no option but to move (or to be moved) elsewhere.

The net effect would be that the physical appearance of the area would likely improve as a result of the environmental initiatives and that the demographic profile of the area would change. A large part of the original population would move out of the area and be replaced by a new, more affluent group, resulting in an overall improvement in the area's indicators of socioeconomic and health status.

It is unclear what effect these changes would have on inequalities within the area. However, it seems likely that those members of the population who were most disadvantaged, such as those who were living in temporary accommodations, would be the ones to move elsewhere and that the "new" population would contain a more homogeneous mix of socioeconomic groups, which differ to a lesser degree than the incoming and outgoing populations.

As this example shows, defining the scope of the HIA is crucial: Focusing on the area and its post-implementation population may show an improvement in the equity situation when in reality the "problem" merely shifted elsewhere as a result of implementing the program.

CONCLUSIONS

It is important to emphasize that health impact assessment remains at an early stage of development and that the examples given in this paper will not necessarily be applicable at all times or in all situations. We have deliberately emphasized the importance of qualitative data, partly because we believe that they are a prerequisite for high-quality HIAs, and partly to refute the persisting belief in some quarters that health studies can be based solely on quantitative data collection and manipulation.

Equity can be addressed within an HIA, whether one is looking at a policy, a program, or a project. What is important is that the issues relating to equity are clearly identified when the procedures, methods, and scope of the HIA are defined. Regardless of the extent to which the policy or project focuses intentionally on the disadvantaged, the data collected on potential impacts must identify the range of affected population groups and the likely differences in impact among them. Equally important, as brought out in the case studies, is identifying how the policy or project may affect populations other than those targeted.

We hope that this paper demonstrates that, while many challenges remain in developing the most appropriate methods and procedures, health impact assessment has a clear role to play in reducing population health inequalities by helping plan-

ners and advocates to optimize the health impacts of public policy.

SINOPSIS

Evaluación del impacto sanitario y las desigualdades

La evaluación del impacto sanitario (EIS) trata de investigar los efectos de los programas, políticas y proyectos en la salud de la población y cómo se distribuyen dichos efectos en ella. Uno de los principios subyacentes de la EIS es su enfoque hacia la equidad y la justicia social. La EIS se ha aplicado en el Reino Unido a varias iniciativas de regeneración (renovación) urbana, entre ellas las denominadas Single Regeneration Budget *(SRB),* New Deal for Communities *(NDC) y* Healthy Living Centers. *Aunque estas iniciativas se centran en las poblaciones desfavorecidas, a veces no se tiene en cuenta el objetivo de reducir las desigualdades en la población destinataria, en oposición a reducir las desigualdades entre dicha población y otros grupos. Este artículo cita ejemplos de las iniciativas SRB y NDC en zonas de Londres, destinadas a mejorar las condiciones económicas proporcionando formación y educación con el fin de crear mejores oportunidades de empleo. Aunque se podría lograr el objetivo de mejorar las condiciones económicas generales de las zonas de intervención, algunos segmentos de la población podrían no beneficiarse tanto como otros, o verse incluso forzados a mudarse a otras zonas desfavorecidas a medida que fueran escaseando los alojamientos de precio asequible, con lo cual el problema tan solo cambiaría de lugar. Estas situaciones alternativas destacan la necesidad de que las EIS tengan un ámbito claramente definido (por ejemplo, el de los residentes actuales, en vez de la zona en sí misma), así como la necesidad de identificar los aspectos relevantes de la distribución equitativa de las repercusiones sanitarias. A medida que se vayan desarrollando más los métodos y procedimientos para llevar a cabo las EIS, este enfoque podría desempeñar un importante papel en la reducción de las desigualdades sanitarias, ayudando a los planificadores a optimizar las repercusiones sanitarias positivas de las políticas públicas.*

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