

Health equity impact assessment

SUSAN L. POVALL¹, FIONA A. HAIGH^{2*}, DEBBIE ABRAHAMS¹ and ALEX SCOTT-SAMUEL¹

¹Department of Public Health and Policy, University of Liverpool, Liverpool, UK and ²Centre for Health Equity Training, Research and Evaluation, Part of the Centre for Primary Health Care and Equity, University of New South Wales, A Unit of Population Health, Sydney and Sydney South West Local Health Districts, NSW Health, Sydney, New South Wales, Australia

*Corresponding author. E-mail: f.haigh@unsw.edu.au

SUMMARY

The World Health Organization's Commission on Social Determinants of Health has called for 'health equity impact assessments' of all economic agreements, market regulation and public policies. We carried out an international study to clarify if existing health impact assessment (HIA) methods are adequate for the task of global health equity assessments. We triangulated data from a scoping review of the international literature, in-depth interviews with health equity and HIA experts and an international stakeholder workshop. We found that equity is not addressed adequately in HIAs for a variety of reasons, including inadequate guidance, absence of

definitions, poor data and evidence, perceived lack of methods and tools and practitioner unwillingness or inability to address values like fairness and social justice. Current methods can address immediate, 'downstream' factors, but not the root causes of inequity. Extending HIAs to cover macro policy and global equity issues will require new tools to address macroeconomic policies, historical roots of inequities and upstream causes like power imbalances. More sensitive, participatory methods are also required. There is, however, no need for the development of a completely new methodology.

Key words: health impact assessment; inequalities; international health; methodology

INTRODUCTION

Health impact assessment (HIA) (Scott-Samuel, 1996) has in the last 15 years become an essential, global tool in the development of healthier public policies (Scott-Samuel *et al.*, 2013; Collins and Koplan, 2009). Because of its systematic approach to identifying health impacts and inequalities resulting from the potential or current application of policies plans, programmes and projects and formulating recommendations to ensure improved health outcomes, HIA has clear relevance to the promotion of health equity and social justice. The World Health Organization's Commission on Social Determinants of Health (CSDH) has

strongly emphasized this important role for HIA (World Health Organisation, 2008) and has also drawn attention—in calling for the application of 'health equity impact assessment' (HEIA) to all economic agreements, market regulation and other public policies, and for related training and capacity building—to the need to examine current HIA methods in order to ensure their adequacy in the global policy context.

While there has in the past been expert debate (Douglas and Scott-Samuel, 2001) and research (Abrahams *et al.*, 2004; Simpson *et al.*, 2005) on the health equity element of HIA, previous work has not addressed the full range of relevant issues—in particular, the macro policy

environment and the ‘causes of the causes’ (Rose, 1994) or fundamental causes (Phelan et al., 2004) of inequalities and inequities.

This paper presents the main findings from a pilot study (Povall et al., 2010) to determine whether or not a new HEIA methodology is needed to examine the health equity impacts of global, regional, national and local financial and public policies. In order to do this, we need to determine the capacity of existing HIA methodologies to include a consideration of health equity impacts. We examined this question through three separate but related qualitative methods: a scoping review of international literature relating to equity assessment within impact assessment, interviews with health equity and HIA experts and two stakeholder workshops.

METHODS

Definitions of concepts and terms

We define *health inequalities* as differences in health determinants and health outcomes between different population groups and *health inequities* as health inequalities that are deemed to be socially produced and systematic, and therefore avoidable and unfair (World Health Organisation, n.d.; Whitehead and Dahlgren, 2007; Solar and Irwin, 2010); *health equity* is the absence of health inequities. It should be noted, however, that the terms health inequality and health inequity are often used interchangeably (Whitehead and Dahlgren, 2007) and that this has been the case for most of the literature included in this study. The use of these terms here follows the authors’ convention and not those of the original documents.

The Gothenburg Consensus on Health Impact Assessment defined HIA as ‘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’ (WHO European Centre for Health Policy, 1999, p. 4). It further recommended that four values underpin the execution of HIA: democracy, equity, sustainable development and the ethical use of evidence (WHO European Centre for Health Policy, 1999, p. 4). It defined health equity as follows:

Equity in health implies that everyone should have a fair opportunity to attain his or her full health

opportunity, and that no one should be disadvantaged from achieving this potential. This term has clear moral and ethical dimensions. (WHO European Centre for Health Policy, 1999, p.9, italics original);

However, in reality, the use of equity in the Consensus is limited to assessing the distribution of impacts according to gender, age, ethnicity and socioeconomic status with no consideration of whether or not those differences could be considered avoidable and unfair.

In contrast, we define Health Equity Impact Assessment as the assessment of the potential differential impacts on health, where those differences would be considered to be avoidable and unfair. We also note that while H(E)IAs are ideally prospective, they can be carried out concurrently, during the operation of a policy or project.

HIAs generally consist of the following key stages: screening, scoping, data collection, impact appraisal, reporting/recommendations and monitoring/evaluation. HIAs may be rapid and desk-based or they may involve empirical research. The key value of ‘democracy’ encourages HIA practitioners to be as inclusive as possible in forming steering groups and in selecting participants in data gathering.

Research design

The three phases of this study were run largely independently of each other, the scoping review running alongside the interviews, followed by the workshops. The methods used in each phase of the study are presented in detail in Table 1 and are outlined below. Because the project had National Health Service (NHS) involvement, it required review by the local NHS National Research Ethics Service committee—which judged it to be service evaluation, therefore not needing NHS ethical approval.

Scoping review

A scoping review is a rapid appraisal of the nature and scope of research in a topic area, encompassing a broad range of literature and study designs but not necessarily in depth or with particular concern for the quality of the studies (Arksey and O’Malley, 2005). To achieve rigour and transparency, Arksey and O’Malley (Arksey and O’Malley, 2005)

Table 1: Methods, main findings and conclusions of the study

	Scoping review	Interviews	Workshops
Methods			
Research questions	<ol style="list-style-type: none"> 1. How is equity addressed within methodologies for impact assessment? 2. How is equity addressed within reports of impact assessments? 	<ol style="list-style-type: none"> 1. What factors affect health equity? 2. What is the current capacity of HIA to assess equity impacts? 3. Is there a need for a new HEIA methodology? 	<ol style="list-style-type: none"> 1. What factors affect health equity? 2. What is the current capacity of HIA to assess equity impacts? 3. Is there a need for a new HEIA methodology?
Literature sources	Requests for information through HIA listservs; (Author 2) searches of peer-reviewed literature through Web of Knowledge, Cambridge Scientific Abstracts (both included MEDLINE) and Google Scholar (Author 1,2,3); Grey literature sourced through Open Sigle, HIA websites and reference lists (Author 1); peer recommendations	N/A	N/A
Literature selection	HIA methodologies with an explicit equity dimension (10); reviews of HIA methodologies (3); reports of HIAs that have explicitly considered equity in the process and/or recommendations (18); reviews of HIAs where equity is considered (10); literature relating to other health assessment tools and methodologies with an explicit equity dimension (15)	N/A	N/A
Participant selection	N/A	Interview participants were identified through stakeholder mapping and selected for their expertise in one or more of the areas of HIA, health equity, policy impact on health equity at the global, national and/or local levels, health equity measurement and the WHO Commission on Social Determinants of Health	Liverpool workshop participants were identified through stakeholder mapping. Selected for their expertise in one or more of the areas of HIA, health equity, policy impact on health equity at the global, national and/or local levels, health equity measurement and the WHO CSDH

Continued

Table 1: *Continued*

	Scoping review	Interviews	Workshops
Data collection	Data were extracted from the literature according to the literature category. For example, data extracted for the HIA guidelines: focus; summary of guideline; definition of equity; definition of impact assessment (IA); determinants of health; population groups considered; equity in the IA process; assessment of differentials as avoidable and unfair; guidance for equity recommendations	Participants gave written consent and could withdraw at any time. Mean interview time was 60 min. All but one of the interviews was conducted over the telephone; one interview was face-to-face and with two participants. All interviews were digitally recorded and the recordings transcribed. The interview schedule considered definitions and factors affecting health equity, policy options at the local, national, regional and global levels, inclusion of equity considerations in HIA, facilitators and barriers to equity considerations in HIA, the need for a new HEIA methodology	Most data were collected from a workshop in Liverpool. Participants gave written consent and could withdraw at any time. All sessions were digitally recorded and transcribed. The workshop was structured around four small group sessions covering the topics: strengthening equity in HIA—the local context; strengthening equity in HIA—the global context; equity recommendations within HIA/HEIA; making HEIA happen and maximizing its impact. Findings from this project were presented at a workshop at an International HIA conference in Rotterdam. Staff took notes during the feedback session in this workshop
Analyses and reporting	Data were analysed thematically and reported for each literature category. Overall themes were then identified and reported	The transcripts were analysed thematically using NVivo8	The Liverpool transcripts and Rotterdam notes were analysed thematically
Main findings Health equity	No consistency in the definitions of equity/inequity/inequalities used in HIA guidelines and reports. Often inferred through the model of health used. Focus on inequalities—differential impacts for identified vulnerable populations and groups. EFHIA the only methodology to consider inequity—avoidability and unfairness	Definitions of health equity are culturally specific. Definitions may vary within organizations. Participants described health equity as the distribution of power and resources within a just society so that individuals have the opportunity to live a decent life and achieve their full health potential regardless of their income, occupation, neighbourhood, race, religion, gender, etc. Health equity needs to be a priority in policy development and impact assessment	The pursuit of equity is a statement of specific values; values that might not be shared with policy makers. Wealthy people and countries protect their own interests—need to highlight the benefits of equity to the whole society. Need a social movement and champions to do this. The fundamental determinant of inequity is the distribution of power. There are opportunities to promote an equity perspective: the Marmot reviews on health inequalities and SDH; natural and man-made crises; global trade and climate talks
General factors affecting health equity	N/A	Negative: structural factors, politics and policy, access to affordable and reliable health services, power and control, injustices, language and culture. Positive: politics and policy; communities, civil society and champions creating pressure for change	Equity is contextual—there are different patterns of inequity, determinants vary by country; policies and recommendations need to be sensitive to these differences. There are concerns about the accountability of donors, constraints on aid to poorer countries and the unintended consequences of national health protection and improvement programmes

Global/local factors affecting health equity

N/A

Global: dominance of global financial institutions; greater complexity.
Local: different social contexts; different political contexts; different levels of awareness of the issues.
Interactions: different perceptions of health, health equity and health inequity; organizational capacity; global pressures on local contexts—political, financial, cultural; lack of ability to assess local impacts of global policies; HIA practitioners from the Global North who do not understand local cultures and contexts when conducting HIAs in the Global South

Global: more sophisticated, structured, covert and complex than the local arena. Positive influences: regional agreements; creation of the G20; global health diplomacy; NGOs raising awareness of health equity in their activities and partnerships; foreign investment that leads to better working conditions in poorer countries; the activities and leadership of the WHO and the UN. Negative influences: lack of common values and/or goals; power inequalities; national foreign policy, military spending, levels of social protection; spread of food culture and influence of multinational organisations; the global capitalist movement; inequitable distribution of the gains from natural resources; climate change; population growth.
Local: actions constrained by personal and political values; policy implementation caught between the top-down and bottom-up pressures for change—need champions in key positions. Positive influences: social democracy; strong universal programmes; progressive tax systems and social protection; strong civil society organisations. Negative influences: market fundamentalism; power and resource inequalities; rise in neo-conservatism; economic reductionism; health discourse dominated by biomedicine and behaviour change approaches
Equity in HIA is difficult to do. Experience from EFHIA demonstrates that policy makers find it difficult to understand the social determinants of health inequity. Equity, therefore, is most often limited to the consideration of differential impacts on vulnerable groups. Need also to understand the gap between policy development and implementation and the ways in which this generates inequity. This is context dependent. Need to develop ways of engaging with all communities regardless of their capabilities. Take account of context, culture and capacity

Health equity in HIA

Several new HIA guidelines with an inequality (not inequity) focus. Whether or not a differential impact is avoidable and unfair is a subjective value judgement. Values are generally not discussed—EFHIA is clear that these need negotiating at the beginning of the process. Most guidelines limit the consideration of inequalities to the early stages of HIA (screening, scoping and assessment). This is reflected in HIA reports, which generally do not follow assessment of potential inequality impacts through to the recommendations. It is rare for HIAs to consider the ‘causes of the causes’ of inequality impacts

Equity often missed in HIA—equity should be considered throughout HIA

Equity in HIA is difficult to do. Experience from EFHIA demonstrates that policy makers find it difficult to understand the social determinants of health inequity. Equity, therefore, is most often limited to the consideration of differential impacts on vulnerable groups. Need also to understand the gap between policy development and implementation and the ways in which this generates inequity. This is context dependent. Need to develop ways of engaging with all communities regardless of their capabilities. Take account of context, culture and capacity

Continued

Table 1: *Continued*

	Scoping review	Interviews	Workshops
Barriers	Complex and time consuming to consider equity (avoidable and unfair differentials) in HIA	Considering whether or not differences in health status are avoidable and unfair adds a layer of complexity; HIA is often required in short time frames; lack of local data; lack of capacity to do HIA—time and skills; dominance of Global North—lack of understanding of local equity issues in Global South by northern consultants; political context; potential for HIA to be reduced to a tick-box exercise	Lack of political commitment and legislative backup; who would conduct global HIAs?; HIA is currently weak in addressing issues of power and power inequalities—power is not understood as a determinant of health inequities; local HIA practitioners find it difficult to challenge policy makers; the HIA process represents white, middle class systems and values and as such can be alienating to local population groups, especially indigenous groups; lack of available evidence and data; political time frames, finances and other resources determine which recommendations get taken up
Opportunities	HIA process can promote inclusion, cross-sectoral working and sharing of sector specific language relating to inequalities and inequity	Minimum standards for HIA; explicit values base; ensuring quality of HIA; international collaboration—for training and research; evaluations of the impacts of policies on health equity; involve key stakeholders throughout the HIA process; offer different policy options; set targets for the recommendations; grassroots pressure	Acknowledge the context; advocate for equity in HIA; different tools for different audiences; HIA is part of a bigger process to assess the equity impacts of policies; community/stakeholder engagement; develop quality standards for HIA; capacity building for HIA; monitor and evaluate the outputs from HIA
Need a new HEIA?	N/A	No	No
Equity in other IA	Environmental Justice has a specific focus on vulnerability. Human Rights offers a legally binding and morally compelling framework. Complexity theory stresses the importance of context and multiple perspectives. All of these could strengthen HIA	N/A	N/A

Conclusion	Without a consistency in the equity/inequalities terminology and approach used, it is difficult to see how an equity focus can be consistently applied within HIA	Need new tools in HIA: In-depth <i>policy analysis</i> that would set a policy in its political and social context, identify the key actors in its development, conduct cross-country comparisons and include an historical analysis of the policy development; <i>Sociological assessments</i> to understand the processes of change at different levels of the policy implementation process and people as actors in policy delivery; Develop <i>new indicators</i> for democracy and power distribution; Include a <i>framework</i> for thinking about equity in policy development —, e.g. PROGRESS-Plus or the Rainbow Model	Further research: Pilot studies: to understand all the influences on an equity issue; to assess the root causes of health inequities; international collaborations to generate high quality HIAs with an equity focus; in the Global South. Case studies: to understand how best to work with multinationals; to see what other ways we can judge long-term health inequalities impacts other than mortality figures. HIA process research: when is HIA used in the policy process; implementation of recommendations; what facilitates and constrains action on equity. Mapping: map causal networks and upstream processes; map key actors; map potential funders
------------	---	---	---

recommend five steps: identifying the research question; identifying relevant studies; study selection; charting the data; collating, summarizing and reporting the results. They also recommend consulting key stakeholders to inform and validate the findings. Early findings from this scoping review were presented at stakeholder workshops in Liverpool and Rotterdam. Feedback on those presentations helped to identify HIA guidelines that had not been included in the review and provided valuable reflection on the scope of the review at that stage.

This scoping review was an update to the literature review conducted for the Equity Focused HIA project in 2004 (Harris-Roxas *et al.*, 2004). We focused on how equity is addressed in HIA guidelines, HIA practice, other impact assessment methodologies and the related fields of environmental justice, human rights and complexity theory. The literature was identified from both published and grey literature sources. The inclusion and exclusion criteria for the review are given in Table 2. The literature was assessed and the data extracted by three members of the research team (Authors 1, 2, 3). The data gathered during the review were analysed thematically and the resulting themes were collated and discussed in the final project report (Povall *et al.*, 2010).

Interviews

We interviewed international key stakeholders in the fields of HIA and health equity in order to understand better the underlying causes of health inequity/equity, the extent to which health equity is considered in impact assessment and the enablers and barriers to considering health equity impacts of policies.

We undertook stakeholder mapping procedures (Scholes, 2000) in order to purposively identify interview participants. Key categories of potential interviewees were tabulated and the Advisory Group and project team recommended individuals within those categories. A final list of preferred participants was agreed. Attempts were made to balance the participants by gender, occupation, area of expertise and region within which they work. In this way, the sampling was purposive, but there was also a snowball element as some of the people invited to participate were identified through other

Table 2: Inclusion/exclusion criteria for the scoping review

	Inclusion criteria	Exclusion criteria
Methodologies and tools	HIA, HIIA, HEIA, EFHIA, equity gauge, HEAT, equity audit, other IAs with an equity focus OR reviews of HIA methodologies	Equality Impact Assessment, non-IA methodologies, methods or tools—unless specifically included
Reports of HIAs	Health equity, reducing health inequalities/disparities or assessing differential impacts a primary aim of the HIA OR reviews of HIA reports	No equity focus or reference to inequalities/disparities/differential impacts
Methods	Clear and full description of methods used	Incomplete or unclear description of methods used
Equity	Separate assessment of equity impacts, including terms such as inequity, inequality, disparity, variation, differential, vulnerable groups	No, limited or unclear assessment of equity impacts. Equity impacts limited to a discussion of the differential impact on indigenous populations
Focus	Policy, strategy and programme assessments	Project assessments
Determinants of health	Inclusive of social determinants of health	Limited to biomedical or health care related determinants
Operation	Local, national, global	No exclusions
Data sources	Electronic databases: WoK, CSA abstracts ^a ; Google and Google Scholar; Grey literature DB: Open Sigle; HIA websites ^b ; Requests for Information sent to HIA websites and listservs; personal recommendations.	All others
Publication dates	1990+	1989-
Publication types	Methods, implementation, evaluation, reviews of primary research	Editorials, commentary, opinion pieces, letters, reviews not of primary research
Language	English	Not English
Country	All	No exclusions
Abstract	Must include an abstract or summary	No abstract or summary

^aASSIA; BHI; Biological Sciences; EconLit; EIS; Environmental Sciences and Pollution Management; MEDLINE; CSA Social Services Abstracts; CSA Sociological Abstracts; CSA Worldwide Political Science Abstracts.

^bHIA Community Wiki, HIA Connect, HIA Gateway, HIA Network, Human Rights Impact Resource Centre, IAIA, IMPACT, London Health Commission, Scottish HIA Network, Welsh HIA Support Unit, WHO HIA page.

participants. This approach aimed to ensure both systematic and widespread coverage.

We interviewed 14 people (of the 16 initially approached) in August and September 2009; two were interviewed together, in person, and the remaining 12 individually, by telephone. The mean interview duration was 60 min. Interviewee characteristics are shown in Table 3.

The interview schedule examined respondents' views on the concepts and determinants of health equity, and the assessment of health equity at different geographical levels. Participants were also asked to consider barriers to and enablers of health equity and policy actions required to promote health equity. A further range of questions covered the adequacy with which health equity is addressed at all geographical and policy levels in current HIAs, and the barriers and enablers to doing so more effectively in future.

The interviews were digitally recorded, transcribed and were analysed using thematic

analysis techniques and the NVivo8 software by one member of the research team (Author 1).

Stakeholder workshop

We held a 2-day international stakeholder workshop in Liverpool, England, in October 2009; 19 people took part, 4 of whom had also been interviewees. Participant characteristics are shown in Table 3. The workshop provided an opportunity to examine in detail the issues covered in the interviews with a wider range of occupations and organizational types represented. Most of the workshop consisted of facilitated small group discussions using discussion schedules broadly comparable with the interview schedules. Later in the same month, we presented the project at an international HIA conference in Rotterdam; the ensuing discussion added some additional perspectives on our research theme.

Table 3: Interviewee and workshop participant numbers and characteristics

Characteristic	Interviewees	Workshop participants
Sex	7 female, 7 male	12 female, 7 male
Expertise	9 academics, 9 practitioners (4 both academics and practitioners)	7 academics, 12 practitioners
Region	6 Europe (of whom 5 UK), 2 North America, 1 South America, 3 Australasia, 1 Asia, 1 Africa	14 Europe (of whom 9 UK), 1 North America, 1 South America, 1 Australasia, 2 Africa
Area of expertise	7 HIA or health equity measurement experts, 7 health equity policy experts	8 HIA or health equity measurement experts, 11 health equity policy experts
Total	14	19

Participants at the Liverpool workshop were identified through stakeholder mapping procedures similar to those employed in the interview phase of the project. The workshop sessions were digitally recorded and transcribed. Thematic analysis was undertaken (by Author 1) using the transcripts and the team's personal notes from the Rotterdam workshop.

RESULTS

The findings from each phase are summarized in Table 1; the key findings are presented below.

Scoping review

In common with earlier reviews of HIA guidelines and tools, our review indicates that equity is still not being addressed adequately within HIA, with the exception of the Equity Focused HIA (EFHIA) framework (Mahoney *et al.*, 2004). In line with the EFHIA review, the scoping review found that even when HIAs were described as having a specific focus on equity, they did not generally move beyond identifying vulnerable population groups and differential impacts.

A number of new guidelines have been developed that include a more explicit focus on inequities/inequalities, often with tools and

guidance for how to include equity or health inequalities in the various stages of HIA. Disappointingly, there is still no consistency in the definitions of equity/inequity/inequality used, if these terms are defined at all. Often they are inferred through the model of health employed in the guidance. The concept of equity as the absence of avoidable and unfair differences in health status across population subgroups necessarily leads to the need to make value judgements within the HIA process. The importance of values is rarely acknowledged and there are no tools to help judge fairness. EFHIA addresses this through the guidance that such values need to be explicitly negotiated in the scoping phase of the HIA, and decisions on equity negotiated as part of the impact appraisal and recommendations phases.

Some guidelines argue for the inclusion of equity/inequalities in all stages of the HIA; most tools focus on inequalities in the screening, scoping and appraisal phases. There is little help in including equity within the results and recommendations. Equity is most frequently addressed through the assessment of potential differential impacts on vulnerable or other population subgroups. These groups may be defined ahead of the HIA, or may be identified as part of the screening and scoping phases. Some guidelines argue for a minimum set of subgroups, such as race, gender and income, with others identified as part of the process. Perhaps not surprisingly, the reviews of HIAs mirror the findings on the guidelines. Again there is inconsistency in the definition and use of the equity/inequalities terminology. Most HIAs discuss health inequalities or equity, but do not then employ a structured approach to assessing impacts on equity or inequalities. Where this does happen, it is done through subgroup analyses and the inclusion of community representatives in the HIA Steering Group or through consultation in the appraisal phase.

Even where the assessment has included consideration of differential impacts, these analyses are often difficult to trace through to the results and recommendations of the HIA. One HIA highlighted the lack of assessment of the 'causes of the causes' of health inequalities/inequities as a limitation of the HIA. Such assessments of distal determinants of health are very rare. But it is acknowledged that the inclusion of equity within HIA is complex, difficult and time-consuming.

Process evaluations of HIAs demonstrate that they can promote equity beyond their recommendations and potential impact on policy development and implementation. The process itself provides opportunities for inclusion—bridging as it does different sectors and social groups—and for learning the languages of equity and of other organizations, fostering shared understanding and greater collaboration. Such benefits may extend beyond the life of the HIA and have been shown to lead to greater intersectoral working and improved inclusion of socially excluded groups in local government decision-making processes.

Interviews and workshops

Participants were asked to consider how impacts on health equity could be assessed and the current capacity of HIA methodologies to make those assessments. In order to set these discussions in a context, the participants were first asked to define health equity and to describe the factors they felt impact upon health equity. The main factors influencing health equity were seen as: structural factors; politics and policy, distribution of power and control and equity of access to affordable and reliable health services.

Workshop participants were clear that there is no need for new methodology: improvement of the equity focus of existing HIA methodologies is the key requirement. Some interviewees felt that an explicit equity focus was essential; one argued for a generic equity impact assessment with health as one of several dimensions covered. Most, however, felt that current HIA methodologies are sufficient, but that new tools may be required to fully and adequately address all determinants, all levels of causality and all policy levels.

Participants observed that the regional and global policy context is more complex, more structured and hierarchical, less controlled and controllable, and more covert in its operations than the national context. Also identified as relevant at this level were the influence of national governments through foreign policy and military expenditure. Concern was expressed that different groups use different modes of operation, language and values and that these need to be acknowledged within impact assessments as determinants of equity.

Regarding geographical levels at which policies act, some interviewees felt that health equity impact assessments of global/transnational public policies will require new HIA tools to be developed (Table 1). These may extend existing methods—for example, in-depth analyses of global policy processes, including where appropriate, historical analysis and examination of the distribution of power in the policy process. While the policies of global institutions may require different tools and indicators from those used in national and local HIAs, it is also the case that global trade, lending or technology policies act locally and thus require local as well as global impact assessment.

Participants identified barriers to carrying out health equity impact assessments and actioning their recommendations, which include the lack of good local data: while adequate data may exist at city, state and regional levels, at the local level data have often not been collected in sufficient depth to be useful in assessing equity impacts within HIA. They noted that lower income countries often lack the structures to gather robust local data. A related and recurring theme was the importance of available, accurate and wide-ranging evidence. In particular, lack of data to assess the impact of upstream or distal determinants on health equity, especially at the global level, was considered an issue, resulting in an excessive focus on proximal, especially biomedical or behavioural, determinants and a resulting restriction to downstream policy options and recommendations.

Participants noted that evidence may also be discounted where it does not fit with the political aims or value systems of policy makers: this was described as ‘policy based evidence making’. Examples given include qualitative evidence in general and also economic evidence that departs from dominant macroeconomic theories and practices. To counteract this, it was suggested that good HIAs require a broad evidence base including social science research and narratives from affected groups: such stories can be powerful ways of engaging with policy makers.

The importance of recognizing that different communities have different capacities and capabilities and that there is a need to develop ways of engaging with all communities was also stressed. Participants with multi-national experience highlighted that national context also matters: the USA, Africa and China, for

example, will have different levels of capacity for HIAs and different cultural understandings of health and its determinants.

The participants concluded that advocacy is needed for the universal inclusion of equity in HIA, to raise awareness of equity issues within society at large and among policy makers, politicians and in business. In addition, HIAs of global policies will need to assess their impact on power imbalances; power is not sufficiently acknowledged as a determinant of health inequities. Participants also felt that HIA practitioners are not effective in raising difficult questions and challenging power brokers. One participant commented that the HIA process represents white, middle class systems and values and can be alienating to local population groups, especially indigenous groups. The CSDH report (World Health Organisation, 2008) provides a good example of this problem, headlining the unequal distribution of power, money and resources as the causes of health inequity but offering no analysis of, let alone solutions to global power imbalances.

Participants made suggestions for future research (Table 1) that would unpick the pathways to inequity and would help to maximize the impact of HIA in the policy-making process.

DISCUSSION

Levels and strategies for action on health equity

It was clear from both the interviews and workshops that participants felt that there is no need for a new health equity impact assessment methodology. However, all three research phases found that equity is not currently assessed adequately within HIA.

Whitehead (Whitehead, 2007) identified four categories of action to tackle social inequalities in health: strengthening individuals, strengthening communities, improving living and working conditions and promoting healthy macro-policies. HIA currently has the capacity to contribute to the first three of these categories through the democratic and inclusive nature of its processes and its potential to identify and address differential impacts of policies and programmes; our research chiefly addressed whether it can effectively encompass the fourth.

Graham (Graham, 2004) advocates for reducing the social gradient as the optimal approach

to improving health equity. The WHO CSDH and the English Marmot Review have called for HEIA on all global, national and local policies (World Health Organisation, 2008; Marmot ReviewTeam, 2010) and The Marmot Review has recommended 'proportionate universalism' (Marmot ReviewTeam, 2010), universal policies to improve equity with targeted interventions proportionate to the level of disadvantage, in order to reduce the gradient. In our view, HIA has much to gain from adopting this approach.

Addressing deficiencies in current practice

While our findings clearly demonstrate that standardizing health equity language is a prerequisite for shared understanding and practice, it is less clear how this can be achieved. We believe that key international bodies like the World Health Organisation and International Union for Health Promotion and Education (IUHPE) should discuss and agree on a common set of health equity concepts and definitions. As this study has shown, HIA would similarly benefit from such an approach—though its shorter and more contested history make this less likely. We believe nonetheless that key bodies like the WHO, IUHPE and the International Association for Impact Assessment could usefully agree minimum criteria for designating a study as an HIA—and that how health equity is addressed should feature in such criteria.

Another key finding concerns the inadequacy with which 'the causes of the causes' or root causes of inequities are currently addressed in HIAs. We see this as a product of several factors. First, it is always tempting to focus on the most obvious, proximal causes of impacts—especially when these are the easiest to eliminate or mitigate. Second, such solutions are usually the most popular with policy makers, politicians and the public—all of whom may focus chiefly on the short term and may lack the knowledge or skills to 'refocus upstream' on root causes. Thirdly, in a world dominated by a neoliberal macroeconomic paradigm centred on inequality (De Vogli *et al.*, 2009), it is usually safest to avoid challenging the status quo.

We share the views of those participants who proposed that HIA should acknowledge the role of the policy process as a health determinant and should appraise related health impacts where appropriate. The same applies with regard to the important role of power

imbalances at all levels of politics and public policy and indeed throughout society. As some participants noted, HIAs should enhance their equity focus when considering issues of policy and of power by including socio-historical analyses of impact causation and by linking these to recommendations.

Fundamental causes of health inequities also include deeply rooted disparities in income, wealth, knowledge, social status and connections (Phelan *et al.*, 2004). Inevitably, some of these will prove difficult to appraise within HIAs—but in our view HIAs should, in the name of transparency, at least acknowledge these issues as root causes wherever relevant.

Strengthening HIA

Various means to strengthening HIA were recurring themes across the data we collected. First, the inclusion of equity considerations in HIA reflects a values base that prioritizes social justice and fairness. These values are not universal and may not be shared by institutions and organizations whose policy and practice we would wish to assess for their impact on health equity. This has implications for the conduct of HIA, for the need to be explicit about the values base of HIAs and for the need to identify mutually acceptable language to convey questions and findings.

Secondly, the determinants and patterns of health equity, and the social and policy influences on health equity are context specific. These will vary within and between countries: health equity impact assessments will need to take account of these differences. The English equity language may not translate in a meaningful way into other languages, and this may restrict the translation of the concepts and values underpinning HIA into other cultures.

Thirdly, the root causes of health inequity were clearly identified at all levels, global to local, as including the influence of financial regulation and practice, and inequalities in power. HIA needs to incorporate consideration of the impacts of power differentials, employing the kinds of approaches described by our participants.

Fourthly, the consideration of equity within HIA can be strengthened through global capacity building using training and learning networks, which emphasize the importance of equity, by introducing a set of minimum HIA standards, by ensuring that HIA is robust and

of high quality and by evaluating and monitoring the uptake of HIA recommendations and the impacts of policy on health equity.

The interviews and workshop discussions identified several areas where research would enhance our understanding of the mechanisms that generate inequities (see Table 1 on conclusion). HIA provides a generic process within which a range of tools and methods can be utilized. Some of this research would assist with necessary methodological developments; some would deepen our understanding of the distribution of power and influence in the decision-making and implementation processes of policy. In addition, work is needed to develop conceptual models describing the interrelationships of the complex processes and values that promote or undermine health equity.

Despite the relative failure during recent decades to strengthen the role of health in environmental impact assessment, we believe that what we propose regarding strengthening equity in HIA is realistic, given the considerable momentum established by the report of the CSDH. This research has described the ways in which HIA must develop to respond successfully to the new demands placed on it by the recommendations of the CSDH and by our expanding awareness of how global policies and actions affect the health chances of us all. We conclude by noting the majority view of our interviewees and workshop participants that new terminology is not required for new variants of HIA capable of addressing global policy impacts on health equity. Like them, we believe that the term health impact assessment will suffice to tackle new global challenges.

ACKNOWLEDGEMENTS

We would like to thank our Steering Group and the participants in our interviews and workshops. We would like to thank the participants in our study and our funders, the Liverpool Institute for Health Inequalities Research. In addition we are grateful for the helpful comments from three anonymous reviewers.

FUNDING

The work was supported by MerseyBEAT (now Liverpool Health Inequalities Research Institute)—a competitive programme within the

University of Liverpool, funded by Liverpool Primary Care Trust (MerseyBEAT Project code: MBRP006). The funding source had no involvement in study design, collection, analysis and interpretation of data, nor in the decision to submit for publication. None of the authors entered into any agreement with the funding organization that could have limited their ability to complete the research as planned. The authors had full control of all primary data at all times.

CONFLICT OF INTEREST

None of the authors had any financial or personal relationships with other people or organizations which could bias their work. The corresponding author, Fiona Haigh, had full access to all study data and had final responsibility for the decision to submit for publication.

REFERENCES

- Abrahams, D., den Broeder, L., Doyle, C., Fehr, R., Haigh, F., Mekel, O. *et al.* (2004) Policy Health Impact Assessment for the European Union: Final report. IMPACT, University of Liverpool, Liverpool.
- Arksey, H. and O'Malley, L. (2005) Scoping studies: towards a methodological framework. *International Journal of Social Research Methodology*, **8**, 19–32.
- Collins, J. and Koplan, J. P. (2009) Health impact assessment a step toward health in all policies. *Journal of the American Medical Association*, **302**, 315–317.
- De Vogli, R., Gimeno, D. and Mistry, R. (2009) The policies—inequality feedback and health: the case of globalisation. *Journal of Epidemiology and Community Health*, **63**, 688–691.
- Douglas, M. and Scott-Samuel, A. (2001) Addressing health inequalities in health impact assessment. *Journal of Epidemiology and Community Health*, **55**, 450–451.
- Graham, H. (2004) Tackling inequalities in health in England: remedying health disadvantages, narrowing health gaps or reducing health gradients? *Journal of Social Policy*, **33**, 115–131.
- Harris-Roxas, B., Simpson, J. S. and Harris, E. (2004) *Equity focused health impact assessment: a literature review*. Centre for Health, Equity, Training, Research and Evaluation. University of New South Wales, Sydney.
- Mahoney, M., Simpson, S., Harris, E., Aldrich, R. and Stewart Williams, J. (2004) *Equity Focused Health Impact Assessment Framework*. Australia: the Australasian Collaboration for Health Equity Impact Assessment (ACHEIA), Sydney, NSW.
- Marmot Review Team. (2010) Fair society, healthy lives: The Marmot Review. Strategic review of health inequalities in England post-2010. Marmot Review, London.
- Phelan, J. C., Link, B. G., Diez-Roux, A., Kawachi, I. and Levin, B. (2004) 'Fundamental Causes' of social inequalities in mortality: a test of the theory. *Journal of Health and Social Behavior*, **45**, 265–285.
- Povall, S., Haigh, F., Abrahams, D. and Scott-Samuel, A. (2010) Health Equity Impact Assessment: Project Report. Liverpool Health Inequalities Research Institute, Liverpool.
- Rose, G. (1994) *The Strategy of Preventative Medicine*. Oxford University Press, New York.
- Scholes, K. (2000) Stakeholder mapping: a practical tool for public sector managers. In Johnson, G. and Scholes, K. eds, *Exploring Public Sector Strategy*. Financial Times / Prentice Hall, London, pp. 165–184.
- Scott-Samuel, A. (1996) Health impact assessment—an idea whose time has come. *British Medical Journal*, **313**, 183–184.
- Scott-Samuel, A., Ardern, K. and Birley, M. (2013) Assessing health impacts. In Guest, C., Ricciardi, W., Kawachi, I. and Lang, I. (eds), *Oxford Handbook of Public Health Practice*. Oxford University Press, Oxford, UK.
- Simpson, S., Mahoney, M., Harris, E., Aldrich, R. and Stewart-Williams, J. (2005) Equity-focused health impact assessment: a tool to assist policy makers in addressing health inequalities. *Environmental Impact Assessment Review*, **25**, 772–782.
- Solar, O. and Irwin, A. (2010) *A conceptual framework for Action on the Social Determinants of Health*, Social Determinants of Health Discussion Paper 2. World Health Organisation, Geneva.
- Whitehead, M. (2007) A typology of actions to tackle social inequalities in health. *Journal of Epidemiology and Community Health*, **61**, 473–478.
- Whitehead, M. and Dahlgren, G. (2007) *Concepts and principles for tackling social inequities in health: Levelling up Part 1*, Studies on social and economic determinants of population health, No. 2. World Health Organization Regional Office for Europe, Copenhagen.
- WHO European Centre for Health Policy (1999) Health impact assessment: main concepts and suggested approach. European Centre for Health Policy. *The Gothenburg Consensus Paper*. World Health Organisation, Brussels.
- World Health Organisation. (no date) Health Impact Assessment: Glossary of terms used. World Health Organisation. Available online at: <http://www.who.int/hia/about/glos/en/index1.html> (last accessed 18 February 2013).
- World Health Organisation. (2008) Closing the gap in a generation: health equity through action on the social determinants of health. Final Report of the Commission on Social Determinants of Health. World Health Organization, Geneva.