

Priorities for research on equity and health - implications for global and national priority setting and the role of WHO to take the health equity research agenda forward

Piroska Östlin (Task Force coordinator and core author), Ted Schrecker (core author), Ritu Sadana (core author), Josiane Bonnefoy, Lucy Gilson, Clyde Hertzman, Mike Kelly, Tord Kjellström, Ronald Labonté, Olle Lundberg, Carles Muntaner, Jennie Popay, Gita Sen, Ziba Vaghri

Process and use

In 2004, the World Health Organization (WHO) established a Task Force on Research Priorities for Equity in Health to provide expert advice on research priorities to take forward the health equity policy agenda.¹ Members were selected purposively from around the globe for their dual expertise in health equity research or development and in advising national and international policymakers on the implications of research for equity-oriented policy. The Task Force identified priorities by way of a consultation paper presented at the 2004 conference of the International Society for Equity in Health in Durban and circulated to task force members along with a summary of the meeting. Subsequently, five main priority areas were identified, and task force members were asked to identify and prioritize key research questions in each area. These areas contributed to the selection of themes for the Knowledge Networks set up by WHO to support the Commission on Social Determinants of Health (CSDH) and the terms of reference for each network. The CSDH issued its Final Report in 2008: one of its three overarching recommendations to reduce health inequities through action on social determinants of health, is to "measure and understand the problem and assess the impact of action." During 2009, WHO including its governing bodies, are discussing ways to ensure that health inequity is measured and reduced - within countries and globally -- and to support health research that explicitly incorporates this agenda.

Therefore, this issues paper was commissioned by WHO, Geneva, to update the advice provided by the Task Force in light of the findings of the CSDH. Taking the report produced by the earlier Task Force as a starting point, this paper sets forth the broad parameters for a global research agenda on equity and health, taking stock of contemporary efforts, stakeholder discussions, relevance to Member States and expected innovations. Organized in three sections (I Background, II Research priorities, and III Next steps), this paper aims to stimulate further thinking, debate and refinement of strategic approaches with respect to where to focus WHO support and collaborations to advance global research on equity and health. It is not a comprehensive review of

research in the area of equity and health. Key strategic issues on which this paper aims to stimulate discussion include:

STRATEGIC ISSUES

- 1. Based on recommendations and learning from the Commission on Social Determinants of Health, the Knowledge Networks set up to support the CSDH, and other contemporary efforts, what areas of research could WHO concentrate support on to best advance greater health equity?**
- 2. What research processes, including concepts, methods, norms and standards, and synthesis approaches could best benefit from global collaboration?**
- 3. How can WHO support and guide collaborators to maximize relevance of global research on equity and health to specific countries and sub-populations; and**
- 4. What core strategies and innovative opportunities could increase research collaborations and its uptake, involving a wider range of investigators, institutions and civil society organizations from low- and middle-income countries?**

The evolution of the ideas contained in this paper reflects considerable discussion at international fora since the preliminary report of the WHO Task Force on Research Priorities for Equity in Health was discussed at the Ministerial Summit on Health Research, Mexico City, Mexico, November 2004 and the final report was published in 2005. The most recent discussions included dedicated sessions at the Symposium on Social Determinants of Health, Rio de Janeiro, Brazil, September 2007, and at the Global Forum for Health Research, Beijing, October 2007 (Annex 1). Since the release of the Commission on Social Determinants of Health's Final Report and the Knowledge Networks' Final Reports during 2008, discussions were held during the "learning & working together to improve the broader determinants of health" session (Annex 2), held during the Bamako Ministerial Forum on Health Research, Mali, November 2008, and during the "social forces and global health" session (Annex 3) of the World Social Science Forum, Bergen, Norway, May 2009.

Looking forward, **this draft of the issues paper** will benefit from anticipated dialogue on the implementation of a research agenda on equity and health, and how WHO and others could support this effort, during a dedicated workshop on "health equity and social determinants of health" at the International Society for Equity in Health's International Conference, Crete, Greece, June 2009. Comments from a wide range of stakeholders, including development partners and national policy makers, as well as a new WHO scientific resource group on equity analysis and research, will also inform a final version of this paper, to be released later in 2009.

Agreement on main directions and cooperative approaches will guide WHO's response to the World Health Assembly's resolution on "Reducing health inequities through action on social determinants of health," passed on 22 May 2009. The resolution urges Member States to **"generate new or make use of existing methods and evidence, tailored to national contexts in order to address the social determinants and social gradients of health and health inequities,"** and requests the Director General of WHO to **"to advocate for this topic to be high on global development and research agendas,"** and **"support research on effective policies and interventions to improve health by addressing the social determinants of health that also serve to strengthen research capacities and collaborations."** Progress on implementing this resolution will be reported to the World Health Assembly in 2012. A new WHO strategy on health research is also currently under discussion, and includes core elements addressing equity and capacity strengthening, with an expected WHA resolution in May 2010.

I. Background

Why equity and health? Equity has been a stated or implied goal of health policy in many countries and international health organizations for decades. At the WHO conference in Alma Ata in 1978, a global health strategy was launched by the World Health Assembly with the goal of Health for All by the Year 2000 (HFA).² HFA implicitly makes equity in health a priority, which was taken forward actively in the World Health Organisation's HFA strategy for Europe.³ The European HFA strategy for the 21st century identifies promoting equity and improving health as guiding principles.⁴ During the recent 44th Directing Council meeting of the Pan American Health Organization (PAHO), held September 22-26, 2008, in Washington D.C, health ministers called for a renewed commitment to the goal of "health for all" and endorsed primary health care as a strategy for reducing the region's persisting inequities in health. The WHO in Geneva launched a global initiative on Equity in Health and Health Care from 1995-1998.⁵ Equity concerns were also prominent in parts of the 2000 Millennium Declaration, which gave rise to the Millennium Development Goals.⁶ Most recently, in 2005, WHO established the Commission on Social Determinants of Health (CSDH), which produced its final report in 2008, including evidence on what actions reduce inequities in the distribution of the underlying determinants of health.⁷ Moreover, the United Nations more broadly has identified the role of equity and health as a marker of overall development. The 2009 Report of the Secretary-General and the theme of the Annual Ministerial Review is "implementing the internationally agreed goals and commitments in regard to global public health" and includes a strong focus on equity and health.

CSDH defined health inequity as the existence of systematic differences in health, both between and within countries that are judged to be avoidable by reasonable action. Using health equity as the foundation of its approach, CSDH concluded that "[s]ocial injustice is killing people on a grand scale" and made three overarching recommendations: improve people's daily living conditions; tackle the inequitable

distribution of power, money, and resources; and as noted, measure and understand the problem and assess the impact of action. It also emphasized that knowledge gaps must not be used as a reason for postponing action on the ample body of evidence that already exists concerning social determinants of health. Hence, there is a need for a research agenda in which priorities are clearly tied to health equity, informing the priorities of international agencies (including WHO), national governments and civil society organisations, while reflecting what is already known.

Importance of broader determinants of health to equity and health. Although impressive overall gains were achieved in life expectancy and child survival during the second half of the 20th century, inequities in health status and in health systems between more and less privileged groups within and between countries have persisted, and in many regions and countries are widening.^{8,9} One important reason behind this development is that health systems in many countries have been unable to adequately deliver on or sustain improvements in health equity¹⁰ for a variety of reasons. It is important to recognise, in turn, that health systems and the people who use them exist within a social context that powerfully determines people's chances to be healthy not only through access to health care, but more importantly through access to a range of goods, opportunities, and rights. A range of resources shape health outcomes across the lifespan, not limited to health services. This point was made compellingly in what is now a classic article on population health, which rejected the “thermostat model” (in which societies can improve health simply by increasing the resources devoted to health care, much as one warms up a cold room by turning up the thermostat) in favour of a model in which health care is only one of the influences on population health outcomes, and sometimes not the most important one.¹¹ More recently, this point was reinforced with abundant empirical support (for instance) in a synthesis of research on HIV, tuberculosis and malaria infection^{12,13}; in a retrospective examination of the first 25 years of Canada’s experience of universal public medical care insurance¹⁴; and of course in the CSDH’s final report which drew on evidence from around the world.

Why is more research needed? How can the research community contribute in the most valuable ways to developing interventions and policies that aim to improve health equity both within and across countries? Biomedical research produces important knowledge about the mechanisms of disease aetiology; the clinical aspects of how people cope with disease and disabilities as individuals; and the biological and psychological mechanisms by which specific risk factors or risk conditions generate different diseases. While biomedical research remains foundational to the curative mandate of health systems, understanding the social aetiology of disease, i.e. the “upstream” influences on (ill) health,¹⁵ generally falls outside its frame of reference. Understanding of the causal relations among these different analytic levels is underdeveloped theoretically and empirically.¹⁶ For example, much of the evidence on the effects of environments on the developing brain has come from animal studies. Additional research involving human beings will contribute to understandings of how the environment affects young children’s brain structure and function.¹⁷

Social context is a determinant of health as it frames the distribution of risks and benefits. Even the current focus of most non-biomedical health research is predominantly on individual risk factors; the social context that frames the distribution and modifies the effect of these risk factors is often neglected^{18,19} or is seen merely as contextualizing individual risk, rather than as determining conditions in their own right. When social context is studied as a determinant of health, it tends to be broken into discrete aspects (e.g. poverty, or discrimination by gender or ethnicity, or exposure to occupational hazards) rather than being seen in terms of interacting processes of social stratification, marginalization and exclusion. Much current health research fails to take a multilevel perspective that links social system characteristics with individual health outcomes. Similarly, most health intervention research focuses only on what is delivered through the health care system or on the ways in which health systems are funded and clinical services delivered, failing to capture the importance of the social determinants of health (that is, the conditions in which people are born, live, work and age in), and of the way in which they are linked to macro-level social processes and distributions of resources and power.¹⁸ Stated another way, research that aims at advancing health equity must define ‘interventions’ much more broadly than is often the case, notably to include elements of social and economic policy and institutional design, although complete terminological (and indeed methodological) consistency on this point is likely to remain elusive.

The current economic downturn underlines the urgency of implementing a broader agenda for research on equity in health. The observation of the CSDH that “[i]mplementation of the Commission’s recommendations is critically dependent upon changes in the functioning of the global economy” (p. 76, and see generally chapters 3, 11 and 15) must be kept in mind when identifying the policies and institutions to be addressed. In a similar vein, Margaret Chan, the Director General of the WHO, recently stated: “I would argue that equitable access to health care, and greater equity in health outcomes are fundamental to a well-functioning economy. I would further argue that equitable health outcomes should be the principal measure of how we, as a civilized society, are making progress.”²⁰

It is therefore essential to broaden the research focus, adopting methodologies and research strategies that:

- go beyond the behavioral and other individual determinants of illness;
- examine the intersections among different social hierarchies (e.g. socioeconomic status and gender)²¹ and their cumulative impacts on health status and health inequities;
- examine the connections between proximal and structural (distal) determinants of ill health, which are often poorly conceptualized and integrated into research;

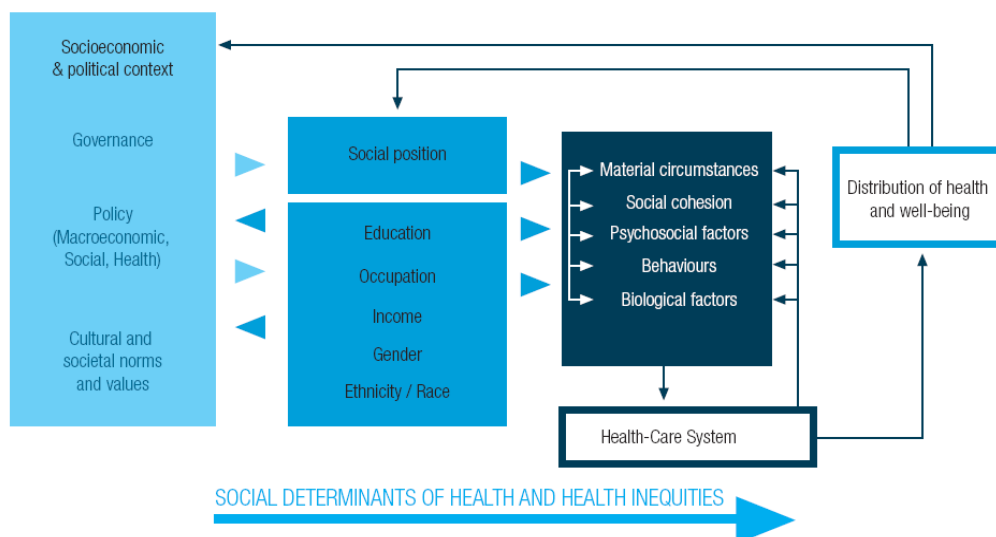
- consider the dynamic (rather than static) nature of equity in different country contexts; this introduces a temporal dimension when investigating social structures and public policies;
- describe the institutions and processes that influence the allocation of resources related to health and its social determinants²²;
- focus on how the global context affects choices about resource allocation towards and within national and sub-national levels;
- pay special attention to the fact that certain kinds of evidence, such as results from randomized controlled trials, simply cannot be generated with respect to many interventions that address social determinants of health²³ – and, relatedly, to the fact that involvement of affected populations is often essential to appropriate research designs and their execution;
- evaluate natural experiments, including the implementation of different policies, with appropriate methods, focusing on those that give the greatest promise to reduce health inequities.

As noted earlier, a considerable base of research evidence already meets these criteria. Since broader determinants of health, including social, economic, political and environmental determinants, invariably raise policy questions that are highly contentious, there is a need for continuous updating of the evidence base in order to maintain credibility and to reflect accurately the effects of a macro environment that may be changing rapidly. In addition, addressing the root causes of ill health at the population level usually requires actions from multiple sectors, not just from the health care sector²⁴; thus, new forms of equity-focused multidisciplinary research are needed to support multisectoral policy initiatives.^{25,26}

II. Research Priorities

Priorities for future health equity research should be based upon identification of the most important gaps in current knowledge, keeping in mind the agenda set out in the report of the CSDH and its conceptual framework. In July 2005, the Commission discussed a paper "*Towards a conceptual framework for analysis and action on the social determinants of Health*" presenting a conceptual model largely synthesizing models proposed by Diderichsen and colleagues.^{18,27,28} Based on subsequent consultations and inputs, the CSDH endorsed this framework and published it in its Final Report (see **Figure 1**). This conceptual model illustrates the pathways by which social determinants of health affect health outcomes, makes explicit the linkages among different types of health determinants, and makes visible the ways social determinants contribute to health inequities among groups in society, given the increasing evidence of significant social stratification in health status.

Figure 1. Conceptual framework used by the Commission on Social Determinants of Health



Together with the input from stakeholder discussions and those across Knowledge Networks, this leads us to recommend an agenda for research in the following four distinct but interrelated areas:

- (1) global factors and processes that affect health equity;
- (2) social structures that differentially affect people's chances to be healthy within a given society;
- (3) health system factors that affect health equity; and
- (4) how to influence (1)-(3) effectively, i.e., identification of policy interventions with the potential to reduce inequities in the determinants of health and health services.

Unsurprisingly, areas (1), (3) and (4) overlap with those identified by the 2004 task force, and (2) combines two categories from the earlier report. In each of these areas, much is already known, but much remains to be understood. Learning over the past few years, however, informs the direction of priorities and emphasis on different questions within each of these broad areas.

The discussion that follows provides a brief overview of the research agenda and identifies several **examples** of priority research questions, in general terms. The lists of

research questions are far from exhaustive, although we are confident that we have identified many of the most important ones.

(1) Global factors and processes that affect health equity

Countries are linked all over the world. The diffusion of new knowledge and technology through trade and investment should in theory improve disease surveillance, treatment, and prevention. Economic growth, necessary for sustaining public goods such as health care, should both improve the supply of, and access to, essential health promoting services, while also reducing poverty, both of which would lead to better health.^{29,30} These outcomes, however, had largely failed to materialize even before the economic crisis that began in 2008, and represent a special challenge for efforts to advance health equity. Considerable evidence now suggests that contemporary globalisation, characterised by trade and investment liberalisation, privatisation of state assets and global integration of financial markets, has not reduced social and economic inequalities or inequities in health^{31,32,33,34} – and, indeed, that globalisation may have slowed or reversed past improvements in health status in some regions of the world.³⁵

Increasing demands for social justice. Beyond the health sector, in-depth discussions involving a wide range of stakeholders have sharpened collective thinking and evidence in this area. For example, the United Nations Department of Economic and Social Affairs supported the International Forum for Social Development during the first half of this decade, with the aim to include developing countries and social groups not benefiting from the globalization process and increase international cooperation to do so. Its final report, *Social Justice in an Open World*, released in 2006 identified three critical domains of equality and equity as central to fair distribution: rights, opportunities, and goods. Equality of rights includes the elimination of all forms of discrimination and respect for the set of interdependent and indivisible human rights. Equality of opportunities reflects that social, economic, cultural and political conditions enable individuals to fulfill their potential. Equality of goods includes living conditions reflecting distribution of income, assets, opportunities for work, education, access to knowledge, as well as health services.³⁶ The International Forum's discussions underline that global processes shape the distribution of rights, opportunities and goods, and the imbalances have contributed to rising inequalities among countries and peoples.

Avoiding and mitigating risks. Clearly, global processes have created ever closer ties between individuals and population across different countries. In some cases, the process of globalisation has contributed to the rapid spread of infectious diseases and increased adoption of high risk lifestyles,³⁷ systematically undermined the public provision of essential services and food self-sufficiency, and reduced the authorities and capacities of states to protect public health.³⁸ Other problematic consequences include trade in health damaging products, such as military weapons and tobacco; migration of people displaced by conflict and/or poverty;³⁹ casualisation of work, which particularly affects women's health and their social protection;⁴⁰ increases in child labour;^{41,42} large-

scale environmental threats such as resource depletion and climate change,⁴³ and increased commercialisation and privatisation of essential services.

A global frame of reference. Research aimed at advancing health equity must engage with the evidence about the effects of all these features of globalisation. Such research cannot be confined to national and sub-national frames of reference. The economic and political drivers of harm to health include policies and trends that transcend national borders and are at least in part beyond the policy ‘reach’ of national governments acting in isolation.^{33,44} Hence while research strategies and designs need to disaggregate findings on health outcomes using such stratifiers as class, caste, gender, ethnicity/religion/national origin, and to understand the domestic policy dynamics underlying regional disparities within countries, they need also to understand the transnational nature of both the origins of these inequities and (in some cases) the appropriate responses to them.

Tools for comprehensive investigation. One way to improve understanding of the effects of globalization and the opportunities for constructive response is to use a health impact assessment (HIA) framework, similar to those used to understand the roles of policy on the climate and physical environment⁴⁵ but with explicit reference to equity concerns. As an illustration, development of mechanisms to assess impacts on the human right to health has been suggested as a priority with respect to the provisions of trade agreements.⁴⁶ HIA frameworks are discussed further in section II.2, below.

PANEL 1. Examples of high-priority research questions for understanding global factors and processes that affect health equity

- How is globalisation’s contribution to the increased inequality of labour market incomes and insecurity of employment playing out in the context of continued global reorganisation of production and service provision?
- How will the financial crisis that began in 2008 affect health equity in low-, middle- and high-income countries? The crisis presents an important opportunity both for longitudinal studies of health impacts and for assessing the health and social impacts of policy interventions, as noted in later Panels.
- What are the long-term health equity implications of current trends in food prices and food (in)security, and of increased liberalization in trade and investment in all aspects of food production, processing and retail? What policy initiatives are needed to avoid negative impacts, and to reduce food insecurity worldwide?
- How are WTO agreements and dispute resolution outcomes, as well as the proliferation of bilateral and regional trade agreements, affecting health and health services both directly (e.g. by way of access to essential medicines and expansion of the role played by private health insurance) and indirectly (e.g. by increasing employment insecurity)?
- What are the implications for women’s health and social protection of the

“feminization” of work forces that has often accompanied the globalization of labour markets?

- How is the changing nature of the international order leading to increased levels of intra- and inter-state violent conflict?
- What kinds of new patterns of migration are associated with globalization, and what are the implications for social determinants of health?
- How can official development assistance be made more effective in advancing health equity? How is the global financial crisis affecting aid flows to countries likely to experience declining growth and increasing poverty due to the crisis? How effective have been multilateral commitments to improve aid?
- How can the international human rights law framework be used more effectively and systematically in support of health equity?
- What research priorities are implied by the need to link health equity with global climate change concerns?

Range of study designs needed. Many of the issues and questions listed in *Panel 1* require not only comparative cross-national studies, but also detailed national case studies that go from household levels to national policy sectors, in turn assessing carefully the impacts of specific aspects of globalisation. **A special need also exists for research on how best to redesign institutions for global decision-making (often referred to as ‘global governance’) so that these can address not only economic crises but also such genuinely global issues as climate change that have important health consequences.** This need was recognized even before the financial crisis that began in 2008,^{47,48} but the crisis has now added urgency. Moreover, research that identifies who and how to engage in global processes, that will induce more equitable distribution of rights, opportunities and goods within and across countries, is urgently needed.

(2) Social structures that differentially affect people’s chances to be healthy

The social environment, or social context, in which we live generates unequal distributions of power, wealth, risks and vulnerabilities to illness.¹⁸ Dimensions of concern include how the interaction of labour market outcomes and public policies affects income and income security,^{49,50,51} gender norms,⁵² access to social services, health care,^{53,54} education, housing, environmental protection, water and sanitation, transportation and security.

Interactions matter, nuanced interpretations needed. It is important to recognise that these influences frequently interact. For example, policies that affect the balance between paid work and women’s domestic responsibilities (the “childcare constraint”⁴⁰) can affect levels of family income, women’s relative position within the household and the associated levels of stress and lack of autonomy, and can have profound effects on

early childhood development.^{55,56} Such influences also operate at less tangible levels: for example, social stratification may lead many young people to have (realistically) low expectations with respect to their economic future, leading to choices such as leaving school or premature single motherhood that can reproduce unequal social circumstances across generations.⁵⁷ Conversely, some young people in such situations demonstrate extraordinary resilience, even in highly adverse environments, so research must also investigate the relevant contextual factors.

Social systems and protections vary considerably. Systems and institutions for social provision vary widely in their comprehensiveness, in the stages of the life course that they emphasize (e.g. support for reducing child poverty vs. old-age pensions and social security), and therefore on how and for whom they affect social determinants of health. So far, research on this topic has been concentrated on the high-income countries, where as a rule, such systems are most highly developed.^{58,59} Even there, much remains to be learned about how variations in systems of social provision operate to influence health, and about how provision of public services (e.g. health care, education, housing and transport) that are not reflected in household incomes affects the overall distribution of the benefits of social provision. It is even more important to expand research efforts to include low- and middle-income countries, where systems (and resources) for social provision are quite different.

In a rapidly urbanizing world, in which it is estimated that 1.4 billion people will live in slums in 2020 in the absence of rapid and effective policy interventions,^{60,61} **problems of urban health demand special consideration.** The most immediate targets for policy attention include multiple forms of material deprivation and their interaction with social exclusion. Many of these policy areas, and their direct and indirect health impacts, are not only beyond the reach of health systems and the key decision-makers within those systems but also beyond the reach of local or metropolitan governments – as in the case of “stealth urban policies” (macro-level choices that have disproportionate impacts on large cities, which may or may not have been intended) that have been identified as major contributors to intra-metropolitan social and economic polarisation in the United States.⁶² In many ways, globalisation is implicated in the deepening of such polarisation in countries rich and poor alike.⁶³

Privatization not a panacea. In keeping with the promotion of market-oriented policy prescriptions at the international level, often with active involvement of international institutions such as the International Monetary Fund and the World Bank, many governments have sold off state assets or adopted commercial norms such as cost recovery (e.g. in the provision of water).^{64,65} The health equity impacts of privatisation must be assessed not only with respect to this narrow definition, but also with respect to a broader sense that involves a fundamental retreat from collective responsibility for social provision, with responsibility assigned instead to individuals and households – a pattern that has important, and largely negative, implications for gender equity.⁶⁶

From risk factors to root causes. Numerous studies directed to understanding inequalities in health mainly in high-income countries have focused on exploring the individual attributes that differentiate health risk, such as smoking, alcohol consumption, eating patterns, and blood pressure. The expanding literature on the social determinants of health emphasizes that many of these risk factors are corollaries of, or strongly influenced by, an individual's social position: income level and accumulated wealth as well as economic (in)security, place of residence, gender, ethnicity, educational attainment, work environment, etc. **The limitations of a focus on individualized risk factors have been critiqued with special force as “public health behaviourism”⁶⁷** in the literature on HIV/AIDS; however, the critique is applicable elsewhere – indeed, to much of the enterprise of ‘health promotion’ in its current form – and has been made strongly and for a long time by some within the public health practice and research communities.⁶⁸ One of the most important implications for research priorities and strategies of the social determinants of health perspective is that it is not enough to study the impact of a specific, proximate risk factor, in isolation from other demonstrated and potential risk factors, on health and disparities in health. This risk factor approach fails to uncover multi-causal mechanisms and root causes behind health disparities, and is likely to neglect the accumulation of influences on health over the life course.⁶⁹

This life-course perspective requires fundamental rethinking of both research priorities and strategies of intervention design, to reflect what is already known about how both material deprivation and the stresses associated with subordinate or marginalized social status “cluster cross-sectionally and accumulate longitudinally,”⁷⁰ and about the biological mechanisms at work.^{71,72} This is an example of the value of describing the multiple stages of causation that lead from the macro-social determinants of health to individual health outcomes, while not losing sight of the importance of acting on what is already known. “Scientific challenges are to describe as precisely as possible the two overlapping but analytically separate causal pathways that account for both individual and population patterns of disease, drawing on knowledge and best practice examples from around the world, and to develop methods for robust assessment of action to enhance health equity.”⁷³

Range of research designs and time frames. As the evidence base continues to evolve, multiple approaches are required to keep evidence current and in demand, relevant to diverse national contexts, and discussed with different stakeholders. This includes different types of research, primary studies (longitudinal, in-depth, multi-site) and secondary analysis of existing qualitative and quantitative data, that are fit for purpose. Research syntheses are a global public good when these address specific questions or areas, that anticipate demand (e.g. those developed via international collaborations such as Cochrane or Campbell Collaborations), that rapidly respond to specific questions high on the international policy agenda, or offer an advanced evaluation of proposed policies and interventions that clarify pre-conditions or context specific factors that enable successful implementation in terms of equity-oriented goals.

As an example of evaluation of proposed policies and interventions, **health impact assessment (HIA)** potentially offers a useful framework for addressing many of these questions as they relate to specific policies, especially policies outside the health sector^{74,75} (including, as noted above, elements of public policy that involve the international economy and multilateral institutions). However, in order to incorporate an equity dimension, indicators and methods must be developed for policy impact assessments that accurately anticipate not only a policy's impact at an aggregate level (for instance, on state or national population health indicators), but on specific population groups, in particular those that are socially disadvantaged.⁴⁵

PANEL 2. Examples of high-priority research questions for understanding how and why specific societal and political structures and relationships differentially affect people's chances to be healthy:

- How can we better understand the health equity impacts (positive and negative) of changes in tax policies, systems of social provision (e.g. income support, education, child care, pension systems and transport), labour market policies, housing policies, etc?
- At the small area level, especially in urban settings, what are the relations between compositional factors (e.g. the social and economic characteristics of populations who live in a given area) and contextual factors (e.g. place characteristics, physical environment qualities, social relationship dynamics, availability of services) on health inequities?
- How are environmental influences on health distributed across different population groups, and with what differential impacts on health outcomes? What are the social, economic and political disparities (e.g. in wealth or access to political processes) that shape these unequal distributions? (This is an area in which health researchers can usefully engage with a largely separate, but extensive literature on ecological or environmental justice.)
- How can the effectiveness of policies and interventions to reduce inequities in health best be evaluated in low, medium and high income countries? What data from existing evaluation studies examining average impacts on population health can be re-analysed to identify differential health impacts across the social spectrum? How can evaluation methodologies be 'scaled' in terms of their resource requirements, so they will be of use in low- and middle-income countries where resources may be seriously limited?
- How can the research collaborations that are necessary for comparative cross-jurisdictional studies best be supported? How can detailed case studies be designed for comparative analyses to supplement findings generated by cross-country comparisons requiring high levels of data aggregation?
- What are the effects of privatisation, of both state assets and responsibility for social provision, on the relationships between citizen and state in health-related interventions? What are the impacts on service provision, access and health equity

outcomes?

- How do social and economic entitlements for citizens, fair processes in decision-making, access for the poor and otherwise marginalised to policy processes, and improved accountability of decision-makers affect the health equity impacts of policy decision-making?
- How can research processes themselves strengthen the organisation and use the knowledge and experience of people who are not professional researchers, but who may have uniquely valuable understandings of their own situations? How can the priorities of research institutions be reformed so that such engaged research is not denigrated or discouraged?

(3) Health services and system factors that influence health equity

Health sector to set an example. Although the antecedents of health inequities often need to be tackled within the broader social and economic arena, the role of health services in reducing ill health and suffering, redressing inequities, and preventing future inequities remains critical.^{76,77} In the short term, the health sector may be an especially promising point of entry for policies and interventions to tackle health disparities, to prevent impoverishment due to health care expenses,^{53,54} and to prevent the decline in social position of those with chronic diseases.⁷⁸

In the past two decades powerful trends in **'health sector reform'** (HSR) around the world involved increased emphasis on market-based solutions – a direction that was actively promoted by international financial institutions,⁷⁹ sometimes exacerbated by the domestic austerity programmes that characterized the era of structural adjustment. (In the words of one research team, “[t]he era of structural adjustment may be over, but the effects of earlier damage continue to cast a long shadow.”⁸⁰) Some measures fundamentally reorganised the values and principles driving health systems, to include privatisation of service provision and financing and commodification of health care. Others were more process or management related, e.g. health sector administrative reforms (such as performance-based funding or private sector management contracts), formal mechanisms for priority setting and an expanded range of health care financing options. While the options adopted vary from country to country and region to region,⁸¹ these health system reforms, many of which continue to be promoted globally, can have fundamental consequences for many people’s day-to-day lives and well-being.

Available research on HSR suggests that many of the reforms have raised barriers to access to essential care for the less well off. Crucially, out-of pocket expenditures for public and private health care services continue to drive many families into poverty in low- and middle-income countries^{54,82} – the “medical poverty trap”.⁵³ Evidence presented to the CSDH strongly suggest the mistaken direction of past HSR, and the importance of recognizing and enhancing the redistributive nature of health care

systems by emphasizing five policy goals: universal coverage; public financing; absence or near-absence of user fees for public services; access to a comprehensive range of services; and a private-sector role that clearly complements the public sector.¹⁰ These recommendations are ‘scalable,’ in that they can be applied to health systems in rich and poor countries alike, and are fully in accord with the findings of other recent research syntheses,^{83,84} one of which⁸³ also emphasized the importance of research on why some jurisdictions do far better in providing coverage than others that invest roughly the same amount in publicly financed health services. On this point, **research needs to generate increased understanding of the value of “demand-side” interventions such as improving the accountability of health service providers,⁸⁵ recognizing that supply-side interventions have sometimes had limited success in improving health outcomes.⁸⁶**

Social determinants and Primary Health Care (PHC). The evidence presented to the CSDH further indicated that health systems in low- and middle-income countries deliver better and more equitably distributed health outcomes when organized around PHC. PHC represents a model in which prevention and promotion are in balance with investment in curative interventions, and where the emphasis is on the primary level of care with adequate referral to higher levels of care.¹⁰ However, PHC is more than just a model for service delivery and more than a prescription for low- and middle-income countries alone; **a PHC-based health system is organized around families and communities, mechanisms to enable individual and collective participation in health, and intersectoral action of relevance to all nations.** For example, as part of a larger strategy of building on established child survival and health programs to enhance early childhood development, PHC can incorporate the provision of early childhood development services to children and families who would otherwise have no access to such services, often for relatively low marginal costs. With the 2008 *World Health Report’s* emphasis on the renewed relevance of PHC,⁸⁷ it is important to develop and implement supportive research strategies. Against this background, it is essential to understand that health inequities between countries can never be addressed properly if health service financing must be limited to the funds available from domestic resources – the argument that expansions of coverage must be ‘sustainable’.^{88,89} With much work on identifying resource needs already done, further research on this point could focus on innovative mechanisms for longer-term and predictable forms of global financing of health systems in low-income countries and, as noted earlier, how to ensure that such investments are used to maximum effect within recipient countries.

Health workers. Research and policy need finally to focus on the human component of health-systems development, which has two dimensions. First, the quality, commitment and dedication of health care providers are critical to health, equitable health systems and development. Numerous recent assessments indicate that the ‘brain drain’ of providers from developing countries, especially from those in southern Africa, threatens to precipitate a complete collapse of health systems already stretched to the breaking point by financial constraints and the impacts of HIV and AIDS.^{90,91} Throughout the

world, the role of women in both formal and informal health care provision is drastically neglected and under-reported, and the gendered nature of human resources for health has not figured largely in health research or policy.^{92,93} Second, processes of management and decision-making within the health system itself are important avenues for reducing inequity and empowering the excluded and marginalized, especially when intersectoral action for health is undertaken as part of a strategy of revitalizing PHC.

PANEL 3. Examples of high-priority research questions for understanding health-care system factors that influence health equity

- What are the most effective measures at local, national and international levels for counteracting pressures to commercialize health services and commodify health care?
- How have some low-income countries achieved levels of coverage and health outcomes that are disproportionately high relative to their levels of expenditure? How can the applicability of their strategies in other contexts be increased, and what are the key research questions? Among the issues to be addressed are the design of appropriate regulatory frameworks to ensure that private sector activities contribute to health equity, and the implementation of financing mechanisms that increase cross-subsidies in financing health care for entire national populations.
- What are the experiences of low- and middle-income countries attempting to (re)design health system financing and organization in line with the recommendations of the CSDH and its health systems knowledge network? (A valuable opportunity exists here for prospective research)
- What are the experiences of countries at all income/development levels attempting to revitalize a comprehensive approach to PHC? (Identifying important areas of research in support of the revitalization of PHC is beyond the scope of the current exercise, and demands separate attention.)
- How will the current financial crisis affect public financing for health systems, in particular (but not only) in low- and middle-income countries, and how can governments respond in ways that maintain and enhance health equity?
- What are the most important policy entry points to reduce the health inequities arising from health worker migration patterns? Who are the critical policy actors?
- What are the most important 'demand-side' aspects of promoting equitable health service access (e.g. information constraints relating to understanding of ill-health and what health services have to offer, power imbalances between health professionals and the users of health services⁹⁴)?
- How can health systems contribute to actions on social and environmental health determinants through, amongst others, inclusive approaches to health service priority-setting, planning and delivery; community development; partnership development; policy advocacy; strengthening working relationships with civil society?
- What governance structures for health systems work best to sustain active community

participation, inter-sectoral action on social determinants of health, and the abilities of community members to influence policies?

- Within the health system, what strategies are most effective for building the institutions (norms, values, etc.) that sustain equity-promoting action through leadership and management initiatives?
- Under what policy and implementation models does decentralization lead to improved local decision-making, net health equity gains and community empowerment?
- How do different funding, delivery and management models of PHC affect comprehensiveness and equity in access to services?
- What are the most attractive mechanisms for mobilizing additional financing for low- and middle-income country health systems? How can these mechanisms be implemented in ways that ensure funds will flow to PHC and other health system modalities that reduce inequities?

**(4) From “problem space” to “solution space”:
effective policy interventions to reduce health inequity**

Against the background of the evidence presented in the preceding discussions, and of emerging research findings in each of these areas, the research agenda must also place great emphasis on the design of more effective interventions,⁹⁵ keeping in mind that **the term “intervention” will probably always be used in multiple ways, corresponding to various scales ranging from the nation (and indeed the international economic order) to the local community.** In some cases typical public health interventions, if applied in the traditional (non-equity-focused) way, could actually increase inequalities since high-income groups may generally be better able to access and utilize services or knowledge from health system interventions.^{96,97} (This criticism is perhaps less applicable to interventions at a policy level that are explicitly designed to be redistributive.) Likewise, programme designs outside the health sector, even when they are meant to address low income groups, may fail to reach the most vulnerable groups.⁹⁸ Furthermore, it makes a difference whether the primary concern is with improving the health of the most disadvantaged members of a population (reducing health gaps), or reducing the steepness of the socioeconomic gradient in health across an entire population.⁹¹ The importance of this distinction emerged with special clarity from the Whitehall studies of British civil servants, which demonstrated a pronounced socioeconomic gradient across the entire study population that could not be accounted for by material deprivation in any absolute sense.^{99,100,101}

Privilege solution space: identifying policies and interventions that reduce inequities.

Research oriented toward reducing health inequity has until recently been devoted more to explaining health inequities than to designing and evaluating policy interventions to address the inequities. In other words, it has focused on what might be

called the “problem space”: knowing what social structures, indicators, and processes are associated with health inequalities.¹⁰² A promising and expanding body of research evidence now addresses what might be called the “solution space”: the strategic drivers of reductions in health disparities, the differential health effects of policy interventions, and the implications alternative options for enhancing equity. Further, many of the research questions identified in Panel 3 address information needs related to the “solution space”. The urgent task now is to build bridges between researchers who work primarily in one or the other of these spaces (*Panel 4*).

Policy interventions that are primarily intended to deal with social problems of various kinds, but without a specific focus on health, are important for understanding the prevalence and distribution of health risks. As noted in the earlier discussions of health impact assessment, more robust approaches are needed to evaluating the impact on health outcomes and health equity of such policies. Conditional cash transfer programs, now widespread in Latin America and being promoted elsewhere, have been evaluated using randomized controlled trials,¹⁰³ but this will often not be possible, necessary or ethically appropriate. In such situations, it is important to be able to compare the health equity impacts of different levels and forms of social provision. Among the information needs for such comparisons are improved measures of the actual level of social provision – for instance, by imputing a monetary value to the provision of publicly financed services¹⁰⁴, since they represent an important, potentially redistributive transfer of resources that is not reflected in statistical comparisons of household income. (Health care services are only the most obvious illustration; we would expect markedly different health outcomes in two societies with identical distributions of income after taxes and transfers if one provided publicly financed health insurance, while the other relied on private insurance and out-of-pocket payment.)

It is also necessary to consider that **policy interventions, and hence policy relevant research, do not need to be initiated at a scale corresponding to the proximate manifestations of the health risks that they address.** For example, a large and expanding literature describes the negative health effects of social disadvantage at the small area or neighbourhood level in cities.^{105,106,107} The major influences on neighbourhood-level disadvantage, however, may require policy attention at the state/provincial or national level, being largely outside the control of local or metropolitan governments.

Public health interventions are most effective when target communities and groups are involved in all aspects of policy and programme development, implementation and evaluation.^{108,109,110} For this reason, a need exists not only for participatory research on the experiences of people most severely affected by the social determinants of health inequities, but also for research on how most effectively to involve them in the design and implementation of interventions.

Regardless of the scale at which an intervention is implemented or the problem it is designed to address, 'one size fits all' approaches may not produce the anticipated results. There is still limited research evidence relating to the circumstances under which interventions tested in Setting A can be generalized to Setting B. Stated differently, the primary focus in evaluation has been on questions of simple causality. More emphasis is needed on evaluation methodologies that assess factors affecting the generalizability of the intervention, and that get inside the "black box" to understand not only that interventions work, but also why they work.¹¹¹ What makes a "best practice" portable? This requires attention *inter alia* to the heterogeneous mechanisms by which interventions succeed. In what contextual settings are interventions most likely to work and for whom? A further need is for a research focus on processes of decision-making, adaptation and management that will enable an intervention to work in multiple settings.

'Natural policy experiments' are situations in which the introduction of a specific policy provides the opportunity for a quasi- experimental design or a comparative analysis that can be used to identify the policy's impacts on different social groups. Special attention must be paid to identifying the research opportunities associated with such situations. Comparing the health consequences of national responses to the financial crisis, as suggested earlier, is one obvious example. Others involve, for instance, health equity assessments of urban renewal initiatives or changes in systems of social security.

Research evidence is of no value to policy-makers unless they have access to it. Thus, an international reporting system for information on ongoing and completed studies (using various methodologies) of policy interventions that address the social determinants of health needs to be encouraged. While the usual mechanisms of academic dissemination remain essential, not least as an assurance of methodological rigour, processes of translation that ensure relevance to policy makers and programme designers are critical. Special caution is in order about the relevance of large-scale, electronic information-sharing platforms to low- and middle-income country contexts where bandwidth and other resources may be limited.

Norms for research addressing equity and health. Finally, the decision-making processes that determine how evidence is defined, how standards of proof are set, and how evidence provided by different stakeholders is valued (e.g. international and national scientific groups, private industry, academic researchers and civil society organizations) are in themselves important issues for research, since the value-laden question of how much evidence is enough to act upon is central to the enterprise of reducing health inequity by way of action on social determinants of health.²³

PANEL 4. Examples of high-priority research questions for understanding effective policy interventions to reduce health inequity

- What is the state of current knowledge with respect to demonstrably effective policy entry points for reducing health inequity by way of social determinants of health? What standards of proof are, and should be, applied in research on such interventions?
- What is the state of current knowledge with respect to health impact assessment (HIA) methodologies? How can they best be applied to interventions that address, e.g., housing, education, or international trade? What can be learned from experience with environmental impact assessments about the circumstances in which impact assessment is, and is not, effective?
- What methodologies are most appropriate for evaluating and addressing interventions that seek to alter several variables simultaneously?
- What methodologies allow for comparative analyses of intervention research to identify generalizable 'best practice' knowledge with respect to reducing health inequity?
- When should research and intervention designs distinguish more effectively between 'health gaps' and socioeconomic gradients in health? How can this best be done?
- For purposes of research on socioeconomic gradients in health status, how can indicators of social position and social stratification be improved?
- How can national and (eventually) cross-national comparative data on the extent of redistribution through social provision in kind (e.g. of health care, education, housing) be developed most effectively?
- As the current financial crisis unfolds, what are the most effective interventions, on a variety of scales, in terms of protecting against adverse effects on health equity? What research infrastructure needs most immediately to be put in place to answer this question?
- What are the most appropriate ways of involving targeted communities or populations in all aspects of intervention development, implementation and evaluation?
- How can natural policy experiments best be used to assess the impact on health equity of major social and health policies? What resources and infrastructure are needed to enable researchers to take advantage of such natural experiments more systematically?
- How can interventions to reduce health inequities reach hard-to-reach and hard-to-engage populations? Are special sampling techniques being used to reach the hardest to reach? What ensures that individuals affected by multiple forms of disadvantage do not drop out of interventions?
- What monitoring strategies and indicators will most effectively assist low- and middle-income countries, in particular, to assess and improve their compliance with health-related obligations under human rights instruments such as the Convention on the Rights of the Child and the International Covenant on Economic, Social and Cultural Rights? What are the most immediate needs for capacity-building?
- What are the most promising entry points for health equity-oriented foreign policies: that is, for policy interventions that address health equity outside a country's own borders?
- What programs and strategies will be most useful in enabling low- and middle-income countries, in particular, to incorporate health considerations into their negotiating

positions in such areas as trade and investment policy? What are the most immediate needs for capacity-building?

III. Next steps

In keeping with the final report of the Commission on Social Determinants of Health, this issues paper argues that health inequities originate in the economic, social and environmental determinants of health, in the policies that influence the distribution of these determinants and in the political and economic interests that shape these policies. These conditions are being powerfully transformed by a process of globalisation that has often been inimical to health equity, and indeed equity more generally. Research processes that seek to advance health equity must generate knowledge that confronts these trends and evidence that promotes health equity in a way that preferentially benefits the most disadvantaged in society, that supports intersectoral action, and that can also serve as a resource for advocacy in support of health equity.

The high-level priorities implied by this analysis are fully in keeping with the 2008 *Draft WHO Strategy on Research for Health*,¹¹² which identified the need for WHO to increase the number of staff with the relevant skills and understandings of research; to provide incentives for them to improve their research-related competencies; to develop a dedicated budget for research; to build external partnerships more proactively; and to redesign its own organizational and financial arrangements to support that process.

Keeping in mind the **four strategic questions** identified at the start of the paper, it is possible to identify three generic directions for policy, program development and resource allocation that will increase the ability of WHO member governments to generate innovative responses.

(1) **Building a critical mass of professional staff with backgrounds in social science and other non-biomedical, non-biostatistical disciplines relevant to social determinants of health**, in order both to provide necessary technical support for member governments and to enable WHO to function as an effective advocate on the global stage.

(2) **Building networks for research support and advocacy and pursuing new research partnerships** focused on social determinants of health with academic research units, civil society organisations, and UN system entities with relevant expertise. Key UN system agencies include the UN Development Programme, the Department of Economic and Social Affairs, UNICEF (e.g. through the Innocenti Research Centre), and the International Labour Organization. These agencies collectively offer an immense body of research evidence and wisdom about the operations of the global political-economic system; WHO must draw on this expertise and avoid duplicating existing research efforts.

(3) **Establishing and expanding a budget dedicated to research related to social determinants of health.** This implies mobilizing the resources necessary to support considerable increases in the budget allocation for Strategic Priority 7 (“To address the underlying social and economic determinants of health determinants through policies and programmes that enhance health equity and integrate pro-poor, gender-responsive, and human rights rights-based approaches”) in WHO’s 2008-13 medium-term strategic plan, as well as intensive internal efforts within the organization to infuse consideration of social determinants of health into the research associated with other strategic priorities. It may be valuable to engage outside experts to guide this organizational rethinking.

The above **generic directions** constitute, in effect, essential steps in the construction of the research and knowledge-sharing infrastructure that is necessary for creative response to more specific research needs. For example, with respect to global factors and processes that affect health equity, WHO need not duplicate existing bodies of expertise, but could build internal capacity sufficient to assess its relevance for social determinants of health, identify where to leverage on-going processes towards health, and must pursue partnerships with the agencies and institutions outside the health sector where that expertise resides. With respect to how to influence policy, WHO could be crucial to capacity building, technical support and mobilizing or brokering additional resources for monitoring, surveillance and evaluation of complex multisectoral interventions that address social determinants of health. It could also take a leadership role in norms and standards, knowledge transfer and international cooperation. As priority-setting proceeds within the substantive areas set out here, it will be helpful to incorporate the procedural guidelines proposed by a 2008 WHO workshop on priority setting for health research,¹¹³ with the crucial provision that an equity dimension must always be explicitly incorporated.

The report of the CSDH has placed health equity on the agenda of the international community in an unprecedented way, and the initial response of the research community has been heartening. On the other hand, the threat of worldwide recession (or worse) may lead citizens and governments to retreat into concern for the familiar and the immediate – meaning that health equity and associated concerns, such as the inequitable impacts of global climate change or pandemics, will be regarded as items of luxury consumption in the policy shopping cart, to be left on the shelf until times are better. This would be both intellectually inappropriate – the financial crisis also presents a valuable opportunity to redesign key international institutions and rebuild domestic regulatory apparatuses in ways that could be supportive of health equity – and ethically indefensible.

Acknowledgements

The authors would like to thank Johannes Sommerfeld for valuable comments on the draft report.

DRAFT

Annex 1: Main recommendations related to evidence gaps and research priorities from the Symposium on Social Determinants of Health, Rio de Janeiro, Brazil, September 2007, and at the Global Forum for Health Research, Beijing, October 2007

1. Main evidence gaps identified across knowledge networks:

- Many themes lacked data and primary studies
- Experiments and experiences are under-reported in network member's views
- There is an inadequate contextualization of experience
- Limited successful policy interventions where impact on health equity is documented, i.e. across social gradient or specific disadvantaged and marginalized groups
- Limited to no synthesis, particularly incorporating low and middle income country experiences and community-level innovations

2. Further develop theoretical frameworks, some examples:

- linking across causal chain, social determinants and outcomes, such as showing the links and pathways that create employment dimensions leading to poor health outcomes
- accounting for a standardized range of explanatory factors
- understanding the intersection of the two axis of the health gradient e.g. health inequities and degree of social inequality in each society or stratification

3. Address frontier issues, such as biological and social interface, some examples:

- the extent and nature of sex-specific needs in health conditions that affect women and men
- understanding of effects of environments on biological embedding and early childhood development

4. Support decision making on alternative interventions, including costs and effectiveness of interventions incorporating an equity perspective, some examples:

- early childhood development programs in low income countries; participatory and community based interventions to address social determinates in urban settings

5. Need for norms and standards on doing primary research in this area, and better or more rigorous research syntheses, some examples:

- of available country experiences of processes to bring about and sustain policy changes, particularly equity-oriented changes
- ways to design and synthesize case studies to enable drawing out of lessons for other contexts

6. Implications for working together, including:

- Facilitate greater desegregation by "equity-stratifiers" (place of residence, gender, wealth, race/ethnicity, etc.) .
- Strengthen health professionals' capacities to understand social determinants and use of equity-stratified information
- Intensify collaboration, integration and leadership of scientists & institutions from low and middle income countries. Although not new, this message deserves to be and must be repeated.
- Improve norms and standards to advance the agenda together:
- Recognize that more complex and long study designs need to be added to more short-term policy oriented research or synthesis activities

Annex 2. Main recommendations from the "learning & working together to improve the broader determinants of health" session held during the Bamako Ministerial Forum on Health Research, Mali, November 2008

1. New research and research synthesis design and topics

- Invest in generating and sharing new evidence on ways in which social determinants influence population health and health equity and on the effectiveness of measures to reduce health inequities, particularly in low- and middle- income countries.
- Continue to improve knowledge in areas for action (as identified by the Commission and its knowledge networks and civil society work streams).
- Increase evaluative research and include participatory action research involving the people targeted by action.

2. Strengthening specific national and regional capacities, including those of existing institutions and individuals

- Create and strengthen monitoring systems for health equity, such as via National Public Health Institutes (NPHI) that are found in many countries.
- Build on existing networks and extend their reach and interest in taking on social determinants and health equity themes, such as the Global Development Network, the Pasteur Institutes, Equidad, Cochrane and Campbell Collaborations, etc.
- Link existing institutions and individuals around the theme of social/economic/political determinants of health and health equity.

3. Extending the reach and shaping the agenda of academic and action-oriented international networks

- The use of Knowledge Networks (KN) as a model for global research should be fostered.

4. Recognizing communities' contribution to research and further institutionalizing community participation in research processes.

- The peer review process should engage non-traditional actors (e.g., indigenous groups).
- Identify avenues for more equal forms of partnerships with civil society organizations.

5. Approaches to engage political commitment to advance research agenda

- Integrate equity effectiveness into policy analysis and synthesis by looking at whether policies in multiple sectors (e.g., transportation, justice, education, health) can improve health equity across the entire population, including the most vulnerable and socially excluded.
- WHO including regional and country levels, with partners, to support advancing this research agenda on broader determinants of health and improving health equity among other contemporary efforts; partners include bilaterals, scientific institutions and networks, and civil society organizations.

Annex 3. Main recommendations from "social forces and global health" session, World Social Science Forum, Bergen, Norway, May 2009 (to follow)

DRAFT

Annex 4. Main recommendations from International Society for Equity in Health workshop addressing the four strategic questions, Crete, June 2009 (to follow)

DRAFT

References

- ¹ WHO Task Force on Research Priorities for Equity in Health, WHO Equity Team. Priorities for research to take forward the health equity policy agenda. *Bulletin of the World Health Organization* 2005;83:948-953.
- ² World Health Organization. *Global Strategy for Health for All by the Year 2000*. Geneva: World Health Organization, 1981.
- ³ World Health Organization. *Targets for Health for All*. Copenhagen: World Health Organization Regional Office for Europe, 1985.
- ⁴ World Health Organization. *Health21 – Health for All in the 21st Century*. Copenhagen: World Health Organization Regional Office for Europe, 1998.
- ⁵ Braveman P, Tarimo E, Creese A, et al. *Equity in health and health care: a WHO initiative*. Geneva: World Health Organization, October 1996 (WHO/ARA/96.1).
- ⁶ United Nations General Assembly. United Nations Millennium Declaration, A/RES/55/2. New York: United Nations, 2000.
- ⁷ Commission on Social Determinants of Health. *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*. Geneva: World Health Organization. 2008.
- ⁸ Evans T, Whitehead M, Diderichsen F, Bhuiya A, Wirth M. (eds). *Challenging inequities in health: from ethics to action*. New York: Oxford University Press, 2001.
- ⁹ EQUINET steering committee. *Turning values into practice: Equity in Health in Southern Africa*, EQUINET Policy Series No.7. Harare, Zimbabwe: Benaby Printers, 2000.
- ¹⁰ Gilson L, Doherty J, Loewenson R, Francis V with inputs and contributions from the members of the Knowledge Network. *Final report of the Health Systems Knowledge Network of the Commission on Social Determinants of Health*. Geneva: World Health Organization, 2007; http://www.who.int/social_determinants/resources/csdh_media/hskn_final_2007_en.pdf
- ¹¹ Evans RG, Stoddart GL. Producing Health, Consuming Health Care. *Social Science & Medicine* 1990;31:1347-1363.
- ¹² Bates I, et al. Vulnerability to malaria, tuberculosis, and HIV/AIDS infection and disease, part 1: determinants operating at individual and household level. *Lancet Infectious Diseases* 2004;4:267-277.
- ¹³ Bates I, et al. Vulnerability to malaria, tuberculosis, and HIV/AIDS infection and disease, part 2: determinants operating at environmental and institutional level. *Lancet Infectious Diseases* 2004;4:368-375.
- ¹⁴ James, PD, Wilkins R, Detsky AS, Tugwell P, Manuel DG. Avoidable mortality by neighbourhood income in Canada: 25 years after the establishment of universal health insurance. *Journal of Epidemiology and Community Health*; 2007; 61: 287-296.
- ¹⁵ Marmot M. Inequalities in Health: Causes and Policy Implications. In: Tarlov AR, St. Peter RF (eds.), *The Society and Population Health Reader*, vol. 2: *A State and Community Perspective* (pp. 293-309). New York: New Press.

¹⁶ Kelly MP, Stewart E, Morgan A, Killoran A, Fisher A, Threlful A, Bonnefoy, J. A conceptual framework for public health: NICE's emerging approach, *Public Health* 2009; 123:e14-e20.

¹⁷ Vaghri Z, personal communication, February 2009.

¹⁸ Diderichsen F, Evans T, Whitehead M. The social basis of disparities in health. In: Evans T, Whitehead M, Diderichsen F, Bhuiya A, Wirth M (eds). *Challenging inequities in health: from ethics to action*. New York: Oxford University Press, 2001.

¹⁹ Saracci R, Olsen J, McMichael A. Europe's health research: getting the right balance. *BMJ* 1998;316:795.

²⁰ Chan M. The impact of global crises on health: money, weather and microbes, address at 23rd Forum on Global Issues, Berlin, March 18, 2009 [online]; http://www.who.int/dg/speeches/2009/financial_crisis_20090318/en/index.html.

²¹ Iyer A, Sen G, Östlin P. (2008) The intersections of gender and class in health status and health care. *Global Public Health* 2008, Supplement 1;3(2):13-24.

²² Schrecker T. Denaturalizing scarcity: a strategy of inquiry for public health ethics. *Bulletin of the World Health Organization* 2008;86: 600-605.

²³ Marmot M, Friel S. Global health equity: evidence for action on the social determinants of health. *Journal of Epidemiology and Community Health* 2008; 62:1095-1097.

²⁴ Benzeval M, Judge K, Whitehead M (eds). *Tackling inequalities in health: an agenda of action*. London: King's Fund, 1995.

²⁵ Östlin P, Sen G, George A. 2004. Paying attention to gender and poverty in health research: content and process issues. *Bulletin of the World Health Organization* 2004;82;740-745.

²⁶ Sen G, George A, Östlin P (eds). *Engendering International Health - the challenge of equity*. Cambridge: MIT Press, 2002.

²⁷ Diderichsen F., Hallquist J. (1998). Social inequalities in health: some methodological considerations for the study of social position and social context. In: Arve-Parés B. (ed) *Inequality in Health – A Swedish Perspective*. Stockholm: Swedish Council for Social Research.

Deleted: ¶

²⁸ Solar O, Irwin A. Towards a conceptual framework for analysis and action on the social determinants of health. Geneva: Commission on Social Determinants of Health, 2007; http://www.who.int/social_determinants/resources/csdh_framework_action_05_07.pdf.

²⁹ Dollar D. Is globalization good for your health? *Bulletin of the World Health Organization* 2001;79;827-833.

³⁰ Dollar D, Kraay A. *Growth is good for the poor*. Washington, DC: World Bank, 2000.

³¹ Birdsall N. *The World is Not Flat: Inequality and Injustice in our Global Economy*, WIDER Annual Lecture. Helsinki: World Institute for Development Economics Research, 2006; http://www.wider.unu.edu/publications/annual-lectures/en_GB/AL9/ files/78121127186268214/default/annual-lecture-2005.pdf

- ³² Cornia GA. Globalization and health: results and options. *Bulletin of the World Health Organization* 2001;79:834-841.
- ³³ Labonté R, Blouin C, Chopra M, Lee K, Packer C, Rowson M et al. *Towards Health-Equitable Globalization: Rights, Regulation and Redistribution, Globalization Knowledge Network Final Report to the Commission on Social Determinants of Health*. Ottawa: Institute of Population Health, University of Ottawa, 2007; http://www.who.int/social_determinants/resources/gkn_final_report_042008.pdf
- ³⁴ Schrecker T, Labonte R, De Vogli R. Globalisation and Health: The need for a global vision. *The Lancet* 2008;372:1670-1676.
- ³⁵ Cornia GA, Rosignoli S, Tiberti L. *Globalization and Health: Impact Pathways and Recent Evidence*, WIDER Research Paper No. 2008-74. Helsinki: World Institute for Development Economics Research, 2008; http://www.wider.unu.edu/publications/working-papers/research-papers/2008/en_GB/rp2008-74/.
- ³⁶ United Nations. *Social Justice in an Open World: The role of the United Nations*, Department of Economic and Social Affairs (DESA), Division for Social Policy and Development, New York, 2006. <http://www.un.org/esa/socdev/documents/ifsd/SocialJustice.pdf>
- ³⁷ Lee K. Globalization: a new agenda for health? In: McKee M, Garner P, Scott R (eds.) *International Cooperation in Health*. Oxford: Oxford University Press, 2001.
- ³⁸ Muroyi R, Tayob R, Loewenson R. *Trade Protocols and Health: Issues for Health Equity in Southern Africa*, Paper produced for the EQUINET/GEGA/SADC Parliamentary Forum Regional Meeting on Parliamentary Alliances for Equity in Health South Africa, August 2003, EQUINET Discussion Paper 17. Harare, Zimbabwe: EQUINET, 2003.
- ³⁹ Laurie M, Petchesky R. Gender, health, and human rights in sites of political exclusion. *Global Public Health* 2008; Supplement 1, 3(2):25-41.
- ⁴⁰ Barrientos S, Kabeer N, Hossain N (2004). *The gender dimensions of the globalization of production*, Working Paper No. 17. Geneva: Policy Integration Department, World Commission on the Social Dimensions of Globalization, International Labour Office.
- ⁴¹ Edmonds E, Pavcnik N. *Does Globalization Increase Child Labour? Evidence from Vietnam*, NBER Working Paper No. 8760. Cambridge, MA: National Bureau of Economic Research, 2002.
- ⁴² Edmonds E, Pavcnik, N. The effect of trade liberalization on child labor. *Journal of International Economics* 2005; 65:401-419.
- ⁴³ McMichael AJ, Friel S, Nyong A, Corvalan C. Global environmental change and health: impacts, inequalities, and the health sector. *BMJ* 2008;336:191-194.
- ⁴⁴ Pollock MP, Price D. Rewriting the regulations: how the World Trade Organization could accelerate privatisation in health-care systems. *The Lancet* 2000;356:1995-2000.
- ⁴⁵ Scott-Samuel A, O'Keefe E. Health impact assessment, human rights and global public policy: a critical appraisal. *Bulletin of the World Health Organization* 2007;85:212-217.
- ⁴⁶ Hunt P. *Economic, Social and Cultural Rights: The right of everyone to the enjoyment of the highest attainable standard of physical and mental health, Addendum: Mission to the World Trade Organization*,

E/CN.4/2004/49/Add.1. Geneva: United Nations Economic and Social Council;
[http://www.unhcr.ch/Huridocda/Huridoca.nsf/e06a5300f90fa0238025668700518ca4/5860d7d863239d82c1256e660056432a/\\$FILE/G0411390.pdf](http://www.unhcr.ch/Huridocda/Huridoca.nsf/e06a5300f90fa0238025668700518ca4/5860d7d863239d82c1256e660056432a/$FILE/G0411390.pdf).

⁴⁷ Eichengreen B. Financial Instability. In Lomborg B (ed.), *Global Crises, Global Solutions* (pp. 251-289). Cambridge: Cambridge University Press, 2004.

⁴⁸ Commonwealth Heads of Government Meeting on Reform of International Institutions. Marlborough House Statement on Reform of International Institutions. London: Commonwealth Secretariat, June 10, 2008; http://www.thecommonwealth.org/files/180214/FileName/HGM-RII_08_-_MARLBOROUGHHOUSESTATEMENTONREFORMOFINTERNATIONALINSTITUTIONS.pdf.

⁴⁹ Diderichsen F. Income maintenance policies: determining their potential impact on socio-economic inequalities in health. In: Machenbach JP, Bakker MJ (eds). *Reducing inequalities in health: A European perspective*. London: Routledge, 2002.

⁵⁰ Employment Conditions Knowledge Network. *Final Report to the WHO Commission on Social Determinants of Health*. Barcelona: Health Inequalities Research Group, Universitat Pompeu Fabra, 2007; http://www.who.int/social_determinants/resources/articles/emconet_who_report.pdf.

⁵¹ UNICEF (2005). *Child Poverty in Rich Countries 2005*. Florence: UNICEF Innocenti Research Centre.

⁵² Keleher H, Franklin L. Changing gendered norms about women and girls at the level of household and community: a review of the evidence *Global Public Health* 2008; Supplement 1, 3(2):24-57.

⁵³ Whitehead M, Dahlgren G, Evans T. Equity and health sector reforms: can low-income countries escape the medical poverty trap? *The Lancet* 2001;358:833-836.

⁵⁴ Van Doorslaer E et al. Effect of payments for health care on poverty estimates in 11 countries in Asia: an analysis of household survey data. *The Lancet* 2006;368:1357-1364.

⁵⁵ Heymann J. *Forgotten Families: Ending the Growing Crisis Confronting Children and Working Parents in the Global Economy*. Oxford: Oxford University Press, 2006.

⁵⁶ Irwin LG, Siddiqi A, Hertzman C and the Early Child Development Knowledge Network. *Early child development: a powerful equalizer*, Final report of the Early Child Development Knowledge Network of the Commission on Social Determinants of Health. Geneva: World Health Organization, 2007; http://www.who.int/social_determinants/resources/ecd_kn_report_07_2007.pdf.

⁵⁷ Bonnefoy J, personal communication, February 2009.

⁵⁸ Lundberg O, Åberg Yngwe M, Kölegård Stjärne M, Björk, L, Fritzell, J. *NEWS. The Nordic Experience: Welfare States and public health*, Health Equity Studies #12. Stockholm: Centre for Health Equity Studies, 2008. http://www.chess.su.se/content/1/c6/04/65/23/NEWS_Rapport_080819.pdf.

⁵⁹ Lundberg O, Åberg Yngwe M, Kölegård Stjärne M, Elstad JI, Ferrarini T, Kangas O, Norström T, Palme J, Fritzell J, for the NEWS Nordic Expert Group. The role of welfare state principles and generosity in social policy programmes for public health: an international comparative study. *The Lancet* 2008;372:1633-1640.

- ⁶⁰ Garau P, Sclar ED, Carolini GY. *A Home in the City: UN Millennium Project Task Force on Improving the Lives of Slum Dwellers*. London: Earthscan, 2005.
- ⁶¹ Kjellström T, Mercado S, Satterthwaite D, McGranahan G, Friel S, Havemann K. *Our cities, our health, our future: Acting on social determinants for health equity in urban settings - Report to the WHO Commission on Social Determinants of Health from the Knowledge Network on Urban Settings*. Kobe: WHO Centre for Health Development, 2007; http://www.who.int/social_determinants/resources/knus_report_16jul07.pdf.
- ⁶² Dreier P, Mollenkopf J, Swanstrom T. (2004). *Place Matters: Metropolitcs for the Twenty-first Century*, 2nd ed. Lawrence, KS: University of Kansas Press.
- ⁶³ United Nations Centre for Human Settlements (2001). *Cities in a Globalizing World: Global Report on Human Settlements 2001*. London: Earthscan; <http://www.unhabitat.org/pmss/getPage.asp?page=bookView&book=1618>.
- ⁶⁴ McDonald D, Ruiters G (eds). *The Age of Commodity: Water Privatization in Southern Africa*. London: Earthscan, 2005.
- ⁶⁵ Loftus A, McDonald, D. Of liquid dreams: A political ecology of water privatization in Buenos Aires. *Environment & Urbanization* 2001;13:179-200.
- ⁶⁶ Fudge J, Cossman B. Introduction: Privatization, Law, and the Challenge to Feminism. In Cossman B, Fudge J (eds.), *Privatization, Law, and the Challenge to Feminism* (pp. 3-40). Toronto: University of Toronto Press, 2002.
- ⁶⁷ Basu S. AIDS, empire, and public health behaviourism. *International Journal of Health Services* 2004;34:155-167.
- ⁶⁸ Baum F, Sanders D. Can health promotion and primary health care achieve Health for All without a return to their more radical agenda? *Health Promotion International* 1995; 10: 149-160.
- ⁶⁹ Dean K. Integrating theory and methods in population health research. In: Dean K. *Population health research: linking theory and methods*. Thousands Oaks, California: Sage, 1993.
- ⁷⁰ Blane D. The Life Course, the Social Gradient, and Health. In Marmot M, Wilkinson RG (eds.), *Social Determinants of Health* (2nd ed., pp. 54-77). New York: Oxford University Press, 2006.
- ⁷¹ Brunner E, Marmot M. Social Organization, Stress, and Health. In Marmot M, Wilkinson RG (eds.), *Social Determinants of Health* (2nd ed., pp. 6-30). New York: Oxford University Press, 2006.
- ⁷² Geronimus AT, Hicken M, Keene D, Bound J. "Weathering" and Age Patterns of Allostatic Load Scores Among Blacks and Whites in the United States. *American Journal of Public Health* 2006; 96: 826-833.
- ⁷³ Blas E, Gilson L, Kelly M, Labonté R, Lapitan L, Muntaner C, Östlin P, Popay J, Sadana R, Sen G, Schrecker T, Vaghri Z. Addressing social determinants of health inequities: what can the state and civil society do? *The Lancet* 2008;372:1684-89,
- ⁷⁴ Lehto J, Ritsatakis A. 1999. *Health impact assessment as a tool for intersectoral health policy*. Brussels: European Centre for Health Policy/WHO Regional Office for Europe, 1999.
- ⁷⁵ Whitehead M, Burström B, Diderichsen F. Social policies and the pathways to inequalities in health: A comparative analysis of lone mothers in Britain and Sweden. *Social Science & Medicine* 2000;50:255-270.

- ⁷⁶ Farmer P. *Infections and Inequalities: The Modern Plagues*. Berkeley: University of California Press, 1999.
- ⁷⁷ Farmer P. *Pathologies of Power: Health, Human Rights and the New War on the Poor*. Berkeley: University of California Press, 2003.
- ⁷⁸ Mackenbach J, Bakker MJ, Kunst AE, Diderichsen F. Socioeconomic inequalities in health in Europe: an overview. In Mackenbach JP, Bakker, MJ. (eds) *Reducing Inequalities in Health: A European perspective*. London: Routledge, 2002.
- ⁷⁹ Lister J. *Health Policy Reform: Driving the Wrong Way? A critical guide to the global 'health reform' industry*. London: Middlesex University Press, 2005.
- ⁸⁰ De Savigny D, Kasale H, Mbuya C, Reid G. *Fixing Health Systems*. Ottawa: International Development Research Centre, 2004.
- ⁸¹ Standing H. Frameworks for understanding health sector reform. In: Sen G, George A, Östlin P (eds.), *Engendering International Health: the challenge of equity*. Cambridge, MIT Press, 2002.
- ⁸² Xu K, Evans D, Carrin G, Aguilar-Rivera A, Musgrove P, Evans T. Protecting households from catastrophic health spending. *Health Affairs* 2007;26:972-983.
- ⁸³ Rannan-Eliya R. Strengthening Health Financing in Partner Developing Countries. In: Task Force for Global Action for Health System Strengthening, *Global Action for Health System Strengthening: Policy Recommendations to the G8* (pp. 59-90). Tokyo: Japan Center for International Exchange, 2009; <http://www.icie.org/researchpdfs/takemi/full.pdf>.
- ⁸⁴ Marriott M. *Blind Optimism: Challenging the myths about private health care in poor countries*, Oxfam Briefing Paper 125. London: Oxfam International, 2009.
- ⁸⁵ Murthy KR. Strengthening accountability to citizens on gender and health. *Global Public Health* 2008; Supplement 1, 3(2):104-120.
- ⁸⁶ Standing H. *Understanding the 'demand side' in service delivery: Definitions, frameworks and tools from the health sector*. London: Department for International Development, 2004.
- ⁸⁷ World Health Organization (2008). *World Health Report 2008: Primary Health Care – Now More than Ever*. Geneva: WHO.
- ⁸⁸ Ooms G, Van Damme W, Baker B, Zeitz P, Schrecker T. The 'diagonal' approach to Global Fund financing: a cure for the broader malaise of health systems? *Globalization and Health* 2008; 4; <http://www.globalizationandhealth.com/content/4/1/6>.
- ⁸⁹ Sachs J. Beware False Tradeoffs. *Foreign Affairs* [online], January 2008; http://www.foreignaffairs.org/special/global_health/sachs.
- ⁹⁰ Aitken JM, Kemp J. *HIV/AIDS, Equity and Health Sector Personnel In Southern Africa*, EQUINET Discussion Paper Number 12. EQUINET and OXFAM GB. Harare, Zimbabwe: EQUINET and Oxfam GB, 2003; <http://www.equinet africa.org/bibl/docs/hivpersonnel.pdf>.

- ⁹¹ Chen L et al. Human resources for health: overcoming the crisis. *The Lancet* 2004; 364:1984-1990.
- ⁹² Gupta N, Diallo K, Zurn P, Dal Poz M. Assessing human resources for health: What can be learned from labour force surveys? *Human Resources for Health* 2003; 1(5).
- ⁹³ George A. Nurses, community health workers, and home carers: gendered human resources compensating for skewed health systems. *Global Public Health* 2008; Supplement 1, 3(2):75-89.
- ⁹⁴ Govender V, Penn-Kekana L. Gender biases and discrimination: a review of health care interpersonal interactions. *Global Public Health* 2008; Supplement 1, 3(2):90-103.
- ⁹⁵ Petticrew M, Whitehead M, Macintyre S, Graham H, Egan M. Evidence for public health policy on inequalities, Part I: the reality according to policymakers. *J Epid Community Health* 2004;58:811-816.
- ⁹⁶ Victora CG, Vaughan PJ, Barros FC, Silva AC, Tomasi E. How can we explain trends in inequalities? Evidence from Brazilian child health studies. *The Lancet* 2000;356:1093-1098.
- ⁹⁷ Graham H, Kelly MP. *Health inequalities: concepts, frameworks and policy*, London: Health Development Agency, 2004; <http://www.nice.org.uk/page.aspx?o=502453>
- ⁹⁸ Victora CG, Huicho L, Amaral JJ, et al. Are health interventions implemented where they are most needed? District uptake of the Integrated Management of Childhood Illness strategy in Brazil, Peru and the United Republic of Tanzania. *Bulletin of the World Health Organization* 2006;84:792-801.
- ⁹⁹ Marmot M, Smith GD, Stansfeld S, Patel C, North F, Head J et al. Health inequalities among British civil servants: the Whitehall II study. *Lancet* 1991;337:1387-1393.
- ¹⁰⁰ Marmot M, Ryff CD, Bumpass LL, Shipley M, Marks NF. Social inequalities in health: Next questions and converging evidence. *Social Science & Medicine* 1997;44:901-910.
- ¹⁰¹ Siegrist J, Marmot M. Health inequalities and the psychosocial environment--two scientific challenges. *Social Science & Medicine* 2004;58:1463-1473.
- ¹⁰² Muntaner C, Sridharan S, Solar O, Benach J. "Against the unjust global distribution of power and money": The WHO Social Determinants of Health Report, global inequality and the future of public health policy. *Journal of Public Health Policy* (in press)
- ¹⁰³ Lagarde M, Haines A, Palmer N. Conditional Cash Transfers for Improving Uptake of Health Interventions in Low- and Middle-Income Countries: A Systematic Review. *Journal of the American Medical Association (JAMA)* 2007;298:1900-1910.
- ¹⁰⁴ Dunn JR, Burgess B, Ross NA. Income distribution, public services expenditures, and all cause mortality in US states. *Journal of Epidemiology and Community Health* 2005; 59:768-774.
- ¹⁰⁵ Pickett KE, Pearl M. Multilevel analyses of neighborhood socioeconomic context and health outcomes: a critical review. *Journal of Epidemiology and Community Health* 2001;55:111-122.
- ¹⁰⁶ Riva M, Gauvin L, Barnett TA. Toward the next generation of research into small area effects on health: a synthesis of multilevel investigations published since July 1998. *Journal of Epidemiology and Community Health* 2007;61:853-861.

¹⁰⁷ Sellstrom E, Bremberg S. Review Article: The significance of neighbourhood context to child and adolescent health and well-being: A systematic review of multilevel studies. *Scandinavian Journal of Public Health* 2006; 34:544-554.

¹⁰⁸ Sen G, Östlin P, George A. *Unequal, Unfair, Ineffective and Inefficient - Gender Inequity in Health: Why it exists and how we can change it*. Final Report of the Women and Gender Equity Knowledge Network to the WHO Commission on Social Determinants of Health. Bangalore and Stockholm: Indian Institute of Management and Karolinska Institutet, 2007; http://www.who.int/entity/social_determinants/resources/csdh_media/wgekn_final_report_07.pdf

¹⁰⁹ Östlin P, Eckermann E, Mishra SU, Nkowane M, Wallstam E. Gender and health promotion: a multisectoral policy approach. *Health Promotion International* Suppl. 2007;21:25-35.

¹¹⁰ A/Rahman SH, Mohamedani AA, Mirgani EM, Ibrahim AM. Gender aspects and women's participation in the control and management of malaria in central Sudan. *Social Science & Medicine* 1996;42:1433-46.

¹¹¹ Vingilis E, Pederson L. Using the right tools to answer the right questions: The importance of evaluative research techniques for health services research in the 21st century. *The Canadian Journal of Program Evaluation* 2001;16(2):1-26

¹¹² WHO Secretariat (2008). Draft WHO Strategy on Research for Health. Annex to: *WHO's Role and Responsibilities in Health Research*, EB124/12, Document for 124th Session, WHO Executive Board. Geneva: WHO.

¹¹³ *Priority Setting Methodologies in Health Research: A workshop convened by WHO's Cluster on Information, Evidence and Research (IER), its Department for Research Policy and Cooperation (RPC) and the Special Programme for Research and Training in Tropical Diseases (TDR)*. Geneva:WHO, 2008.