Globethics Repository



Conference news - equitable access to health care and infectious disease control

This page was generated automatically upon download from the Globethics Repository. More information on Globethics see https://www.globethics.net. Data and content policy of Globethics Repository see https://repository.globethics.net/pages/policy.

Item Type	Conference proceedings
Authors	Macinko, James;Almeida,Celia;Vega Romera, Roman;Travassos,Claudia
Publisher	United Nations Research Institute for Social Development (UNRISD)
Rights	With permission of the license/copyright holder
Download date	2026-11-08 16:12:08
Link to Item	http://hdl.handle.net/20.500.12424/178692

UNRISD United Nations Research Institute for Social Development

Contents

Introduction 1
I. Access, Equity, Health Systems and Infectious Diseases 2
II. Concepts, Determinants and Measures of Equity in Access 5
III. Measuring Equity in Access, Social Conditions and Social Exclusion 9
IV. Inequalities in Access to Infectious Disease Prevention and Control Services 13
V. Current Evidence and Research Needs on Dimensions of Access 15
VI. Research Needs, Challenges and Strategies 24
VII. Conclusions and Lessons Learned 26
Agenda 29
Participants 31

CONFERENCE NEWS

Equitable Access to Health Care and Infectious Disease Control

Concepts, Measurement and Interventions

Report of an International Symposium
13–15 February 2006, Rio de Janeiro, Brazil

Introduction

Access to quality health care and disease control tools such as drugs, vaccines and diagnostics is a crucial determinant of population health and an essential component of strategies designed to reach the Millennium Development Goals.[1] The United Nations and its various technical agencies and programmes therefore play a critical role in advancing the agenda to improve access to health care.

While there is general agreement that more equitable access to life-saving technologies must be improved, there is an ongoing debate over the best means of enhancing such access and, at a more basic level, a lack of consensus on the definition of what access actually means and how it ought to be measured. It can be argued that this lack of consensus on the definition and operationalization of the concept has hampered progress in generating and applying knowledge to identify and strengthen pathways between access and health outcomes, especially in low-income countries.

This symposium, which took place on 13–15 February 2006 in Rio de Janeiro, Brazil, brought together 31 international experts who work on different dimensions of access and who represent different organizations and distinct perspectives on this topic. The Oswaldo Cruz Foundation (FIOCRUZ) organized the symposium, in collaboration with the UNICEF/UNDP/World Bank/WHO Special Programme for Research and Training in Tropical Diseases (TDR), the World Health Organization (WHO) and the United Nations Research Institute for Social Development (UNRISD). The symposium was financially supported by the TDR Programme

The objective of the symposium was to stimulate critical debate on current concepts and measurement tools related to access to health care, its relationship to social determinants of health, and the focus on pro-poor programmes. To this end, sessions were devoted to reviewing approaches, definitions and measurements of access in relation to various dimensions of health care; discussing the relationship between access to health care and social determinants of health; reviewing operational approaches for measuring and improving inequities in access; summarizing existing approaches within the United Nations (UN) system to the construction of indicators and measurement tools around access; highlighting the critical role of research on access to health care for

[1] See http://unstats.un.org/unsd/mi/mi def_list.asp

Ministério da Saúde
FIOCRUZ
Fundação Oswaldo Cruz
Special Programme for Research & Training in Tropical Diseases (TDR) sponsored by UNICEF/UNDP/World Bank/WHO
World Health Organization

reaching the Millennium Development Goals; and identifying research gaps from a social science research perspective.

I. Access, Equity, Health Systems and Infectious Diseases

In his opening address, **Thandika Mkandawire** analysed the debate over "targeting vs. universalism" and its relevance to the concept of health care access. For Mkandawire, health policies are social policies and as such should be used to correct market failures, guarantee individuals' life chances, redistribute and assign resources, and promote social welfare. The core concerns of social policy—need, deserts, and citizenship—are social constructs which derive full meaning from the cultural and ideological definition of the concepts of "deserving poor", entitlement and rights.

Ideological shifts and fiscal constraints in many countries have led to important changes in recent decades. Universalism has been driven by ideologies of equality and citizenship (or nation-building) but the rise of new ideologies, such as those that privilege individual responsibility and a limited role for the state, has had profound influence in some of the key industrialized countries. These ideological shifts in the North have had repercussions in the South: the attack on the welfare state translated into an attack on the "developmentalist" approach, which hitherto enjoyed strong conceptual and ideological support.

The fiscal crises of the late 1970s led to the perception that there was a need for budgetary restraint and to the idea that global competition required changes in tax policies and a reduction in social transfers. It was argued that a better use of limited resources would be to target the "deserving poor". Consequently, social policy was directed at providing funds to "mitigate the social dimensions of adjustment", reflecting a shift in emphasis from development to poverty reduction. Increased focus on efficiency and the development of the so-called new managerialism encouraged concepts from the private sector to replace the traditional ideas of public administration.

These political transformations have resulted in what could be called a "crisis of universalism" because they largely undermined the political coalitions and the social pacts behind universalistic policies. This crisis can be viewed as a result of the attack on the welfare state and the concept of social and economic development that it supported, but it was also stimulated by the gap between theory and practice generated by universalistic policies; the stratification and capture of universalistic policies by political elites; the false sense of unity that hid underlying exclusion; and discrimination by gender, race and ethnicity that rejected the need for affirmative action.

The concept of equity is really at the heart of the debate between universalism and targeting. Although current debates on poverty pay little attention to equity, one argument advanced in defence of targeting is its redistributive virtue. In a redistributive system transfers would be skewed in favour of the poor. Universalism is accused of not being redistributive and of wasting scarce resources on the middle and upper income classes and the "undeserving poor".

In contrast, levels of inequality are actually lower in societies that pursue universalistic policies than in those societies that rely on means-testing and other forms of selectivity. This is not to say that there is a functional relationship between universalistic policies and redistributive policies in other areas, but that there is an affinity between the preference for universalism and other measures such as high taxation and progressive taxes. Targeting exacerbates this trend since it leads to the creation of a dual structure. As Amartya Sen has argued, "Benefits meant exclusively for the poor often end up being poor benefits".[2]

In developmental contexts social policy has had a multiplicity of effects on equity, social inclusion, nation-building, conflict management and human capital formation. The current case for targeting rests on the narrowing of the social agenda to poverty alleviation.

Lessons learned show that different forms of targeting generate administrative errors in inclusion, exclusion and transaction costs. Targeting has resulted in inequalities related to identifying "the poor" (needy people and communities), corruption and clientelism. When poverty is extensive, targeting becomes unnecessary and costly. Such administrative constraints on targeting are compounded in poor countries where most people earn their livelihood in the informal sector, where people may be "invisible" to the state and where the state has limited overall capacity. Targeting can also

[2] Sen, A. 1995. "The political economy of targeting." In D. van de Walle and K. Nead (eds.), *Public Spending and the Poor: Theory and Evidence*. Johns Hopkins University Press, Baltimore, MD, p. 14.

lead to reduced budgets devoted to poverty and welfare so that "more for the poor" means "less for the poor". The paradox is that optimal targeting requires meeting an increase in the needs of one group by a reduction in the resources allocated to it. This induces perverse incentive effects, high marginal tax rates and poverty traps.

There are now many critiques against targeting. It can be considered invasive; it can stigmatize the poor and subject them to bureaucratic arbitrariness, which can induce ex-ante insecurity about whether they will continue to meet programme eligibility criteria as the minimum threshold for inclusion increases. These critiques are so pervasive that agencies such as the World Bank are now proposing new forms of more universalistic policies such as "level playing fields", lump sum transfers or uniform tariffs.

The choice between targeting and universalism is ultimately a political economy problem, because it involves choosing instruments for the redistribution of resources in society and for determining levels of social expenditure. The debate on targeting in many poor countries skirts this issue partly because the funds to be targeted often come from external sources, as a fixed poverty reduction allocation, and are supposed to be disbursed by autonomous specialized agencies or non-governmental organizations (NGOs). Choosing between targeting or universal approaches ultimately relies on the autonomy of poor countries vis-à-vis international donor agencies and requires a political decision of societies themselves, since sustainable welfare programmes need the support of the middle classes.

Access to effective interventions is shaped by the design of health systems, which are themselves shaped by social forces and values. **Alex Irwin** and **Orielle Solar** discussed the health system as a social determinant of health, emphasizing challenges and opportunities to improve health equity, defined as "the absence of unjust, avoidable or remediable differences in health between groups defined by social, economic, demographic or geographic conditions".

Because health equity refers to both outcomes and opportunities, the political implications of health equity require that health be seen as a "special good", directly responsible for individual well-being and capability. This implies that governments have a responsibility to guarantee opportunities to attain health, and that reducing health inequities requires action on the social determinants of health, a social justice orientation, and the view that health policy must extend further than health care.

In a comprehensive model, the health system itself should be viewed as an intermediary determinant of health. Within this framework, a health system is defined as "all organizations, institutions and resources destined to produce health actions".[3] Health actions are understood as any effort that has health improvement as its primary goal—be it through personal health services, public health services, or by means of intersectoral actions on health determinants that are the root cause of health inequities. Examples include the provision of food supplements through the health system, and transport policies and interventions that aim to tackle geographic barriers to health care. The health system also plays a role in mediating the differential consequences of illness in people's lives, by ensuring that health problems do not lead to a further deterioration of social status and by facilitating social reintegration through, for example, programmes to support the reinsertion of the chronically ill into the workforce. The health system can also contribute to empowerment by facilitating public participation in monitoring, evaluation and decision making about system priorities and the investment of resources. However, these activities do not take place in most health systems due to their predominantly hierarchical and authoritarian structure.

The extent of people's exposure to risk factors that render them vulnerable to illness and injury, and the social consequences thereof, depend on the social conditions in which people live and work, which also reflect their different positions in power hierarchies, social standing and resource levels. The health system, as a product of these same social processes, reflects existing levels of inequality and social stratification, and can exacerbate inequitable access to health services and unjust or avoidable differentials in exposure, vulnerability and health outcomes. But the health system can also be a place in which to respond to power differentials that underlie health inequalities in order to help reduce them and their negative consequences for population health.

To respond to health inequities, health systems will need to promote universal access and social protection. This requires strengthening several aspects of health systems, including leadership, governance and accountability;

[3] World Health Organization. 2000. *The World Health Report 2000—Health Systems: Improving Performance*. Oxford University Press, Oxford.

development and implementation of more equitable national health policies; promoting intersectoral actions; generating evidence on measuring equity, including through qualitative research methods and approaches such as historical and contextual analysis; and more appropriate human resource development, among others.

In summary, health systems and their impact on equity in health depend on the underlying values of a society, on the level of solidarity among its members, and on an understanding of the importance of the social determinants of health.

Although the health system has an important role in promoting access, the ability of health services to reduce inequalities may also depend on characteristics of the organization of the health system. **Leiyu Shi** discussed the role of primary care in improving effectiveness and equity in access and population health.

Primary care has several core functions, including first contact (primary care should be the first place people go with each new health problem); continuity of care or longitudinality (primary care should focus on the person as a whole and not just on a particular disease or organ, and it must do this over the life course by creating a long-term relationship between the individual and the health provider); comprehensiveness (primary care services should be capable of resolving the majority of a population's health needs); and coordination and integration of care (primary care serves to facilitate and coordinate specialty care, and care delivered by other parts of the health system, including public health and other community actions).[4]

Based on these definitions, primary care's first contact function provides a bridge between the accessibility of the health system and health services utilization. Likewise, the definition of an eligible or covered population is linked to utilization and to a person-focused, doctor-patient relationship through the primary care feature of longitudinality. The range of services that the health system can offer finds its link to problem recognition and resolution through the primary care feature of comprehensiveness, and continuity of care within the overall health system is facilitated by primary care's coordination function.

The evidence (primarily from countries of the Organisation for Economic Co-operation and Development—OECD) overwhelmingly supports the role of primary care in improved health outcomes at both individual and population levels.[5] The evidence also supports the contention that well-structured primary care systems can facilitate other aspects of access (such as effectiveness and appropriateness) and that this type of access (as opposed to access to other forms of more specialized care) may directly contribute to reductions in health inequalities.

For these reasons, strengthening primary care and its core functions should be emphasized by countries wishing to improve access to the types of health services that people need most. Because most population health needs are addressed in primary care, investments in primary care systems may have significant benefits in terms of improved population health and surmounting inequalities in health.

Mauricio Barreto further refined the focus of access from broader social and health systems aspects to specific infectious disease control tools. In the period immediately following the Second World War, the scientific community in wealthy countries considered, incorrectly, that infectious diseases had ceased to be a threat and that they would soon disappear. But the behaviour of infectious diseases changed in the last two decades of the twentieth century, and in these countries new infectious agents have emerged while some older infectious diseases have re-emerged. In contrast with developed countries, in the developing world, emerging and re-emerging infectious diseases added to an epidemiological profile where more persistent infectious diseases still had great importance in population morbidity and mortality.

The emergence and re-emergence of infectious diseases has been attributed to a complex set of circumstances that coupled social inequalities with insufficient knowledge about the spread of infectious agents, demographic and behavioural changes, industrial and technological development, economic development and land use, international travel and commerce, adaptation and change of microbes, and the weakening of public health measures.

For these reasons current efforts should be oriented toward preventing the repetition of past errors, given that complex problems were previously addressed with partial solutions that did not alter their root causes.

[4] Starfield, B. 1998. *Primary Care: Balancing Health Needs, Services, and Technology*. Oxford University Press, Oxford.

[5] Starfield, B., L. Shi and J. Macinko. 2005. "Contribution of primary care to health systems and health." *The Milbank Quarterly*, 83(3):457–502.

What is needed is the construction of a new conceptual and theoretical consensus on the causes of infectious diseases, in particular, continuing the unfinished debates of the nineteenth century to better understand the connections between illness and health, and between molecules and society. This new consensus should be based on better understanding of the social determinants of health, including environmental change, among others.[6]

Likewise, it will be important to improve the development and transfer of scientific knowledge and technology; to develop and use international law; to clarify the moral and ethical basis for the control of infectious diseases; to enhance epidemiologic surveillance at the international level; to strengthen the means of controlling infectious diseases; to improve national and international communications to better manage outbreaks; to support the primary care basis of health systems; and to expand and strengthen North-South and South-South cooperation.

With the publication of McKeown's studies in the 1950s it seemed clear that the role of the health system in control and treatment of infectious diseases was secondary. But the role of health systems has been strengthened in more recent decades due to notable advances in scientific knowledge and biomedicine, and some lessons have been learned from infectious disease control experiences. First, to be effective, knowledge and technology for the control and treatment of infectious diseases need to be available at the primary care level, but this has not yet happened in most health systems. Second, misuse of technologies has had important side effects such as microbial resistance, immuno-suppression and increased prevalence of allergic reactions. Third, the cost of many new technologies has created access barriers for vulnerable groups, including the poor, and this has contributed to health inequities. Each of these barriers will need to be overcome in order to meet the challenges posed by infectious diseases in the twenty-first century.

II. Concepts, Determinants and Measures of Equity in Access

Access is a complex concept with many different definitions; its meaning has changed over time and according to context. In the health services literature the term is often used inaccurately and authors are not always explicit in defining the relationship between access and the utilization of health services; thus "access" has referred to characteristics of health services supply, demand, and even to the relation between the two. It has been limited to aspects of the decision to seek care but has also encompassed the effectiveness of the medical care received. **Claudia Travassos** presented an overview of this complex concept by reviewing definitions of access and their relationship to aspects of health service utilization.

According to Donabedian,[7] accessibility is just one aspect of health service supply in a specific population and refers to "the features of health services and resources that favour or limit their utilization by potential users". This definition does not define propensity to seek care, but "the lack of (dis)adjustment between patients' needs and services and resources used". Donabedian defines access as the ease with which people can obtain medical care, and thus his definition additionally includes organizational and geographic aspects of health services.

Penchansky and Thomas[8] define access as "the level of adjustment between clients and health system". Their definition focuses on the two-way relationship between health service supply and individuals, and includes five dimensions: availability, accessibility, accommodation, affordability and acceptability. Availability refers to how individuals' requirements match up with service capacity. Accessibility-related issues include distance from services, transportation resources and travel time. Affordability has to do with whether individuals are able to pay for services. Accommodation refers to how individuals are able to take advantage of the organization of services. Finally, acceptability has to do with patients' satisfaction with providers' practice, as well as providers' attitudes about patients' personal characteristics.

In Frenk's[9] definition of access, characteristics of supply and of the population are also complementary. Accessibility is seen as the relationship between a set of obstacles to seek and obtain care ("resistance") and the corresponding ability of the population to overcome

[6] Barreto, M.L. 2003. "Science, policy, politics, a complex and unequal world and the emerging of a new infectious disease." *Journal of Epidemiology and Community Health*, 57(9):644–645.

[7] Donabedian, A. 1973. *Aspects of Medical Care Administration*. Harvard University Press, Cambridge, MA.

[8] Penchansky, D.B.A. and J.W. Thomas. 1981. "The concept of access: Definition and relationship to consumer satisfaction." *Medical Care*, 19:127–40.

[9] Frenk, J. 1985. "Concept and measurement of accessibility." *Salud Pública de México*, 27:438–53.

obstacles ("power of utilization"). Resistance includes ecological, financial and organizational components. The power of the population is understood as time, transportation, financial resources and the capacity to deal with the organization. This model assumes that various equilibriums between the population's power of utilization and the supply resistances are possible to reach the same level of accessibility. As a consequence, Frenk suggests that a different way of organizing health services may be necessary for each socio-economic group.

Between the 1960s and 1990s Anderson and colleagues[10] developed a utilization model based on individual factors consisting of predisposing factors (factors that exist prior to the appearance of the health problem and that affect people's predisposition to use health services), enabling factors (means available to people to obtain health care), and health needs (health conditions perceived by people or diagnosed by health professionals).

Beginning in the 1990s, the United States Institute of Medicine (IOM) proposed a definition of access as "the utilization of health services in an adequate time to obtain the best possible result".[11] In this definition access becomes nearly synonymous with utilization. In a similar vein, the WHO recently proposed an indicator for health system assessment related to access called "effective coverage", defined as the proportion of a population needing a certain health procedure that actually received it.[12] This definition is comprehensive and combines potential access, realized access (utilization) and effective access (quality of care).

Based on this review of the concept and definitions of access presented by Travassos, there seems to have been a tendency to amplify the scope and concept of access from its original idea of entry into health services to include the process of care and even health outcomes. Donabedian's conception of access is itself sufficiently abstract to apply to almost any context, but it limits itself to potential access. The use of broader concepts of access does not always take into consideration the understanding or measurement of each factor that determines each step in the process of use and quality of services. Thus, the complex nature of measures of access that are derived from these broad definitions make measuring access more difficult and may limit our ability to correctly interpret results.

Much as the definition and measures of access show great variation, so, too, does the definition of equity and its relationship to access. **Gavin Mooney** discussed the intersection of access and equity from the perspective of the social goods produced by the health system. For Mooney, equity is about distributing "good" in some culturally relevant or culturally determined sense. The willingness to help the disadvantaged is a function of both social compassion and the "capacity to benefit".

Other than access, the dimensions for considering equity that are most often suggested are use (utilization) and health. Use is problematic both conceptually and theoretically because, without removing all freedom of choice, it is difficult to imagine that "equal use" would be a good measure of fairness. On reason why "use" is so prevalent may be that it can be measured.[13] But use is clearly neither the same as nor a good proxy for access.

Given all the other determinants of health in a society, it is at best inappropriate to ask a health service to deliver equal health to all. If we did, it would be very expensive and inefficient since it would attract too many resources to health care, some of which would be more efficiently used to promote health (or other social goods) in other sectors of the economy. Access at least leaves individuals and the community with some element of choice with respect to their use of health care.

Other potentially useful concepts in discussing equity are horizontal equity (the equal treatment of equals) and vertical equity (the unequal, but equitable, treatment of unequals). In practice, health care equity is most often set in terms only of horizontal equity, at least on the delivery side. Vertical equity is addressed more often in funding, as in progressive taxation. The extent to which societies are prepared to pursue vertical equity will vary depending on how compassionate they are.

[10] Andersen, R.M. and J.F. Newman. 1973. "Societal and individual determinants of medical care utilization in the United States." *Milbank Memorial Fund Quarterly*, 51:95–124; Andersen, R.M. 1995. "Revisiting the behavioral model and access to medical care: Does it matter?" *Journal of Health and Social Behavior*, 36:1–10; Aday, L.A. and R. Andersen. 1974. "Framework for the study of access to medical care." *Health Services Research*, 9:208–20.

[11] Millman, M. 1993. *Access to Health Care in America*. National Academy Press, Washington, DC.

[12] World Health Organization. 2001. Background paper for the technical consultation on effective coverage of health systems. World Health Organization, Geneva.

[13] Mooney, G. et al. 1991. "Utilization as a measure of equity: Weighing heat?" *Journal of Health Economics*, 10:475–80.

Also useful are the concepts of procedural justice (getting the procedures, or the means, fair) and distributive justice (the fairness of the outcomes or the ends). Different societies and cultures may opt for one or the other. While often it is assumed that it is only ends that are of value, means can also be valued.

For example, to have health care equally accessible for all can be seen in some countries as a sign of a decent society. That can be valued in itself and in addition to any gains in outcomes, such as better health. These considerations are likely to be cultural in the sense that not all cultures or societies will place the same importance on having universal access.

There are many views of access, most often dependent on whose vantage point is taken. Mooney felt that access is best interpreted from the perspective of the potential patient or the citizen. It is most often the patient who makes the final decision as to whether to use health services, so the patient's perception of both the barriers faced and the severity of these barriers matters. Seen from a wider societal perspective, citizens also have a role to play in determining for the health care system (as a social institution) what "good" they want health services to achieve. Part of this good is likely to relate to access and equity.

Access barriers may include price, time inconvenience or other factors. In addition, cultural barriers are potentially important and yet frequently invisible to policy makers, who are most often from the dominant culture. In Australia for example, one of the biggest barriers faced by Aboriginal people is that most health services are based on a value structure that is non-Aboriginal.[14]

The concept of need is often used together with access (or use), as in "equal access for equal need", as a way of defining equity. In resource allocation formulas, need is usually taken to be about the amount of sickness in a population. Such formulas address the question of how, fairly, to allocate resources to different regions of a country. Resources are then allocated pro rata with need, with various adjustments.

Mooney preferred the concept of "capacity to benefit" to that of need. First, the capacity component relates to the resources in health care only. Second, it embraces the notion of doing good or producing benefit. Sickness-based need incorporates only health problems, with no consideration as to whether health services can do anything about them.

It has been argued that the best people to define equity in health care are informed citizens, as shown in the following definition by a Citizens' Jury in Perth.[15]

> Equal access for equal need, where equality of access means that two or more groups face barriers of the same height and where the judgment of the heights is made by each group for their own group; where need is defined as capacity to benefit; and where nominally equal benefits may be weighted according to social preferences such that the benefits to more disadvantaged groups may have a higher weight attached to them than those to the better off.

This definition includes a number of features. First, it incorporates the potential users' perceptions of the barriers to use. Second, it adopts capacity to benefit as need. Third, by weighting benefits differentially according to degrees of disadvantage, it endorses vertical equity.

The works of Coburn,[16] Navarro[17] and Wilkinson[18] indicate that there is no level playing field across different societies and cultures for pursuing equity in health care. For example, neoliberalism creates an environment that makes equity in health care either less attractive than in more "solidaristic" or communitarian societies, or results in "weaker" constructs of equity being accepted in policy. This is in part because neoliberalism results in greater inequality in income distribution, which in turn leads, other things being equal, to more ill-health. In neoliberal societies there is thus likely to be a higher social inequity base from which to start. It is also in part because equity in health care is more successfully pursued by publicly (rather than privately) funded health care. The low tax base that neoliberal governments seek makes the funding of

[14] Houston, S. 2004. *The Past, the Present, the Future of Aboriginal Health Policy* [doctoral thesis]. Curtin University, Perth.

[15] Mooney, G. and S. Blackwell. 2004. "Whose health service is it anyway? Community values in healthcare." *Medical Journal of Australia*, 180(2):76–78.

[16] Coburn, D. 2000. "Income inequality, social cohesion and the health status of populations: The role of neo-liberalism." *Social Science and Medicine*, 51(1):135–46.

[17] Navarro, V. 2000. "Are pro-welfare state and full-employment policies possible in the era of globalization?" *International Journal of Health Services*, 30(2):231–51.

[18] Wilkinson, R.G. 2005. *The Impact of Inequality: How to Make Sick Societies Healthier*. Routledge, Oxford.

social welfare programmes and public health care systems more difficult.

Thus, Mooney argued, when considering the social determinants of health, neoliberal globalization is likely to have a negative influence on health and health care equity. It may be useful to see equity in health as the key; consider the links between that and the economic structure of the society, and in turn the social determinants of health; and thereafter see health care as a residual in the policy chain of equity.

In order to bring together the various components of access, health systems and equity, **Alex Irwin** and **Orielle Solar** presented a conceptual framework for access that aims to address health system bottlenecks and links the access debate to intersectoral action on social determinants. For them, health equity is concerned with outcomes as well as opportunities. This means that equity "does not require everyone to have the same level of health, but it demands such a distribution of determinants of health...that every individual has the same possibilities to lead a long and healthy life".[19]

The idea of access to health care services and access to health opportunity is expressed in the notion of effective coverage, defined as "the fraction of maximum possible health gain an individual with a health care need can expect to receive from the health system".[20] This implies the need to resolve access-related problems by not only removing barriers but also actively identifying opportunities for improving access. By studying use of services by different social groups according to level of need, it is also possible to detect differences that might not otherwise be perceptible.

Effective coverage was first described by Tanahashi[21] as a "coverage pyramid" with five hierarchical domains: availability coverage, accessibility coverage, acceptability coverage, contact coverage and effective coverage. The Tanahashi framework provides a useful analytical tool by illustrating that even though services may be available, they may not actually be used by those in need.

Evaluation should start with the measurement of effective coverage. If the level of effective coverage is satisfactory, the evaluation process does not have to go further. If it is low, one should look at contact coverage. If contact coverage is satisfactory, one must determine the factors that prevent patients from receiving effective services. If contact coverage is also low, then acceptability and accessibility coverage should be measured. If the physical accessibility and acceptability of services are high, one must look for the problem among those factors that affect individual personal behaviour in order to find out why acceptable and physically accessible services are not used. If accessibility coverage is low, one should check whether resources are available, and then take necessary action based on the findings. In practice, of course, the relationship between the different domains of the coverage measure is not strictly straightforward and hierarchical.

However, there is a hierarchy of coverage measures, with effective coverage the highest domain and itself an intermediate goal. The key to measurement of effective coverage is to determine what constitutes an effective intervention. In other words, there should be a common agreement about the criteria for counting the occurrence of an intervention as an effective intervention, and how much variance from the established criteria would be acceptable. Assessing effective coverage also requires the simultaneous evaluation of other functions such as stewardship, financing and organization of services and resources.

The second component of the equity in access framework is composed of indicators of intesectoral policies and actions. Intersectoral public health action is a process that requires continuity, sustainability and acceptability targeted to different social sectors, including education, transport, labour, agriculture and housing.

Four questions should be addressed when analysing intersectoral action in the equity in access model. The first, existence, asks whether any intersectoral actions are being carried out by the health system. The second, integration, asks what coordinating mechanisms exist between the health sector and other sectors. The third, sustainability, asks if there is a specific budget and plan for intersectoral activities and the likelihood of these being maintained in the longer-term programming and

[19] Stronks, K. and L. Gunning-Schepers. 1993. "Should equity in health be target number 1?" *European Journal of Public Health*, 3:104–111.

[20] Shengelia, B. et al. 2005. "Access, utilization, quality, and effective coverage: An integrated conceptual framework and measurement strategy." *Social Science and Medicine*, 61(1):97–109.

[21] Tanahashi, T. 1978. "Health service coverage and its evaluation." *Bulletin of the World Health Organization*, 56(2):295–303.

planning of the health system. The fourth, acceptability, asks how well intersectoral actions meet citizens' expectations.

As an example, consider the barriers and stages of access to treatment for tuberculosis (TB) faced by the poor. The stages of health-seeking by TB patients, from recognition of symptoms to cure, may be represented as a linear process or pathway to cure. A model of attrition rates for poor and non-poor TB cases, through the stages along the pathway to cure, can be established. The space between stages represents determinants of progress to the next stage, including barriers that may impede progress. At each successive stage along the pathway to cure, some TB patients will be lost. Similarly, moving along the pathway, the ratio of non-poor to poor TB patients will increase.

Other factors related to the social determinants of heath also come into play. Factors related to the individual's immediate context can become barriers to access. Limiting and enabling factors related to the individual include financial resources, health insurance and social networks. Psychosocial factors include formal and informal networks, information, skills and knowledge, perceptions of the health care system, attitudes toward health care providers, self-efficacy, anxiety and shame.

In considering the development of policies to promote more equitable access, there is some evidence on the relationship between social determinants and health equity, but much less is known about pathways of health inequities and even less about interventions.[22] There is considerable research describing the scope of health inequities, but little intervention research that helps to identify practical responses. Most research has been designed to assess modifications to individual behavioural risks, rather than to measure the effectiveness of interventions to tackle wider social determinants of health. Although several interventions have explicitly adopted more comprehensive approaches to reduce health inequities, few of these have been evaluated adequately and of these, many potential lessons learned have not been made available to the public.[23]

To conclude, the ultimate goal should be better health for all, with the strongest gains for disadvantaged groups. This implies improved health service delivery, and also action on the social determinants of health—because what good does it do to treat people's illnesses and then send them back to the conditions that made them sick? As Sir Michael Marmot has said and as Geoffrey Rose had previously emphasized, "we need to understand the causes of the causes" in order to take action to improve population health. To move forward, we need to develop models that include and deepen domains relevant for understanding the health care–seeking behaviour of deprived populations, including qualitative studies of poor and excluded people, and to identify the potential mechanisms and interactions that exist at micro, macro and meso levels, such that policies take these influences and interactions into account. This also requires going beyond the traditional, linear, positivist model of science and professional dominance, in which technical views dominate policies, to embrace a more interactive model that describes a process or debate and helps to create and set the agenda. Ultimately, these are political and communications challenges—making evidence speak to policy.

III. Measuring Equity in Access, Social Conditions and Social Exclusion

Measurements of access and equity are not only confounded by difficulties in defining these concepts, they are also complicated by the need to identify and develop strategies to reach socially excluded groups, which themselves can be defined in a myriad of ways. **Leiyu Shi** presented a general framework to study vulnerable populations.[24] Such groups include racial or ethnic minorities, lower-income families, children or adolescents, the elderly, homeless individuals and people with specific health conditions (those with HIV or mental illness, for example), among others.

Shi argued that defining groups by only one measure of vulnerability ignores the fact that among such groups, health risks tend to overlap and many vulnerable groups share common traits. For example, racial and ethnic minorities are more likely to have lower socioeconomic status (SES) due to family income and education levels, and low–SES families are more likely to be homeless and/or have chronic conditions. Such commonalities

[22] See B. Nutbeam. 2004. "Getting evidence into policy and practice to address health inequalities." *Health Promotion International*, 19(2):137–140

[23] See J.P. Mackenbach. 2003. "Tackling inequalities in health: The need for building a systematic evidence base." *Journal of Epidemiology and Community Health*, 57(3):162.

[24] See L. Shi and G. Stevens. 2004. *Vulnerable Populations in America*. Jossey-Bass Publishers, Inc., San Francisco, CA.

call for a revised concept of vulnerability that incorporates these overlapping risks.

Within the context of vulnerable groups, several trends have been observed. First, vulnerable populations appear to have been growing larger. The result is an increasing demand on the capacity and resources of medical and social services. Second, to address the health impacts of vulnerability, policies must act on social forces to shape the broader ecological context. Third, vulnerability is fundamentally linked with national resources. Poor health not only impacts families but also detracts from national productivity and economic prosperity. Fundamental improvement in national health is not possible without a focus on vulnerable populations. Fourth, vulnerability and equity cannot coexist. Equity is a governing principle in many countries, public policies have been enacted to create some protections where equity does not exist (for example, civil rights legislation) and there have been initiatives calling for the reduction or elimination of inequities in health and health care.

The current models for explaining vulnerability include those that place emphasis on the individual, the community and interactions between the two. Individual models propose that personal risk factors such as availability of resources, risky behaviours and socioeconomic status determine why some individuals become more vulnerable than others. Community vulnerability models focus on social resources present in the community, exposure to local physical and work environments, and inadequate availability of medical care in the community. These models emphasize that vulnerability is not simply a matter of bad luck or lack of will.

For Shi, there is a need to combine both individual and community approaches in order to understand vulnerability. His model brings together predisposing, enabling and need factors at the ecological level (such as residential and geographic location and segregation, social class and social norms, overall health trends and behaviours) that influence individual predisposing, enabling and need factors (such as race and gender, income and education, physical and mental health status) that in turn contribute to vulnerability that can lead to poor mental, physical and social health at both the individual and population levels.

It is important to note that vulnerability in this model does not represent a personal deficiency of the populations defined as vulnerable. Rather, vulnerable populations experience the interaction of many risks over which individuals may have little or no control. In addition, vulnerability increases as risk factors increase, and many risk factors (at the individual and community levels) tend to cluster together. The combination of specific health needs with other risk factors may make access to needed care even more difficult. For example: compare an individual with asthma to another individual who has asthma (need risk factor) is also Latina (predisposing risk factor) and who has no health insurance (enabling risk factor).

The vulnerability model has distinctive characteristics: it is a comprehensive model that includes individual and ecological factors; it is a general model that examines the level of vulnerability of populations in general, not vulnerable traits of subpopulations; and it is a multidimensional approach that allows examination of the overlapping and cumulative impact of vulnerability.

One approach to protecting vulnerable groups is to develop universal systems of social protection. **Eduardo Levcovitz** discussed the challenges of measuring social protection and mitigating social exclusion in Latin America. The idea of social protection is often embodied within a country's health or social security system. But even though European models of health systems have influenced the development of health systems in the Americas, none of these social protection models has been completely implemented within the region. As a consequence, most countries currently have highly segmented and fragmented health systems and relatively low levels of social protection.

Over the past decades health system reforms in Latin America and the Caribbean were implemented based largely on ideological grounds and did not take into account the particular histories or cultures of each country. As a result, there has been very little change in terms of health system performance, and equity in health has actually worsened. Public health, quality and continuity of care, as well as integration of prevention, promotion and treatment have remained relatively marginal in debates about health system reforms.

Major challenges in health and social sector reform have been guaranteeing universal social protection for all citizens; eliminating or reducing avoidable disparities in coverage, access and health services utilization; and assuring that all receive care according to their

needs and contribute to health financing according to their abilities.

The Pan American Health Organization (PAHO) developed a methodology to evaluate the extent of social exclusion in the Americas from 2001 to 2005. It defined social exclusion as distinct from health inequalities centred on the poor. The objectives of the evaluation were to quantify the proportion of the population excluded in Latin America, and to identify the principle sources of social exclusion, develop a profile of the populations excluded from health, map geographic areas with the greatest social exclusion, and identify steps necessary to achieve universal coverage. Categories used to measure exclusion included social class, gender, age, geography and health service organization.

The study has several important findings. First, several strategies were identified to eliminate or reduce segmentation and fragmentation. These included the need for inter-institutional coordination that would help strengthen the steering role of national health authorities, align and harmonize international cooperation efforts, and fortify within-country cooperative strategies with agencies such as the WHO and the United Nations Development Assistance Framework (UNDAF). Another identified strategy entailed developing networks of integrated care, re-orienting health systems toward primary health care, and incorporating information and scientific knowledge in public health programmes to improve health system performance.

In order to implement the recommendations, international cooperation agencies face several challenges including the need for strong leadership and institutional structures; enhanced use of information, knowledge and innovation; strengthened capacity for planning and coordinating actions; and the intensive use of intelligence, creativity, debate and compromise.

In measuring and explaining inequalities in access and use of health services, it is important to begin by asking how to measure the level of compliance with the principle of "equal treatment for equal need" that allows for comparisons over time and between countries, and then to identify sources of data that allow for such a measurement. To this end, **Owen O'Donnell** discussed challenges in measuring and explaining inequalities in access in low-income countries. Evaluation of equity in health services requires the establishment of ranges between individuals according to characteristics such as income and according to methods of measuring health needs that can apply not only to wealthy but also to low-income countries.

In this context, horizontal equity is defined as utilization and not as access to care, given the interest in results rather than opportunities. Use according to income is differentiated from actual use when describing inequalities, and use according to need when describing inequities. In order to evaluate whether or not use is equitably distributed, the actual distribution of care (by income) is compared with the distribution of heath care need, or the inequality in access compared to a known standard of need.

An important challenge in measuring inequalities in low-income countries is related to means of measuring health needs. First, measurement of horizontal equity requires a proxy for need. In the OECD countries self-assessed health is often used, whereas in low-income countries evidence on socioeconomic differences in health knowledge could be used as a proxy for need. Second, the measurement of inequality in health service utilization could be sufficient for measuring inequity when there is little or no variation in need (for example, vaccination) or when the distribution of need is known. As an example, when the utilization of the rich compared to that of the poor shows that utilization is lower among the poor, but their health need is greater, then this represents an inequity.

Measurement of horizontal inequity requires better data. One option is to use anthropometric or psychological indicators, but these do not measure a general health state relevant for all possible health service needs in a population. One alternative is to remove the socioeconomic bias in self-assessed health status by using, for example, the vignette method proposed by the WHO World Health Survey. With the database from the World Health Surveys it has been observed that the rich report less "good health" in India and China; that is, inequalities actually increase once this bias has been corrected.

In conclusion, in order to more accurately assess and improve equity in access, considerable work will need to be done on advancing methods for conceptualizing and measuring needs in health and health services.

In low-income countries, research on the measurement of social conditions and social exclusion refers most

often to infants and children, and women of reproductive age. **Sara Arber** discussed the importance of also examining inequalities in access to health care for men, women in middle life, and older people. In spite of the fact that the majority of older people are women, many of these women die alone without home care or other sources of necessary support.

To address these shortcomings, it is necessary to measure the social conditions of different population groups at two levels. At the individual level, this includes measuring characteristics of the person such as their employment status, occupation and income, although for women who are not in the formal employment sector these become more difficult to assess. At the family level, it is important to capture characteristics of the household such as the structure and quality of the dwelling, access to potable water, possession of a car, consumer goods and total income.

When social conditions are measured at the individual level using characteristics of the person, it is important to keep in mind that individual characteristics do not necessarily reflect the social conditions of that person's household or family. Family social conditions should ideally be measured using social data about the head of the household or about a combination of adult members of the household. Social exclusion should be measured via characteristics of access to sources of financial capital, transport, language ability, cultural knowledge, capacity to navigate bureaucratic procedures, ability to use new technologies (such as the Internet), and physical disabilities. Women and older people are at a disadvantage on all of these measures, and therefore have a tendency to face increased social exclusion. In terms of the elderly population, there is a rapid increase in the oldest age groups in low-income countries and a growing proportion of older people who live alone due to changes in family structures. Lack of family care for older people reflects cultural changes, as well as smaller numbers of children, increased migration and a larger number of women in the formal workplace.

From a gender and aging perspective it is also important to note the clustering of certain vulnerable characteristics, for example widows who have physical disabilities or dementia.[25] Since women outlive men and men marry women younger than themselves, a woman can expect to be a widow for 10 or more years, on average, in many societies. Widowhood confers low social status on women in many societies. Women, especially those suffering from disabilities, often live alone and suffer material deprivation, with little access to formal health care or informal carers. In contrast, the majority of older men are married or married for the second time, and in these circumstances their wife usually provides care.

Measuring social exclusion is complex and until now has been dominated by the relationship between income/poverty and inequalities in access. But it is important to consider inequalities in access for different population subgroups, and to recognize that inequalities are multicausal and require multivariate analyses, albeit with clear conceptual models. For example, a poor person who is working and has good social support networks is not necessarily socially excluded, but a non-poor person facing language, cultural, transportation and mobility barriers, and without support networks, is likely to be socially excluded.

Elderly women who live alone are a growing population group in low income countries and have a high rate of poverty, a high level of disability and a lack of access to transportation, but they may have good social support networks. Future work in measuring social exclusion will need to be able to distinguish between these different groups, and address the multiple and overlapping pathways to promote social inclusion even for the most marginalized groups.

Measuring social inequalities and discrimination necessitates a national system of measurement of the socioeconomic environment and evaluation of the extent to which macroeconomic policies promote well-being and enhance quality of life. **Roy Carr-Hill** observed that even though the debate on poverty has become more sophisticated in concepts (absolute and relative) and in methods (poverty mapping), there is little attention to the quality of vital statistics. This applies equally to measuring progress toward the MDGs—without improvements in data quality, we will likely not know where we will be in 2015, because we do not know how far we are today from those goals.

Relevant indicators include reducing or eliminating absolute poverty in terms of education, food security, unnecessary health risks, housing and water. All are related to well-being, but only people can tell us what well-being means to them; neither the market, which only allows a unidimensional (monetary) and inequitable (given the relative inequity of income) means

[25] Arber, S., K. Davidson and J. Ginn. 2003. *Gender and Ageing: Changing Roles and Relationships*. Open University Press, Maidenhead.

to measure relative preferences, nor the election urn allow us to adequately measure the dimensions that encompass well-being.

There are a number of difficulties inherent in obtaining valid data for measuring equity in low-income countries. Demographic data such as total population count by age and gender, and measures of births and deaths, are fairly unreliable in most developing countries because few have vital events registries that function well. Many population estimates are based on extrapolations from one of the Coale-Demeney models[26] or their derivatives, rather than on counts.

The quality of the statistics for monitoring poverty reduction strategies at the international level is deteriorating, perhaps because most information systems are financed by donors with minimal national involvement, and hence little commitment to data quality. There is also no consensus on whether poverty should be measured in absolute or relative terms. Other problems have to do with routine administrative data. Population censuses may reach 100 per cent coverage, but they generally contain insufficient information. Data on use of education and health services, for example, rarely include socio-demographic variables.

Three additional difficulties also bear mentioning: household surveys do not include the poorest of the poor; family expenditure is not a good indicator for standard of living; and proxies used to measure poverty are almost impossible to compare over time and within countries in order to evaluate trends. Household surveys also have several omissions, including no data on homeless, nomadic or pastoral peoples, or those who live in institutions. Finally, although included in the sampling frame, many households in the urban slums are in practice not interviewed because it is seen as risky or it is difficult to identify distinct households.

The use of surveys to measure poverty entails several problems. The measurement of consumption in household surveys is probably biased because the richest households participate less in surveys, and national accounts do not contain items consumed by the poor, who are also often excluded from household surveys. The use of asset indices poses additional difficulties in terms of measuring income or consumption levels, because there is usually no information on the quality or quantity of the goods and services, or the ownership of assets by the household, family and individual. It is also not clear how such indices should be generalized to other communities or countries.

[26] See, for example, A.J. Coale and P. Demeney. 1983. *Regional Model Life Tables and Stable Populations*. Academic Press, New York.

IV. Inequalities in Access to Infectious Disease Prevention and Control Services

Focusing more specifically on inequities in access to infectious disease control services, **Aryanti Radyowijati** synthesized the principal findings of a review paper, beginning with the proposition that access has various definitions and may have different meanings in different contexts and places.[27]

Based on the assumption that potential access is likely to translate into realized access, research has centred on the former while leaving the latter behind. Consequently, the focus in access research has been on supply-side issues and too little attention has been paid to demand-side issues, such as consumer satisfaction with services and goods received. Another limitation is that access has often been measured using quantitative methods, emphasizing availability, accessibility and affordability components, and therefore our understanding of the concept may not incorporate important qualitative aspects such as accommodation, acceptability and consumer satisfaction. Research on access to infectious disease control tools has also been disproportionately focused on access to health services and curative tools (medical care); access to diagnostic and preventive tools has received inadequate attention and remains relatively unexplored.

In relation to infectious diseases, access has been relatively well researched in some of the TDR diseases (such as malaria and TB), but for other diseases (like African Trypanosomiasis) there is only fragmentary information available.[28] It cannot be denied that the development of new technologies such as medicines, vaccines and diagnostic tools may increase the options for effective disease control in the 10 priority TDR

[27] Radyowijati A. and H. Haak. 2005. *Access and Accessibility to Disease Control Tools with Special Emphasis on TDR Target Diseases: A Review of the Evidence* [unpublished paper commissioned by the TDR Programme]. Consultants for Health and Development (CHD), Leiden.

[28] TDR focuses on the following neglected infectious diseases that disproportionally affect poor and marginalized populations: African trypanosomiasis, Dengue, Leishmaniasis, Leprosy, Lymphatic filariasis, Malaria, Schistosomiasis, Tuberculosis, Chagas disease, and Onchocerciasis.

diseases. However, these new technologies will only be effective if all dimensions of access are well studied and each is addressed when applying lessons learned.

In their paper, Radyowijati and Haak recommend that "social science studies may provide essential information for informed decisions that are crucial to the long-term success of disease control programs. They should be routinely included as an essential feature of those programs".

In the developing world, the burden of major diseases is growing. Underlying reasons for this increase range from rising poverty levels to health systems–specific failures. **Ricardo Thompson** discussed how, on the one hand, people may be forced to "learn" or "accept" to live in poverty and disease, while on the other, these same people have become less trusting of health systems and health workers. This has taken place in spite of the fact that the past two decades have seen increased efforts in the design of new disease control tools (diagnostics, vaccines, drugs, etc.). Moreover, older tools, despite no longer being highly efficacious, could be effective if properly used in an integrated manner. But implemen-tation issues are not prominent enough in most research agendas, and there is only a limited understanding of the real-life conditions in which many tools are used.

An increasing, but still insufficient, amount of money has been made available for disease control. Nonetheless, in contexts of weak health and management systems, and insufficient human resources, countries may be overwhelmed by these financial resources. Resources may be misused, goals may change continuously, and the desired impacts may not be achieved. The disease burden inexorably increases as a result.

The context in which the various actors in this "drama" must act is not much more promising. The implementers (governments, health staff, international and local NGOs) follow globally defined guidelines for disease prevention and control, but have little time to think, and are working under pressure to show results, at least implementation results, without enough time to do the homework required to understand site-specific underlying factors for disease occurrence. The recipients of these actions (local populations and, sometimes, local health staff) are living and working in a context of weak or non-existent health care networks and education systems, widespread poverty, low literacy levels and little access to information. They have become accustomed to the comings and goings of health personnel (central-level health staff, NGOs, etc.), have resigned themselves to disease and death by sometimes establishing their own primary health care system, and remain suspicious of or disillusioned with standards of health care provision and other disease prevention activities.

One way to surmount these challenges would be to relate these three different, but equally deficient worlds. The first challenge is in defining needs and priorities. Access to disease control tools should be determined by need. The process of defining need is often very complex: although it should take place in the context of all locally defined priorities, instead needs are frequently centrally defined and then "proposed" to local authorities and populations. With no integration it becomes a "bazaar" of opportunities.

Moreover, exclusion can occur even in the context of availability of services and different tools. Self-exclusion may result from poorly defined needs/priorities, but it can also be a consequence of general disillusionment with life, short-term life planning and despair. Accessibility and even usage of disease control tools can change dramatically between the beginning of a campaign and later on, for example. Such changes can have serious implications for measurement. Decision-making processes are complex at the community level and do not always follow implementers' rationale.

Research can play an important role when it is well integrated and clearly focused. Needs must be identified by recipients even if they differ from those of the implementer, so research into understanding the real context in which a tool is to be used is essential. Other actions related and unrelated to health also need to be considered in this context, such as transferring ownership of the concepts and technologies to the communities. Long-term commitment is crucial, as perceptions and behaviours take time to change.

If prioritization and targeting are necessary, then discussions and community engagement are essential. Cost-recovery issues should be a matter of in-depth research and coherent with other actions, and sustainability must be a research priority. Information, education and communication must be central, with a long-term commitment and continuous evaluation. Monitoring and evaluation should preferably involve the recipients and should be used as means of advocacy. The challenges are considerable. The first problem is related to the fact that local authorities and communities in areas where diseases are endemic depend on external

aid, and, for that reason, partners (national governments, for example) must follow donors' rules (mainly because funds tend to be earmarked for a specific use), which do not always take local and national realities into consideration, and which often imply a short-term commitment. The result is "aid vitiation": due to lack of donor coordination, weak coordination between central and local levels, weak management structures and limited human resources, international aid fails to meet its objectives.

These challenges can also be opportunities, once the behaviour of governments and international donors is taken into consideration. Processes of decentralization can be an improvement, from the perspective of facilitating dialogue between different levels of care and optimizing available and needed resources. Donors are also changing funding mechanisms with initiatives such as Sector Wide Approaches (SWAPs), and these could also be a step forward in raising global awareness and answering the call for action against infectious diseases.

As an illustration, **Maria-Victoria Aviles Blanco** presented the results of a study exploring individual-level health determinants, using the concept of a "health production function"[29] to describe malaria incidence in Honduras.

The study found that preventive health interventions had positive impacts in the reduction of malaria, while curative interventions tended to focus on already high-incidence communities. Health infrastructure reduced the incidence of malaria, and in places with no health services there seemed to be a "call effect" for human resources. At the municipal level, differences in malnutrition and "health success indexes" were associated with differences in malaria incidence; while indicators such as the proportion of people who know about public policies, being a beneficiary of immunization campaigns, and the presence of social programmes were all associated with malaria reduction.

In the case of Honduras, public health interventions appear to have had significant impacts in the fight against malaria, although different interventions had different impacts and interacted with individual and household factors in different ways. Public infrastructure and prevention programmes were argued to be the most effective strategies reducing the incidence of malaria. Specific recommendations included paying closer attention to undernutrition and access to basic services, focusing on the complementarity of personal and household hygiene as preventive measures, and institutionalizing the fight against malaria.

V. Current Evidence and Research Needs on Dimensions of Access

Macro-level forces such as globalization and the international movement of ideas and ideologies have important implications for reforms (economic, sectoral and of the state), including health system reforms intended to improve access in middle- and low-income countries. In many cases, such larger processes may shape what is even considered possible in terms of improving access and equity. **Celia Almeida** discussed historical trends, implications and results of health sector reforms over the past decades with an emphasis on the important role of those forces in the developing world.

The terms globalization, health policy, health sector reform and equity have been used in varying, often imprecise ways. In particular, the term globalization as it is currently being used refers to a growing nterdependence among the world's economies, as a dynamic inherent to the development of capitalism. However, recent aspects of globalization are neither "natural" phenomena nor inexorable dynamics, but are actively produced at specific political and economic conjunctures with serious repercussions on all spheres of national life.

Health policy and health sector reform definitions rarely emphasize the links between economics, politics and social policy. There is still little discussion of the contextual aspects that define and originate reforms, and decisively influence their implementation. The tendency has been to present health sector reform as merely a set of technical processes naturalized by globalization. Furthermore, the inclusion of principles of equity or universal rights into laws intended to guide the formulation of health policies does not automatically guarantee the implementation of policies that actually improve levels of equity. Even so, there is little health sector literature analysing the reasons for these discrepancies.

[29] Gertler, P.J., E. Rose and P. Glewwe. 2000. "Health." Chapter 8 in M. Grosh and P. Glewwe (eds.), *Designing Household Survey Questionnaires for Developing Countries: Lessons from 15 Years of the Living Standards Measurement Survey*. World Bank, Washington, DC, Volume one, pp. 177–216; and Behrman, J. and A. Deolalikar. 1998. "Health and nutrition." In H. Chenery and T.N. Srinivasan (eds.), *Handbook of Development Economics*. North-Holland, New York, pp. 630–711.

The way the issue of health sector reform is included on the political agenda of countries in the North (particularly in Europe) is very different from the South. In the North, health sector reform was mainly driven by constraints stemming from the economic crises of the 1970s and1980s and the need to control national health spending, as well as the crisis in the welfare state and neoliberal attempts to dismantle social policies.

In countries of the South (particularly in Latin America and the Caribbean, and in Africa), and in Eastern Europe, with rare exceptions, macroeconomic adjustment policies (mainly during the 1980s and 1990s) were not concerned with putting appropriate social policies into place, and the inclusion of health sector reform on political agendas was not determined by the need to control increasing costs and spending. The health sector reform agenda for the majority of countries has been one of the conditionalities of international loans. It has been required based on the need to address long-standing historical problems (inefficiency, ineffectiveness and inequalities) which, in fact, are present in health care systems, but which have been aggravated by the successive adjustment programmes that reduced investment in social policies and degraded state institutions and public administration. It has also entailed a pragmatic acceptance of the new economic conditions and the inexorability of resource shortages, while advocating selectivity and basic benefit packages for specific groups in need, that is, the poor.

The political agenda of these contemporary reforms has also been conditioned by the dynamic of building a "market society" that underlies neoliberal hegemony. Principles of administrative reform, decentralization and the introduction of competition mechanisms have been stipulated in order to obtain greater efficiency and equity in health systems. In several countries, these elements have been taken into consideration in the design of new health sector reform models, the main objectives of such reforms being the reduction of public spending on the health sector; breaking up "monopolies" and redefining roles (of the state and health providers); altering the public-private mix to increase private sector participation in service delivery; meeting "consumer" demand; and achieving greater managerial efficiency, flexibility and effectiveness. It was claimed that these measures would yield better levels of equity.

The (neo-)conservative inspiration for this agenda is reflected in the fact that it centres on medical care, not on the social determinants of health or a broader view of "health" relating the health sector reform process with multi-sector strategies designed to overcome inequalities. Even though inequalities in access may be best addressed by the health sector, recommendations are to set priorities and apply compensatory public policies focused on the most needy, a strategy that does not, a priori, lead to better levels of equity.

These ideas were spread worldwide and reinterpreted in reform proposals in numerous countries, resulting in a broad variety of strategies for change in spite of the quite homogeneous agenda. Practically all health system reform processes bear the marks of this agenda, which endeavours to redefine the state's distributive function in the health service field, thereby substantially restricting the nature of health policy as social policy.

Recently implemented health sector reforms have aggravated some constitutive features of societies in the South and created new problems by favouring a pragmatic and restrictive approach. The values of solidarity and equal opportunity for all are being replaced by a "radical utilitarian individualism"; and the principle of "health needs or need for health services" is giving way to a concept of "risk" that is monetized and defined according to the individual's social and economic situation.

In some cases in the South, the implemented reforms can be said to be more far-reaching than in the countries of the North, in that they extend to various spheres—from the funding to the reorganization of health systems—and have entailed substantial conflicts between the principles of solidarity and equity, on one side, and efficiency and effectiveness, on the other, and have considerably augmented the complexity inherent to health systems. In addition, legal principles have been approved that institutionalized the right to health as a social benefit, formally instituting universal coverage and the commitment to the principle of equity. In fact, however, in most cases the way these changes have been operationalized has worsened health system fragmentation and segmentation, and has not overcome inequalities, besides leaving much to be desired in terms of efficiency.[30]

[30] See C.M. Almeida. 1999. "Reform of the state and health sector reform: International experiences and directions of change." (In Portuguese). *Ciência & Saúde Coletiva,* 4(2):263–286.; Almeida, C. 2002. "Health services reform and equity in Latin America and the Caribbean." (In Portuguese). *Cadernos de Saúde Pública*, 18(4):905–925.; Almeida, C. 2006. "Health sector reform in Latin America and the Caribbean: The role of international organisations in formulating agendas and implementing policies." *Well-Being and Social Policy*, 2(I):123–60.

Poverty has taken precedence over the core concerns of social policy, such as citizenship or health as a human right, and privatization has taken place, all in a context where a powerful private medical care sector is gaining strength internationally, where funding for implementing so-called public goods is scarce and where nation-states' policy-making autonomy is constrained, all constituting an extremely complicated arena for decision making. In spite of the need to build regulatory and implementation capacity, reform of the state was not carried out as hoped, in addition to which this capacity building was severely compromised by fiscal stress and declining prestige of public institutions and state officials.

There is a notable neglect of the epidemiological and programme execution aspects of public health programmes and endemic, epidemic or infectious disease prevention and control programmes, poor integration of levels of care, and difficulties in setting up referral and counter-referral networks, while system restructuring has not been designed according to the population's needs and territorial supply. Guaranteed health services are offered on a service package basis, with varying scope and coverage for different social groups producing greater segmentation, and in some countries that have lagged behind most in terms of health coverage for their populations and solidarity financing mechanisms, such targeting processes have exacerbated inequalities. The diversity of organizations involved in service provision in some countries (China, Colombia, the Dominican Republic and Guatemala, for example) is also striking and poses questions as to the technical (and ethical) capacity of such dissimilar bodies, even more so when they are authorized without a rigorous evaluation process.

It can be said that in countries of the North, particularly Western Europe and Canada, reform has not fundamentally altered the principles on which health systems are structured. The introduction of competitive mechanisms into health systems has faced strong criticism, but calls for splitting financing from provision have proliferated; as a result, the state's role as regulator has been steadily strengthened. Reforms have not shifted the approach away from financing health on a solidarity basis, with universal (or near-universal) access to services, regardless of ability to pay. The public proportion of total health spending has generally been maintained (at between 70 and 80 per cent).

In Eastern Europe, Latin America, Asia and Africa, meanwhile, the models of reform have been much more radical and complex, although conditions were much more precarious and reforms were subject to considerable financial limitations and historically deficient regulatory capacity. The rules of financing and the benefits have been changed, in addition to separating the functions of regulation, provision and financing. In some cases, this has led to the dismantling of existing health systems, with no guarantee of improvements in the health care provided to the public or the state's implementation capacity. Greater participation by the private sector has also been encouraged in service management and provision, along with users' freedom of choice and competition among insurers and providers, thus introducing quasi-market strategies into public health service provision. Also making itself felt more incisively in these regions is the large-scale diffusion of the ideas and influence of international agencies, such as the World Bank, and donor-funded programmes targeting specific diseases. Access, use and utilization of health services have actually worsened in many countries, and serious constraints confront attempts to achieve more positive results.

In summary, the genuine dilemma between administering scarce resources (efficiency) and overcoming inequalities (social justice) has been accentuated to extremes over the past few decades This dilemma is especially important in some regions (such as Latin America and the Caribbean), because external conditionalities have met with strong national acceptance and experimentation has proliferated with little or no criticism.

Breaking with the technocratic, reductionist focus thus entails thinking about (state and health sector) reform on the basis of broader theoretical and conceptual frameworks. In this regard, it is essential to restore politics to the analysis of reform processes, given the tendency to disregard politics and spread the belief that it is possible to make important changes to how health systems are structured without contemplating contending projects and resistance to change (not to mention the powerful new players benefiting from change). This means strengthening the connections between state and society. For that purpose governability and governance are complementary concepts, because the former refers to the general systemic conditions where power is exercised, and the latter to the state's action in implementing policies and providing guarantees for the achievement of collective goals, such as assuring decent conditions of life for its population.

Increased commercialization of health services also presents barriers to improving access. **Celia Iriart**

presented a case study on Argentina showing that commercialization is a powerful force for change in health systems, but one that should be reshaped, directed and—in part—blocked in the interest of promoting better access and more equitable health outcomes.[31] Commercialization is defined as the provision of health care services through market relationships to those able to pay; investment in, and production of, those services and of inputs to them for cash income or profit; and health care finance derived from individual payment and private insurance.

The case study called attention to the need for a change in the "common sense" related to the principles that have guided the creation and development of health systems. Before reforms undertaken in the 1990s, the common sense idea was that health care was a right guaranteed by the state and financed by public and social security funds created by taxes and salary contributions; social security was a large fund managed by government and workers' unions; and public health care service organization was based on the principle of universal access.

But the new approach that resulted from the promotion of commercialization processes implied that health care was no longer a right guaranteed by the state, but a good to be acquired by individuals; that the health sector should be deregulated and subject to a competitive market; that public and social security institutions should compete with the private sector for resources; that the public sector should be concerned only with those living in absolute poverty while the rest of the population should pay for preventive and curative health care; and that the state administration should finance only programmes considering questions of general public health.

Less money became available for health care due to increasing administrative costs and bureaucratic procedures, the need to return profits to private investors, and rising levels of corruption. Health care access also decreased because a minimum health package was established, obliging people to pay for services not included in it, and user fees were required in public hospitals and clinics, increasing co-payments. For example, visits to primary care centres by pregnant women decreased by 43 per cent between 2000 and 2001; early pregnancy detection fell by 23 per cent; lack of supplies to test toxoplasmosis and syphilis worsened the technical quality of prenatal care for poor women; and children receiving the nationally recommended number of first year check-ups decreased by 20 per cent.

The experience of commercialization in Argentina shows that health care systems do need reform, but this process should not be driven by private financial interests who extract money from the health sector to make profits and satisfy shareholders. Instead, reform should be directed at changing the health care system so that it benefits all people. That is, the curative, individualistic, mercantilist and biological model managed by financial capital cannot resolve the health care needs of the majority of people, and no managerial reform can stop increasing health system costs that are driven by pharmaceutical and insurance corporations.

Decentralization of health systems has been proposed as one way to address organizational barriers to access. **Daniel Maceira** discussed lessons learned from decentralization of health systems and services in terms of organizational barriers and equity. The proposed framework for assessing organizational barriers starts with the premise that decentralization processes require a willingness to distribute political and financial power, as well as investment in local management and control. Any reform should foresee a complete action plan that considers spillovers into other sub-sectors (private, social insurance) and addresses cross-subsidies needed to avoid increases in equity gaps. History also matters: every health system is influenced by the historical legacy of that society and the role of federalism and political regime (socialism, authoritarianism, among others) is critical.

There are advantages and disadvantages of each of the principal types of health financing reforms in the health systems of the Latin American and Caribbean region, which include decentralization of service provision, separation of functions (financing versus provision), public/private partnerships, creation/redefinition of social insurance systems, development of basic packages of health care interventions, development of hospital self-management and cost recovery methods (co-payments). Maceira discussed these positive and negative elements in more depth through a case study on maternal-child health in Bolivia, where a series of neoliberal reforms, involving new political and economic stakeholders and strongly

[31] The Argentine case study, by Celia Iriart, was part of a larger UNRISD project, titled "Commercialization of Health Care. Global and Local Dynamics and Policy Responses", coordinated by Maureen Mackintosh and Meri Koivusolo.

influenced by international donors and multilateral organizations, had created tensions between municipalities and departments (as in Santa Cruz and Tarija) and decreased the political power of unions (post-1985). Bolivia implemented a structural reform strategy to develop a system of maternal and child health insurance for the poorest population groups. The reforms resulted in increased health care coverage, the appearance of unintended subsidies, greater empowerment of local leaders, and very weak reductions in the equity gap in resource allocation.

Maceira drew the following conclusions based on the Bolivian experience: (i) the level of administrative and managerial expertise of major political parties serves as a significant "quality shifter" in some public policy outcomes; (ii) urbanization is a relevant issue when planning health care strategies; (iii) financial resources, as a proxy of decentralization commitment, have a significant and positive effect on social outcomes; (iv) local managerial capacity has a significant impact on health and education outcomes; and (v) community-type variables appear to influence social sector results.

There is still limited empirical literature on decentralization in Latin America and the Caribbean, as well as a general lack of monitoring and evaluation tools that may partially explain the lack of documentation and analysis of results. Nevertheless, it can be said that limited institutional capacity at the public level leads to organizational constraints in policy implementation. There tends to be weak coordination between national- and municipal-level authorities, and the main rules and reforms are defined by actors with strong bargaining power. This implies transfers of financial and epidemiological risks, and poor equity indicators, leading to inefficient allocation of resources, high transaction (administrative, bargaining) costs, ineffective reforms, and lack of sustainable monitoring and evaluation mechanisms to improve feedback needed to develop a sound advocacy agenda.

There is ample evidence confirming that access to effective health care is a major problem in the developing world. Millions of people suffer and die from conditions for which there exist effective interventions. Economic barriers are considered one of the major impediments to access. In his presentation, **Owen O'Donnell** discussed how economic barriers influence access and presented several options for improving access to needed health care.

O'Donnell outlined two sides to the access problem. On the supply side, good-quality, effective health care may not be offered. On the demand side, individuals may not utilize services from which they could benefit. Of course, the two are related. Poor quality care will arouse little interest from the public. A high level of demand, made effective by purchasing power, will induce the provision of quality care. Solving the access problem requires tackling both demand- and supply-side issues. Income is defined as the capacity to pay for health care and/or insurance. This means that the capacity to pay for services is constrained by income and wealth. Price, defined as what must be paid for health services, includes formal and informal charges, and costs other than charges (for example, transport, lost earnings).

In low-income countries, health service utilization increases with income, and there is evidence of a positive relationship between income and utilization that is strongest for hospital care but also holds for primary, child and reproductive health care. Generally, income elasticity is positive (that is, the quantity of health services demanded increases as income increases) but is less than unitary, meaning that the demand for health services will not increase as fast as income increases so the proportion of total income going to health care will actually decrease as people's incomes rise. This is to be expected given the heavy reliance on out-of-pocket financing; and because of the high level of out-of-pocket financing and a general lack of credit, current income can be considered a constraint on health care use.

The price of health care also constrains utilization of health services in low-income countries and can be high relative to incomes. Most evidence shows a negative impact of price on utilization, and estimates price elasticities of less than one. Poorer individuals are most responsive to price, and elasticities are even lower for primary care. There is some evidence that improvements in the quality of services and reduced transport costs can partially offset these price effects. Nevertheless, overall utilization is lowest among the least well off.

Can these constraining effects of income and price be eliminated? According to O'Donnell, given the economic conditions of low-income countries, they cannot. Nor, in his opinion, would "free" care be efficient or equitable. But there is a strong case for scaling-up spending on health care such as that proposed by the Commission on Macroeconomics

and Health[32] to provide universal access to "essential" services.

Given these assumptions, for which health services and for whom should the income and price constraints be weakened? O'Donnell focused on the second part of the question, proposed "the poor" as the answer and then went on to outline the preferred mechanisms for weakening these constraints. One approach would be to expand health insurance coverage for the poor, because pre-payment (risk-pooling) and credit (risk-smoothing) mechanisms could weaken the budget constraints on health care demand. But expansion of pre-payment is largely conditional on the process of economic development, and although policy initiatives can accelerate this process (as shown in the case of Thailand, for example), such an approach is not affordable for most low-income countries. Another approach, O'Donnell suggested, would be to combine several types of targeting, based on income (although this may have administrative and incentive problems); or other characteristics, such as number of children or geography (although these run the risk of programme leakage). Another option would be community financing schemes that have some (limited) risk pooling, but further experimentation and evaluation is required to ascertain their effectiveness.

Another possible solution is fee waivers for the poor. In the short to medium term, fee waivers are more feasible than expansion of insurance coverage. But there are many examples of schemes that have failed to protect the poor and ensure their access to care. Some deficiencies are vague exemption criteria, difficulties in assessing income, implementation, information, discretion, and disincentives to providers. Entitlement cards have had some success (for example, in Thailand and Indonesia), but care must be taken to separate the responsibilities for verification of entitlement from service provision, and providers must be compensated for any lost revenue. Effective fee waivers need to define concrete eligibility criteria, make regular reviews of eligibility, and carefully define the roles of NGOs or other agencies involved in service delivery.

[32] The Commission on Macroeconomics and Health was launched by Gro Harlem Brundtland, then Director-General of the WHO, in January 2000. Over a two-year period, the Commission analysed the impact of health on development and examined how health-related investments could have a positive impact on economic growth and equity in developing countries. It recommended a set of measures designed to maximize the poverty reduction and economic development benefits of health sector investment.

Taking into consideration that the effectiveness of insurance and fee waivers is constrained by the size of price effects, it is important to evaluate non-price factors and whether or not economic incentives could be used to overcome non-price barriers to use.

Conditional cash transfers have been used in Latin America to encourage participation in human capital (education) programmes. This approach could be applied in health for preventive interventions for which need is homogenous or easily verifiable. O'Donnell discussed regional evidence of raised immunization rates and prenatal care, with the greatest effects for the poor, but further experimentation and evaluation would be required to establish where such schemes actually work and for what types of services they are effective; to identify characteristics of successful programmes; and to understand for how long such programmes might be effective.

Access to health care may be inadequate due to economic reasons, including insufficient or inappropriate allocation of resources, insufficient household incomes, lack of credit and prohibitive charges. But there are also important non-economic causes of inadequate access. A few general principles and strategies could help to tackle the problem: assuring universal access to essential services; bringing priority services close to the community; improving quality of care; reducing the service provision role and strengthening the stewardship role for the state; targeting diseases of poverty; and developing more effective ways to protect the poor from user charges.

What actually works, in terms of implementing such strategies, remains unknown. There is a general lack of evidence on the effectiveness of specific programmes in increasing utilization. There is also a need to go beyond broad strategies to policy measures that are context-specific, detailed and heterogeneous. In spite of these challenges there is great scope, through evaluation, to learn about programme characteristics that are essential to success.

Affordable access to essential drugs is part of the MDGs but progress on health MDGs has been too slow, particularly in low-income countries. **Jorge Bermudez** presented the Pan American Health Organization (PAHO) framework for technical cooperation and strategy implementation, emphasizing that access to medicines is a typical cross-cutting area.

Medicines may be a barrier to care due to issues related to cost, pricing, economic regulation, market exclusivity or affordability. Today, too many people around the world lack access to essential medicines. One third of the world's population lacks regular access (of which 320 million people in Africa have less than 50 per cent coverage) and this problem has worsened with economic pressures. The world drug market mobilized resources of about $406 billion in 2002: North America had 42 per cent of this market; Europe 27 per cent; Japan 11 per cent; Africa, Asia and Middle East 13 per cent; and Latin America 7 per cent. At the same time, the world population reached six billion people in mid–2001.

The 2005 *Human Development Report* shows that the gap between the MDG target for halving poverty and projected outcomes is equivalent to an additional 380 million people living on less than a $1 a day by 2015; and yet for every $1 that rich countries spend on aid they allocate another $10 to military budgets. On the other hand, current spending on HIV/AIDS, a disease that claims three million lives a year, represents only three days' worth of military spending.[33]

WHO perspectives on access to essential medicines have some fundamental principles: access is a human right; essential medicines must not be considered simply another commodity; products that may save lives must be considered "public goods"; and it is necessary to identify appropriate incentives to ensure research and development of new products, mainly for neglected diseases. To do this will require confronting and overcoming market failures, public health (government) failures; and sectoral and inter-sectoral failures.

Recent negotiations and decisions affecting this situation include the 1995 establishment of the WTO (World Trade Organization) and the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), which includes patent protection with the admission of some exclusions. In 2001, the "Doha Statement on TRIPS and Public Health" stated that public health has priority over the rules of international commerce, and legitimized compulsory licensing as well as other options for countries without a developed industrial base.[34] The Ministerial Conference in Doha also commissioned a process for developing a set of regulations to deal with these situations.

Nevertheless, it can be argued that trade issues still present significant barriers to access to medicines. These include: "TRIPS–plus" free trade agreements[35]; patent protection as a legal monopoly for 20 years (without competition); trends in innovation (such as incremental innovation, which does not necessarily add therapeutic value but does increase cost since new medicines are always more expensive than the older ones); research and development (R&D) cost-recovery in developing countries; development of medicines for neglected diseases; and seeking a balance between innovation and public health.

Some countries in Latin America and the Caribbean already have pertinent legislation intended to include TRIPS Agreement flexibilities in patent legislation, but countries are not making full, systematic use of the flexibilities or safeguards that the TRIPS Agreement provides. Free trade agreements are imposing restrictions on national laws and on international agreements, superseding national legislation (such as TRIPS–plus). Thus, countries need to improve their legislation to ensure better health conditions for their people, but even this is not enough.

In order to achieve the best possible global balance between the need to invest in innovation and access to new medicines, safeguards must be present in the negotiation of new regional or bilateral trade agreements. The issues of intellectual property, investment, innovation and competition require a tridimensional—global, regional and bilateral—strategy in negotiations. This also implies that, as future agreements are negotiated, it will be necessary to make a link between concluded commercial agreements (such as TRIPS) and "free-trade" accords (such as NAFTA).

There are examples of policies and decisions that may make a difference, such as anti-retroviral (ARV) price negotiation for 11 countries in the Americas; the joint statement of the Ministries of Health of Argentina, Brazil, China, Cuba, Nigeria, Russia, Thailand and Ukraine endorsing the establishment of the HIV/AIDS technical cooperation network; different models for local manufacturing (state production in Brazil, the Government Pharmaceutical Organization in Thailand, the private sector in India, local manufacturers in Latin America); the PAHO regional strategic plans for 2006–2015 and the Universal Access initiative for 2010

[33] United Nations Development Programme. 2005. *Human Development Report 2005—International Cooperation at a Crossroads: Aid, Trade and Security in an Unequal World.* Oxford University Press, Oxford.

[34] See www.wto.org/english/thewto_e/ minist_e/min01_e/ mindecl_trips_e.htm

[35] "TRIPS–plus" is the name given to post–2003 bilateral and regional trade agreements that provide greater intellectual property protection for the pharmaceutical industry than do the original TRIPS agreements.

(HIV/AIDS); the precedents for intellectual property rights and access to medicines set out in the Central America–Dominican Republic–United States Free Trade Agreement (CAFTA–DR); and pandemic influenza and worldwide availability of Oseltamivir (Roche Tamiflu®) and current vaccine technology.

There are also proposals from innovative developing countries. A good example is the PAHO Regional HIV/AIDS STI Plan for the Health Sector 2006–2015 that includes improving access to medicines, diagnostics and other commodities by collaborative efforts to ensure availability, effective cost-containment strategy, bulk procurement, generic medicines, transparency on pricing, leadership in joint negotiation, awareness regarding trade, and rational use of medicines.

Specific proposals for action to improve access to medicines include implementing joint price negotiation and incentives for local manufacturing (public and private); increasing the number of countries participating in the PAHO Strategic Fund; and using global forums to raise public awareness and foster joint actions. In addition, countries should fully utilize the TRIPS Agreement flexibilities, implement the Doha declaration regarding international trade with a health approach, and resist a "TRIPS–plus" approach in free trade agreements. There is a need to empower innovative developing countries and to create networks for technical cooperation and technological development. Finally, we need to ask whether the current intellectual property regime is adequate, and if a balance between innovation and public health is even possible.

Access to needed care is also determined by geography. In his presentation, **Luis Rosero-Bixby** discussed the geographic barriers to physical access to health facilities in Costa Rica and illustrated how Geographic Information System (GIS) approaches could be used to measure inequalities in access.

There are three main measures of physical or geographic access: (i) the distance to a specific type of health facility; (ii) the presence of health services within the community; and (iii) the density of services in an area. All of these measures have problems when aggregated to the community level. For example, measures of distance to a health facility might not take into account crowding or clustering of facilities in the same place, the definition of community itself might be arbitrary, and measures of density may not account for heterogeneity or the use of services outside the defined area.

There are several types of data for measuring physical access. These include administrative records to measure density; survey sampling data to measure distance or travel time, and characteristics of the health services which are often available only nationally or for large areas; and data from a census of facilities and population that is geocoded, which provides highly disaggregated data on distance, density measures and characteristics of health services.

Results in Costa Rica showed that approximately 10 per cent of the population had inadequate access to health care. Between 1994 and 2000 inequity in access to health care declined for medical consultations (8.7 per cent improvement) and overall service density (4.0 per cent improvement). The earlier the reform, the greater the improvement in equity in access to medical consultations: 15 per cent improvement in the areas with the earliest reform (1995), 7 per cent improvement for the areas with reforms that started in 1997, and only a 3 per cent improvement in areas that had no reform by 2000. A similar pattern was detected for overall density of access.

Rosero-Bixby showed how GIS methods can improve measurement of equity in access to health care. Disaggregated measurement of location of services can also aid in allocation of resources and facilitate impact evaluation, but geocoded inventories of health facilities are a requirement for these types of analysis. Notwithstanding the results presented here, additional research is needed on the "friction of distance" and on other factors such as the utility functions used to measure service density.

Information and communication also play an important part in determining various dimensions of access. In his presentation, **Michael Thiede** argued that a multidimensional approach to access that looks at information and communication can elucidate how relations between service providers and individuals are based on an interchange of information, how the distribution of information implies inequities in access, and how this information can be used to develop guidelines for health policy in resource-poor settings.

Access is a precondition to health service utilization (which is itself based on choice) and access can be considered the freedom to utilize health services. But relational factors may limit people's subjective choice sets or their freedom to utilize health services, and can therefore be thought of as information and communication barriers.

Information is a vague and ill-defined concept, it has built-in elements of subjectivity, and it is a health care good to which no value can be assigned ex ante and may enlarge individual/communal choice sets. It is also a demand-side factor of access. Communication is information exchange and is a prerequisite for social interaction. It connects lifeworlds and social systems, and regulates the behaviour of social systems independent of information completeness or correctness. Exclusion from or participation in communication processes largely determines an individual's social position.

Thiede used case studies from Ghana and South Africa to illustrate the importance of information as a determinant of health service access. In Ghana, the most common source of information about how to treat or manage malaria is relatives (77.2 per cent), followed by government (12.6 per cent) and chemists (10.2 per cent). Percentages differed when disaggregated by asset quintiles, however, with the richest citing government as their main information source and the poorest citing relatives and chemists. The explanation for these differences is as much cultural as a change in attitude toward health information, either because it is transmitted through the media or because health personnel inform patients about malaria even if the patient is seeking care for another health problem.

In South Africa there is evidence that information regarding AIDS has been essential in the fight against the disease. But it is important to take into account the stigma associated with the disease, including assuring that health education initiatives are not presented in a threatening way ("HIV/AIDS workshop" may be frightening and dissuasive), and assuring that mass communication and educational campaigns actually reach the people they are intended to reach through means such as placement of communication materials and billboards, including rural areas in campaigns, and making sure that there are ways to contact those who may be illiterate.

Health communication should be seen as an interactive and participatory process between the health system, communities and households. Communicative processes are those processes that assist in establishing and securing equally negotiable pathways into the medical system for individuals from all cultural and socio-economic backgrounds in society. In order to improve communicative processes, facilitators must establish trust. Communication itself must aim at an increased overlap of lifeworlds, defined as spheres of inter-subjectively shared assumptions and perceptions of the environment in which communicative processes are embedded.

Good information policy can make a significant contribution to more equitable public policies. Health policy often overemphasizes the supply side, but health information needs to be truthful, comprehensible, adequate and trustworthy. A lack of appropriate health information from the health system leads to the distortion of information and misuse of treatment regimens. The victims of misuse are the poor who do not get appropriate information. Even if health information does not directly stimulate service utilization, it may contribute to individual knowledge and thereby increase access since even "free" information is not automatically consumed or homogeneously processed.

The health system often develops independent of the people it is supposed to serve, so we need a framework to allow for communication that does not focus on unilateral achievement but on consensus. To this end it is important to develop partnerships that go beyond health care and a basic participatory approach, toward an integration of communities' views as a reference for the evaluation of corresponding health information.

In addition to information and communication barriers, interpretations of illness categories and perceived symptoms are shaped by political economy, history and social relations, and may present another set of access barriers. In her presentation, **Arachu Castro** discussed how analyses of the local interpretation of disease, health seeking and disease-related stigma need to be embedded within a wider political economy context. When such a broad approach is lacking, differences in health seeking tend to be "culturalized", power relations ignored, and "cultural" differences used to justify the shortcomings of public health interventions.

Castro illustrated this point by presenting results from a study on the timing of presentation for HIV care in Hinche, in central Haiti.[36] In the study, carried out in 2005, the following factors were associated with late presentation for care: lack of identification of HIV transmission and symptomatology; poverty and socioeconomic status; and quality of prior experience with local health care system. Harsh poverty was a

[36] Louis, C. et al. 2007. "Late presentation for HIV care in central Haiti: Factors limiting access to care." *AIDS Care*, 19(4):487–491.

striking theme among all patients interviewed and was intricately associated with many of the other reported factors.

The case study illustrates the necessity of a multifaceted approach to improve access to care and respond to HIV/AIDS in Haiti. Such an approach would include accessible, free and effective medical care; expansion of basic education; and enhanced collaboration between local, traditional healers and the biomedical health care system. Such collaboration is being attempted with some success in the hospital in Hinche. Appropriate and reliable medical care would increase patients' motivation to seek hospital care and help dissipate the negative impressions held by many patients about the local hospital. Local health education campaigns aimed at reaching the entire population could increase HIV awareness, improve knowledge about disease risk factors and prompt patients to present for care earlier, perhaps before they visit a traditional healer. These measures could lead to more effective detection of HIV, significantly reduce the number of patients who present late for care, and mitigate suffering and premature mortality from AIDS in Haiti and in other resource-poor countries similarly affected by the AIDS epidemic.

VI. Research Needs, Challenges and Strategies

It is often hoped that new information technologies can accelerate progress in improving access to infectious disease control tools. In his presentation, **Ernesto Marques** discussed how modern medical "points-of-care" and supporting services, such as radiology and pathology, can be transformed by information technology.

In wealthy countries, the norm is to use multiple proprietary (and often expensive) database software and a variety of formats that often do not communicate well with each other, if they can communicate at all. The result can be an inefficient medical "infostructure" where end-users are unable to transform the terabytes of data into useful information, which could guide better health care spending priorities and implementation strategies.

The public health situation in developing countries is quite different than in developed nations for numerous and obvious reasons; however, the main problem for the public health administrator is the same: lack of good, up-to-date information to guide priority decisions and identify problems of exclusion and inequitable delivery. This problem becomes even more critical in situations where resources are more limited, since they demand even stricter definition of public health priorities. Today the financial cost of implementation of a hardware infostructure in a few sentinel point-of-care units, strategically selected to be representative of larger regions, is a very small fraction of total public health expenses, likely less than 1 per cent. This investment, even in very poor countries, could easily be recovered.

At this stage, it is critical that health policy makers in general, and particularly those in parts of the developing world with a critical mass of software engineers (such as Brazil, India and South Africa), take advantage of the incredible power of open-source software and the community around it to start a massive effort to create a low-cost patient-centric health infostructure, designed to meet the information needs of public health organizations, and make it available for global distribution. The use of standard data transfer and storage on all proprietary software purchased by governmental agencies should also be a requirement.

Legislation protecting patient information privacy and other ethical issues involved in the design and protection of databases is one of the biggest challenges for the development of such medical and public health information systems. However, modern encryption, anonymization techniques and databases with large numbers of subjects can overcome the possibility of singling out a person and ensuring the privacy of each patient.

A patient who has visited the family doctor, been referred to a specialist, had numerous blood samples taken and other investigations performed (often redundantly) usually has limited knowledge of, access to and control over the collected medical data. The patient has no way of knowing what data exist, who has access to them, or whether there are errors (to name but a few problems); and each time the patient visits a medical service, clinicians collect the same information again. On the other side are the public health specialists trying simultaneously to manage the health system, identify the problems, find the solutions, improve the services and deal with a restricted budget—but who have to base their decisions on information that is difficult to obtain, costly, old, unreliable, scattered across a large number of different fragmented health

services and must be re-entered into a new database to be analysed.

Interestingly in terms of overcoming health inequities, developing countries are in a unique position to exploit the potential of a patient-centric, open source software–based health infostructure by virtue of starting with a fairly blank slate. Just as many developing countries (notably those in Southeast Asia and Latin America) leapfrogged expensive and obsolescent landline telephonics and became nations of mobile phone users, those countries that have not yet invested in proprietary, non-integrated and technologically obsolete health information systems will find it easiest to implement a new model.

Such patient-centric infostructure systems, which could be implemented from local to national levels, would enable expansion of evidence-based medicine, clearer identification of health inequalities and more accurate cost-benefit analyses. In addition, the public health sector could link such databases to traditional Electronic Patient Record (EPR) systems at a greatly reduced price by promoting the use of standards-based formats for data transfer and storage. Ultimately, the new health infostructure would help decrease health inequity. Developing countries such as Brazil, India and South Africa are particularly well positioned to take advantage of the open source movement and leapfrog countries burdened by legacy systems.

There are considerable challenges—and opportunities—regarding research on access to health systems. **Ritu Sadana** discussed three of the most pressing issues: the quantity, location and topics of research; approaches to producing research; and the relevance of research to health systems.

In relation to the first aspect, research quantity and location, according to data from the PAHO Advisory Committee on Health Research (2005), between 1992 and 2001 there was a decline in low-income countries' share of easily accessible research on health topics. Between 1994 and 2001 the share of lower-middle income and upper-middle income countries increased, while the higher-income countries maintained their relatively high position. In the same period there was also heterogeneous growth across geographic regions: the Americas and Africa declined; Europe remained stable; the Middle East and the Western Pacific regions increased, and Southeast Asia declined between 1994 and1997 and grew afterwards. There is also a heterogeneous contribution within each geographic region. For example, in Latin America and the Caribbean, the major contribution comes from Brazil, Argentina, México, Chile and Venezuela in decreasing order of production. Within the Americas, Canada and the United States are also exceptions.

In relation to the type of research, there is evidence of limited research on public health and health systems, social sciences and welfare, and food sciences. Health systems and public health research increased slightly between 1995 and 2001, but it is still quite low. Clinical medical research is the best financed (followed by basic and biomedical research), and it grew the most between 1995 and 2000.

Opportunities stem from the growing consensus on priority topics for health systems research, such as financial and human resources; organization and delivery of health services; governance, stewardship and knowledge management; and the effects of global initiatives and policies (including trade, donors and international agencies) on health systems.[37]

Regarding research approaches, limited infrastructure has led to a limited range of outputs. Ways of addressing this situation include defining national health research priorities; implementing ethical processes; making research valid and transferable; fostering research networks and collaboration; creating an enabling environment and career structures for research and dissemination; bridging the gap between researchers and the users of research; allocating more funds to health systems research and cross-sectoral operational research addressing health; committing to evaluation; and producing and disseminating more policy briefs and systematic reviews.

There is a wide range of stakeholders in knowledge production on health. But there is also limited collaboration among stakeholders[38] and limited collaboration across important countries (such as Brazil, India and South Africa), as illustrated by an analysis of the number of papers with at least one co-author in each of the three countries.[39] Overall, there is greater international collaboration in clinical medicine, and basic

[37] World Health Organization. 2005. *Report of the Task Force on Health Systems Research*. Chair: Andy Haines. World Health Organization, Geneva.

[38] WHO Health Research Systems Analysis Survey, 2004 (included 2,868 individuals in 13 countries).

[39] Social Science Citation Index and Science Citation Index databases.

and biomedical research, than in health systems research. But it is possible to stimulate greater collaboration among stakeholders and countries. In the Americas between 1992 and 2001, extra-zone collaboration on public health and health systems topics nearly doubled.

Another challenge is the overall quality of the knowledge produced, since it has been suggested that "most published research findings are false".[40] This claim highlights the need to nurture more balanced and ethical research partnerships, and to increase opportunities for collaborative networking across low- and middle-income countries. On the other hand, there is a growing consensus on the need to improve and standardize methods across multiple centres and research sites, and to document how context-specific barriers have been overcome.

Two important challenges regarding the relevance of research to health systems include limited capacity to identify or set priorities for national health research; and limited origin, focus and types of studies included within meta-analyses of research findings on child health. An opportunity for overcoming this situation is to increase media coverage of health research. A study reviewing newspapers in Tanzania in 2004 showed that 40 per cent of coverage was related to general heath information and 20 per cent to health policy and health systems.[41]

In the discussion that followed, participants called attention to the fact that scholarly and scientific analyses often use a limited number of specialist databases that do not include books or book chapters as well as other types of publications such as magazines, government publications, grey literature and even some journals. Yet such sources frequently present the results of large studies and surveys, and, in less developed countries (and even in more developed, large ones like Brazil) are an important sources of dissemination of knowledge. Participants highlighted the importance of consulting these other sources and taking them into consideration. In closing, Sadana suggested that workshop participants would contribute to new methods for systematic review of actions that improve access, coverage and increase equity, if they could agree on some basic definitions and measures of access and coverage.

VII. Conclusions and Lessons Learned

Based on the presentations and discussions, the following specific issues emerged from the symposium. ***Access and equity.*** The issue of access is inextricably linked with ideas of disparities, equity and social values. Disagreement about what individuals and societies value translates into disagreement on approaches to improving access. A prime example is the debate over universalism versus targeting. Both approaches claim to have the same goal in mind—improving access for those in most need—but each is based on a fundamentally different value orientation. Thus debates persist, even when empirical evidence is presented about the benefits of one approach over the other. Conference participants reiterated the need to look at systematic and universal approaches to improving equity in both access and outcomes.

Access, health systems and the social determinants of health. Health systems are important social institutions, and there is consensus that many aspects of access need to be addressed through changes in health systems. But there are also tensions between approaches that focus on upstream or social determinants of inequalities and those that focus on immediate demands for health services based on specific health needs. There also exist tensions between different visions of the principles on which health systems should be based, such as universalism versus targeting. These tensions are even more apparent in the case of infectious diseases where vulnerable groups may be defined by social conditions of material or social deprivation, but in this case the solution to reducing inequities is often based on delivering a specific medical treatment to people who often have only a precarious relationship with the health system.

Defining access and equity. Access is a broad concept that has been measured and conceptualized in different ways. The lack of systematic approaches, of comparable studies across health problems, health systems or countries, impedes understanding of what, exactly, it will take to improve access and at what level (individual, health provider, health system, public policy, national, international) actions taken to improve access will be most effective. Likewise the understanding of equity is varied, and its definition and operationalization depend

[40] Ioannidis, J.P.A. 2005. "Why most published research findings are false." *PLoS Medicine*, 2(8):e124, doi:10.1371/journal.pmed.0020124.

[41] World Health Organization. Forthcoming. *Health Research Systems Analysis Media Review Study*. World Health Organization, Geneva.

on social values that are not always explicit in policy discussions. Moreover, there is no comprehensive framework to analyse equitable access to heath services and little clarity on appropriate theoretical frameworks to encompass the many dimensions of these two concepts.

The symposium highlighted several new ways to measure and define access and equity, and participants endorsed the need to go forward with new approaches to conceptualize and measure these concepts in all of their forms. This will require investment in new ways to collect data, explicit acknowledgment of values such as social justice and human rights, and a commitment to act on results.

Data availability and quality. Crucial issues surrounding measures of equitable access emerged from the discussion: the availability of data sources; data elements; methodological challenges and opportunities; and research questions. Participants emphasized the great need for and opportunity to advocate for availability of publicly funded data (such as National Health Household Surveys and the World Health Surveys); coordination and collaboration in data collection; sharing existing data; harmonization of key data elements; and better use of data for influencing policy and the design of appropriate, feasible interventions. There was also an appreciation of the value of qualitative research to validate measures of access and to explore and understand the relationship between barriers to access and perceived need among vulnerable and excluded populations.

Discovering, documenting and disseminating "what works". Participants agreed that there is little systematic, comparable evidence about what works to improve access to tools that can prevent and control infectious diseases. Much available evidence is limited in scope, difficult to generalize, too descriptive or too prescriptive, overly quantitative and lacking a contextual qualitative side, or often not documented in a way that allows for dissemination to other potentially interested parties. To this end, participants felt it would be useful to develop cases of "best practices", and discussed several means for systematically documenting and disseminating these best practices.

History, culture and politics matter. Inequalities in access are the results of historical and political processes that are often outside the scope of discussion on health services or infectious disease prevention and control. Nevertheless, issues such as international trade agreements; financial capital flows and investments; medical research and development, and pharmaceutical pricing; the policies of international aid agencies; and the diffusion of specific health sector reform agendas and models were all identified as fundamental in considering not only the emergence and persistence of inequalities of access, but also as issues that need to be addressed in a more comprehensive way if sustained progress is to be made.

Directions for research. In terms of a research agenda, workshop participants identified the need to (i) systematize and disseminate experiences of best practices in access to health care services; (ii) document how governments enforce and guarantee the right to health under alternative health care systems; (iii) analyse the strengths and weaknesses of the entire range of policy options available to extend social protection in health and protection from catastrophic financial expenditures due to illness; and (iv) document the historical development of health care systems, not only in terms of the social determinants of health but also as barriers to or facilitators of reform intended to improve access.

Group discussions also proposed a new way of mapping access dimensions across types of infectious disease control tools. The technique, illustrated with three specific diseases (malaria, TB and African Trypanosomiasis), is applicable to other types of infectious diseases. The access map is a matrix where the horizontal axis represents dimensions of access (availability, accessibility, acceptability, affordability) and the vertical axis contains different tools by level of intervention (preventive, diagnostic, therapeutic, information). The map can then be used to identify priority areas for research and action, and to identify and prioritize gaps in knowledge, technology or implementation.

Finally, participants discussed several themes for further research and action.

First, there is a need for more research on what access means to citizens. This could include better understanding of sociological, philosophical and anthropological aspects of equitable access, utilization of health care services and health as a human right.

Second, more country case studies and cross-country comparative analyses on access and equity could help solve methodological challenges related to research methods and current data limitations. Such research

could also help to assess the generalizability of lessons learned from smaller-scale innovations. Comparative analyses could take place through international workshops that focus on specific areas or dimensions of access in countries with different health care systems, and different health sector reform models and processes. Analysis should focus on how different components of health reforms (for example, decentralization, strengthening primary care, defining a basic packages of services, separation of financing from provision, privatization) affect outcomes and equity within different national economic, social and political contexts.

Third, it is essential to document and standardize efforts to systematize interventions related to access and equity, including assessment of the effectiveness and the cost-effectiveness of each one, in order to build a body of evidence upon which to advocate for policy reform. Such an agenda should also take into account analysis of different stakeholder perspectives to gauge the likely alignment of interests for different models of health sector reform. Ultimately, such an approach could result in a portfolio of strategies, including carefully documented considerations about best practices and relevant research results that could be used to more thoughtfully inform policy development and implementation.

The symposium served as a platform to discuss broad issues that cut across multiple disciplines. Access itself was considered to be a fundamental issue and perhaps partially because of the breadth of the concept and all that it has come to mean, participants overwhelmingly supported efforts to work together to improve understanding, and to develop collaborative research agendas and projects (including cross-country comparisons), in order to progress toward the development of effective intervention programmes, policies and approaches for more equitable access to health care in the developing world.

Agenda

Monday, 13 February 2006

08:00 – 9:15 Welcome Addresses and Introductions
Chair: Paulo Buss

Thandika Mkandawire

Johannes Sommerfeld

09:15 – 10:40 Session I: Introduction
Chair: Carlos Morel

Thandika Mkandawire—*Targeting vs. Universalism with Specific Considerations for Health Interventions and Implications on Access*

Alex Irwin and Orielle Solar—*The Health System as a Social Determinant of Health: Opportunities and Challenges for Improving Health Equity*

Leiyu Shi—*Primary Care and Health*

Mauricio Barreto—*Contemporary Issues in Access to Infectious Disease Control Tools*

10:40 – 11:00 Plenary Discussion
Rapporteurs: Celia Almeida, Roman Vega Romero

11:15 – 12:15 Session II: Concepts, Determinants and Measures of Equity in Access
Chair: Norberto Dachs

Claudia Travassos—*Concepts of Access: A Review*

Gavin Mooney—*Access and Equity: Rethinking Some of the Theory*

Alex Irwin and Orielle Solar—*Access and Effective Coverage: Towards a More Comprehensive Model for Measuring Equity in Health Opportunity*

12:15 – 12:30 Plenary Discussion
Rapporteurs: Celia Almeida, Roman Vega Romero

14:00 – 15:30 Session III: Measuring Equity in Access, Social Conditions and Social Exclusion
Chair: Leiyu Shi

Leiyu Shi—*A Conceptual Framework to Study Vulnerable Populations*

Owen O'Donnell—*Measuring and Explaining Inequalities in Access*

Eduardo Levcovitz—*Characterization of Social Exclusion and Challenges for Social Protection in Health in Latin America and the Caribbean*

Sara Arber—*Measuring Social Conditions and Social Exclusion*

Roy Carr-Hill—*Measuring Social Conditions and Social Exclusion: Some Thoughts*

15:30 – 16:00 Plenary Discussion
Rapporteurs: Celia Almeida, Roman Vega Romero

16:15 – 17:15 Session IV: Inequalities in Access to Infectious Disease Prevention and Control Services
Chair: Ricardo Thompson

Aryanti Radyowijati—*A Review of Research on Access to Infectious Diseases Control Tools*

Maria-Victoria Aviles Blanco—*Access to Health Care as a Determinant of Health*

17:15 – 18:00 Plenary Discussion
Rapporteurs: Celia Almeida, Roman Vega Romero

Tuesday, 14 February 2006

08:30 – 10:00 Session V: Current Evidence and Research Needs on Dimensions of Access
Chair: José Noronha

Celia Almeida—*Current Evidence on the Impact of Health System Reform in Access*

Owen O'Donnell—*Economic Barriers to Health Care Access*

Luis Rosero-Bixby—*Geographical Barriers: Physical Accessibility to Health Care*

Jorge Bermudez—*Drugs and Medicines Barriers*

10:00 – 10:15 Plenary Discussion
Rapporteurs: Celia Almeida, Roman Vega Romero

10:30 – 12:00 Session V (continued): Current Evidence and Research Needs on Dimensions of Access
Chair: Gavin Mooney

Michael Thiede—*Information and Communication Barriers*

Celia Iriart—*Organizational Barriers: Access in the Context of Commercialization of Health Care*

Daniel Maceira—*Organizational Barriers and Equity: Lessons from Decentralization*

Arachu Castro—*Social Vulnerability and Health-Seeking Behaviour*

12:00 – 12:30 Plenary Discussion
Rapporteurs: Celia Almeida, Roman Vega Romero

14:00 – 17:00 Group Discussions on Equity in Access: Theoretical, Conceptual and Methodological Issues, Evidence and Research Needs

Group A
Facilitator, Roberto Briceño Leon

Rapporteur, Roman Vega Romero

Group B
Facilitator, Norberto Dachs

Rapporteur, Maria Miralles

Group C
Facilitator, Maria Dutilh Novaes

Rapporteur, Maria-Victoria Aviles Blanco

17:00 – 18:00 Rapporteurs' Reports: Issues Identified, and Issues Requiring Further Attention

Agenda

Wednesday, 15 February 2006

08:30 – 09:30 Session VI: Research Needs, Challenges and Strategies

Chair: Johannes Sommerfeld

Ricardo Thompson—*Research on Access to Infectious Disease Control Tools: Challenges and Obstacles*

Ernesto Marques—*The Impact of New Technologies on Access to Infectious Disease Control Tools*

Ritu Sadana—*Health Systems Research: Challenges and Opportunities*

9:30 – 9:45 Plenary Discussion

Rapporteurs: Celia Almeida, Roman Vega Romero

10:15 – 12:00 Feedback from Group Work and Plenary Discussion

12:00 – 12:30 Wrap-Up and Closing

Thandika Mkandawire

Johannes Sommerfeld

Claudia Travassos

Participants

Celia Almeida
Fundação Oswaldo Cruz (FIOCRUZ)
Brazil

Sara Arber
University of Surrey
United Kingdom

Maria-Victoria Aviles Blanco
United Nations Research Institute for Social Development (UNRISD)
Switzerland

Mauricio Barreto
Universidade Federal da Bahia
Brazil

Jorge Bermudez
Pan-American Health Organization (PAHO)
United States of America

Roberto Briceño Leon
Laboratorio de Ciencias Sociales (LACSO)
Venezuela

Paulo Buss
Fundação Oswaldo Cruz (FIOCRUZ)
Brazil

Roy Carr-Hill
University of York
United Kingdom

Arachu Castro
Harvard Medical School
United States of America

Norberto Dachs
Universidade Estadual de Campinas (UNICAMP)
Brazil

Celia Iriart
University of New Mexico
United States of America

Alex Irwin
Department of Equity, Poverty and Social Determinants of Health (EQH), World Health Organization
Switzerland

Eduardo Levcovitz
Pan-American Health Organization (PAHO)
United States of America

Daniel Maceira
Centro de Estudios de Estado y Sociedad (CEDES)
Argentina

James Macinko*
New York University
United States of America

Ernesto Marques
Fundação Oswaldo Cruz (FIOCRUZ)
Brazil

Maria Miralles
Management Sciences for Health
United States of America

Thandika Mkandawire
United Nations Research Institute for Social Development (UNRISD)
Switzerland

Gavin Mooney
Social and Public Health Economics Research Group (SPHERe)
Australia

Carlos Morel
Fundação Oswaldo Cruz (FIOCRUZ)
Brazil

Maria Dutilh Novaes
Universidade de São Paulo
Brazil

Owen O'Donnell
University of Macedonia
Greece

Aryanti Radyowijati
Consultants for Health and Development
The Netherlands

Luis Rosero-Bixby
Universidad de Costa Rica
Costa Rica

Ritu Sadana
WHO Evidence and Information for Policy Cluster (EIP)
Switzerland

Leiyu Shi
John Hopkins University
United States of America

Orielle Solar
Department of Equity, Poverty and Social Determinants of Health (EQH), World Health Organization
Switzerland

Johannes Sommerfeld
UNICEF/UNDP/World Bank/WHO Special Programme for Research and Training in Tropical Diseases (TDR), World Health Organization
Switzerland

Michael Thiede
University of Cape Town
South Africa

Ricardo Thompson
National Institute of Health
Mozambique

Claudia Travassos
Fundação Oswaldo Cruz (FIOCRUZ)
Brazil

Roman Vega Romero
Pontificia Universidad Javeriana
Colombia

Jeanette Vega*
Department of Equity, Poverty and Social Determinants of Health (EQH), World Health Organization
Switzerland

**Unable to attend*

Devoted to public health issues since 1900, today **Oswaldo Cruz Foundation** (**FIOCRUZ**) excels in health research. Its mission covers education and training; the production of vaccines, drugs, and diagnostic kits; and quality control of products and services. At FIOCRUZ, the development of policies, strategies and actions in the field of science and technology information and communication is carried out by ICICT, the Institute of Scientific and Technological Information and Communication in Health. For further information consult www.fiocruz.br

The **Special Programme for Research and Training in Tropical Diseases** (**TDR**) is an independent global programme of scientific collaboration. Established in 1975 and co-sponsored by the United Nations Children's Fund (UNICEF), the United Nations Development Programme (UNDP), the World Bank and the World Health Organization (WHO), it aims to help coordinate, support and influence global efforts to combat a portfolio of major diseases of the poor and disadvantaged. For further information consult www.who.int/tdr

The **World Health Organization** (**WHO**) is the directing and coordinating authority for health within the United Nations system. It is responsible for providing leadership on global health matters, shaping the health research agenda, setting norms and standards, articulating evidence-based policy options, providing technical support to countries and monitoring and assessing health trends. For further information consult www.who.int/

The **United Nations Research Institute for Social Development** (**UNRISD**) is an autonomous agency that carries out multidisciplinary research on the social dimensions of contemporary development issues. Through its research, events and publications, UNRISD provides government agencies, intergovernmental organizations, non-governmental organizations, scholars and others with a better understanding of how development policies and processes affect different social groups. It works to stimulate dialogue and contributes to policy debates both within and outside the UN system. Current research programmes include: Social Policy and Development; Democracy, Governance and Well-Being; Markets, Business and Regulation; Civil Society and Social Movements; Identities, Conflict and Cohesion; and Gender and Development. UNRISD is grateful to the governments of Finland, Mexico, Norway, Sweden, Switzerland and the United Kingdom for their core funding.

This issue of **Conference News** was written by James Macinko, Celia Almeida, Roman Vega Romero and Claudia Travassos. Statements and opinions presented herein are those of the participants as expressed during the symposium and as recorded by the writers, and do not necessarily represent the institutional views of UNRISD, FIOCRUZ, TDR and WHO.

© UNRISD 2007

Permission will be granted for the use of content from this publication for all non-commercial education, training and information purposes, including translation, quotation and reproduction, in any medium, provided there is no change to the content and full acknowledgement of the source is clearly stated. Please send permission requests and a copy of any resulting product with such content to UNRISD.

United Nations Research Institute
for Social Development (UNRISD)
Palais des Nations
1211 Geneva 10, Switzerland

Phone 41 (0)22 9173020
Fax 41 (0)22 9170650
info@unrisd.org
www.unrisd.org

Printed in Switzerland GE.07-01986-September 2007-4,000 UNRISD/CN19/07/3 ISSN 1020-8054