Globalization and health: a framework for analysis and action*

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Abstract Globalization is a key challenge to public health, especially in developing countries, but the linkages between globalization and health are complex. Although a growing amount of literature has appeared on the subject, it is piecemeal, and suffers from a lack of an agreed framework for assessing the direct and indirect health effects of different aspects of globalization. This paper presents a conceptual framework for the linkages between economic globalization and health, with the intention that it will serve as a basis for synthesizing existing relevant literature, identifying gaps in knowledge, and ultimately developing national and international policies more favourable to health.

The framework encompasses both the indirect effects on health, operating through the national economy, household economies and health-related sectors such as water, sanitation and education, as well as more direct effects on population-level and individual risk factors for health and on the health care system. Proposed also is a set of broad objectives for a programme of action to optimize the health effects of economic globalization. The paper concludes by identifying priorities for research corresponding with the five linkages identified as critical to the effects of globalization on health.

Keywords International cooperation; Health status; Risk factors; Financial flows; Economic development; Public policy; Research; Treaties; Models, Theoretical; Developing countries (*source: MeSH*).

Mots clés Coopération internationale; Etat sanitaire; Facteur risque; Flux financiers; Développement économique; Politique gouvernementale; Recherche; Traités; Modèle théorique; Pays en développement (*source: INSERM*).

Palabras clave Cooperación internacional; Estado de salud; Factores de riesgo; Corrientes financieras; Desarrollo económico; Política social; Investigación; Tratados; Modelos teóricos; Países en desarrollo (*fuente: BIREME*).

Bulletin of the World Health Organization, 2001, 79: 875–881.

Voir page 880 le résumé en français. En la página 880 figura un resumen en español.

Introduction

Globalization is one of the key challenges facing health policy-makers and public health practitioners (1-3). Although there is a growing literature on the importance of globalization for health (4, 5), there is no consensus either on the pathways and mechanisms through which globalization affects the health of populations or on the appropriate policy responses. There is, however, an increasing tension between the new rules, actors and markets that characterize the modern phase of globalization and the ability of countries to protect and promote health.

This paper proposes a framework for understanding and analysing the economic aspects of

Ref. No. **01-1329**

globalization and their impacts on health. While health is a complex outcome and the processes of globalization are far from straightforward, we make the case that an explicit framework for research can advance the formulation of appropriate health policy and enable researchers to place their research in the context of a useful model. Presented also is a set of broad objectives for action at the national and international levels for the protection and promotion of health in the context of globalization, particularly for poor populations.

This paper has three key themes. Firstly, that an agreed analytical framework is essential for a reliable assessment of the health effects of globalization, the development of a research agenda, and appropriate policy responses. Secondly, that the indirect effects of globalization operating through the national and household economies are important for health outcomes, as well as the more obvious and direct effects on health risks and health systems. Thirdly, that the effects of globalization will be optimized only when improvements in health and well-being become central objectives of national economic policy-making and the design and management of the international economic system.

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Economic globalization: an overview

Economic globalization has been the fundamental driving force behind the overall process of globalization over the last two decades. It has been characterized both by a dramatic growth in the volume of cross-border flows and by major changes in their nature. International trade has grown at an accelerating pace — nearly 8.6% per year over the period 1990–99 with the proportion accounted for by services increasing steadily, reaching nearly 19% in 1999 (6, 7). Financial flows from developed to developing countries have increased much more dramatically over the last decade, more than recovering from the post-debt crisis slump of the 1980s. At one time mostly consisting of aid and commercial loans to governments, these financial flows now go overwhelmingly to the private sector and are dominated by investments in productive capacity by transnational companies and in shares bought by institutional investors (8). However, this transformation has largely bypassed low-income countries, a most of which remain critically dependent on aid flows. These aid flows are only now beginning a slow recovery after years of decline, and in 2000 remained 16% below their 1991 levels despite a temporary boost as a result of the Asian financial crisis. Total net official development finance (including non-concessional loans) fell still further, from a peak of US\$ 60.9 billion in 1991 to an estimated US\$ 38.6 billion in 2000, an overall decline of 37% (10).

These changes in cross-border flows reflect, and were preceded by, a considerable opening of economies, particularly in developing countries, through the lowering of trade barriers, removal of capital controls, and liberalization of foreign exchange restrictions. This opening occurred largely in response to International Monetary Fund and World Bank programmes, and, in the case of trade, has been consolidated by the Uruguay Round Agreements of the General Agreement on Tariffs and Trade (GATT) which established the World Trade Organization (WTO). A major difference from the last major period of globalization, over the period 1870-1914, has been in the composition of the crossborder movements of people. These are now dominated by travel and tourism, with a smaller proportion of legal migrants as developed countries have sought to close their borders, except to highly skilled people or those with capital.

Globalization and health: a conceptual framework

A conceptual framework for assessment of the linkages between globalization and health is illu-

strated in Fig. 1 (in outline) and Fig. 2 (in detail). ^b The relationship between the three processes of globalization is circular, i.e. there are important feedback effects. Increasing cross-border flows stimulate the development of global rules and institutions, which promote the opening of economies, which increases the scale and scope of cross-border flows. Globalization is influenced by a number of driving and constraining forces: technological developments, political influences, economic pressures, changing ideas, and increasing social and environmental concerns.

Population health status and its distribution are determined by population-level influences, individuallevel health risks, and the health care system. The last two are strongly influenced by the household economy. There are multiple direct and indirect linkages between globalization and the proximal determinants of health. This model highlights five key linkages from globalization to health; three direct effects and two which operate through the national economy.^c The direct effects include impacts on health systems and policies operating directly (e.g. the effects of the WTO General Agreement on Trade in Services (GATS)) and through international markets (e.g. the effect on pharmaceutical prices of the WTO Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPs)); and direct effects on other influences on health at the population level (e.g. cross-border transmission of infectious disease, and marketing of tobacco). The second category includes effects operating through the national economy on the health sector (e.g. effects of trade liberalization and financial flows on the availability of resources for public expenditure on health, and on the cost of inputs); and on population risks (particularly the effects on nutrition and living conditions resulting from impacts on household

It should be noted that the linkages in Fig. 2 are bi-directional. As well as the linkages from globalization to health (dotted lines), there are also potentially important linkages from health to globalization (heavy dotted lines) through the same channels. While the impact of health on the globalization process itself is limited, the effects on household and national economies are likely to be much stronger, creating the potential for vicious or virtuous circles between the economy and health.

Uses of the conceptual framework

The conceptual framework provides a basis for developing and promoting pro-health policies in national economic policy-making and international negotiations. By providing a basis for decision-makers, negotiators, policy analysts, and advocates to

^a Low-income countries are defined as countries with gross national income per capita of US\$ 755 or below in 1999, using average exchange rates for 1998–2000 (9).

^b The structure of the health care system component is based in part on that developed by the International Development Research Centre as part of its MAP-Health project (11).

^c For a more detailed discussion of some of these linkages, see ref. 12.

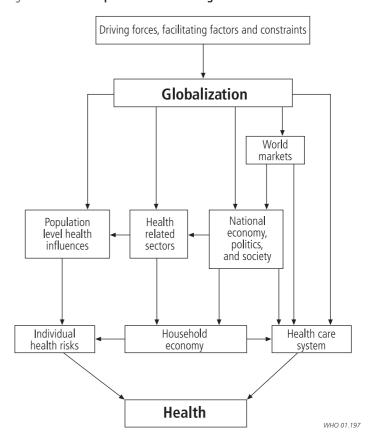
trace through the potential effects of a particular policy proposal for health, the framework will encourage decision-making that takes explicit account of the implications for health.

To be fully effective in this respect, however, the framework needs to be supplemented with empirical evidence on the various linkages involved. A first step would be to use it as the basis for synthesing existing evidence on the relationships between economic, social, and health variables. While there is little empirical analysis extending from the global level to that of the individual, there is considerable evidence on at least some of the links in the causal chains connecting globalization to health. Nonetheless, there are major gaps in our knowledge of the relative strength and the nature of these linkages in different economic and geographical contexts, and these need to be filled by further research. The framework provides both a means of identifying these gaps and of prioritizing and structuring the research required to fill them. It also provides a basis for comprehensive case studies of the impact of globalization on health in particular countries, or of its effects on particular health problems (e.g. HIV/AIDS, antimicrobial resistance) or determinants of health (e.g. access to quality health care, nutrition, and diet). Although the relevance, nature, and strength of the various components of globalization and the different aspects of its impact will vary considerably among countries and dimensions of health, the framework provides a useful checklist of potential effects.

An agenda for action

While specific policy recommendations depend on the outcome of the synthesis of existing evidence and further research to fill the gaps in our knowledge, some general prerequisites can be identified for globalization to become a positive influence on the health of poor populations, broadly corresponding with the links in the analytical framework. First, it is essential that the economic benefits of globalization extend to all countries, and especially to low-income countries (the link from globalization to the national economy). This means ensuring that changes in international rules and institutional arrangements fully reflect the needs of developing countries. It also requires the removal of major obstacles to development in the international economy. These include the remaining debt problems of low-income countries, the chronic weakness and instability of commodity markets, restrictions on access to developed country markets, and the role of volatile international financial flows in generating financial crises. A greater volume, better allocation, and higher quality of financial and technical assistance are also required to create the national conditions necessary for successful integration into the global economy — notably adequate and reliable infrastructure, human development, and effective political and administrative institutions.

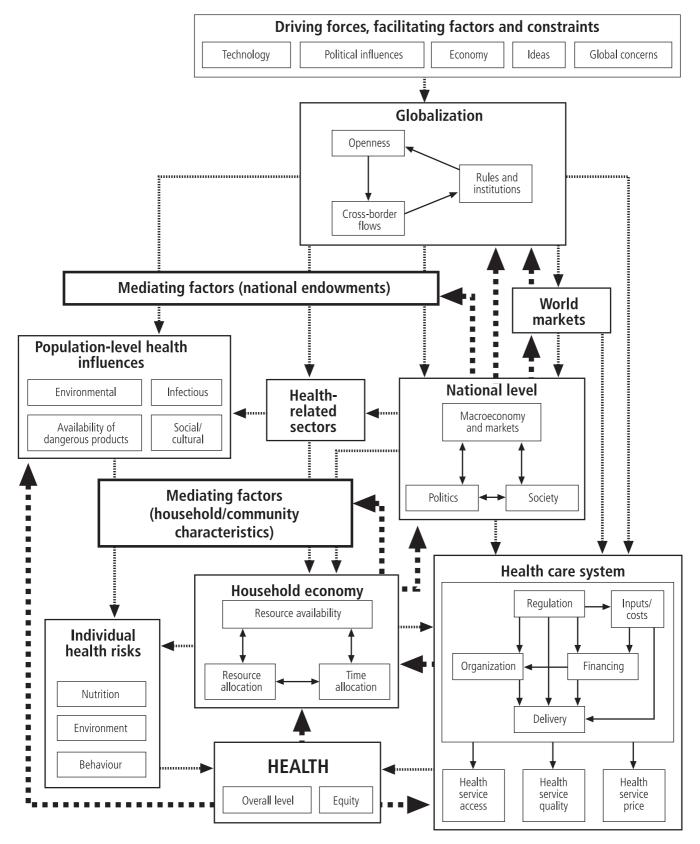
Fig. 1. Outline conceptual framework for globalization and health



Extending the benefits of globalization geographically also means that countries need to manage the process of integration with the international economy in ways that maximize the economic opportunities and minimize the economic risks and social costs. Several requirements need to be fulfilled in this respect. The extent, timing, pace, sequencing, and design of policies directed towards opening the economy must be appropriate to each country's particular circumstances, ensuring that the preconditions for positive economic and social effects of such policies are in place before they are carried out. Social principles and objectives must be fully and effectively integrated into policies towards international trade and financial flows. In addition, macroeconomic and structural policies that accompany economic opening, or are required as a result of it, must be well designed and implemented. This means that governments must retain the "policy space" necessary to fulfil these conditions, and receive the technical assistance needed to develop the capacity to do so.

Secondly, the economic benefits of globalization need to be translated into health benefits (the links from the national economy to the health care system, health-related sectors, and the household economy). This requires that economic growth be sustainable and consciously directed towards the poor, through better design of pro-poor national economic policies, and more explicit consideration of distributional effects in decisions at the global level. It also requires that the resources generated by a

Fig. 2. Detailed conceptual framework for globalization and health



globalization process more favourable to developing countries are used to strengthen health systems, to ensure universal access to cost-effective interventions, and to improve other services essential to health, such as education, water and sanitation, environmental protection and effective nutrition and health safety net programmes. Equally, where globalization has adverse economic effects on a country (e.g. through dislocations arising from changes in export and import prices or financial crises), the impact on health must be minimized. This means protecting health-related spending from reductions in public expenditure, limiting the adverse effects of low or negative growth on the incomes of the poor, and increasing aid and improving policy design to achieve these objectives. More generally, policy coherence is required to ensure that policies in non-health sectors contribute to health objectives and vice versa.

Thirdly, potentially adverse effects of globalization on population-level health influences (e.g. on tobacco marketing and cross-border transmission of infectious disease) must be minimized. This requires action at the international level, e.g. an effective Framework Convention on Tobacco Control (13), and efforts to ensure that governments retain the ability within international agreements to take measures necessary to protect public health.

Fourthly, the design and implementation of international rules need to take full account of their potential effects on the health care system and health-related sectors. This implies the need for a full health impact assessment of international agreements and measures that may have significant effects on health-related sectors, whether directly (e.g. through constraints or influences on sectoral policies) or indirectly (e.g. through the availability of resources and input costs), before they are implemented.

In addition to each of the individual linkages, the interaction between different linkages is also important. There are a number of trade-offs inherent in the globalization process that need to be resolved, taking full account of their health dimensions. Examples include the trade-off between food safety regulations in developed countries and the export prospects of low-income countries (14); and the conflict in the international regulation of intellectual property rights between the incentives to develop health technologies, the need to prioritize research in line with health needs rather than ability to pay, and the affordability of medical technologies to lowincome populations and developing countries. These trade-offs require the development of effective international mechanisms to resolve such problems systematically in the interest of health.

It is important to monitor the effects of globalization and health, and to ensure that the results of such monitoring are fed effectively into decision-making processes at the national and international levels. This includes the identification of emerging trends—effects of globalization that are not immediately apparent, but which may, if not

quickly and effectively resolved, have major impacts on health in the future. This requires a considerable strengthening of our understanding of the linkages between globalization and health outcomes. To this end, WHO should continue to function as an independent provider of knowledge and evidence to help policy-makers make informed judgements. In monitoring, as in analysis, it is important to take into account illicit cross-border flows as well as those that occur through formal channels. This includes, for example, the direct health effects of trade in illegal drugs and small arms, trafficking in women and children, and illegal migration, and the effects on the national economy of capital flight and smuggling.

Ultimately, making globalization work for the benefit of health requires a fundamental change in current approaches to economic issues at both the national and the international levels. At the national level, policies need to be designed explicitly to maximize the well-being of the population, rather than assuming that this will automatically be achieved by policies oriented towards economic growth, supplemented by "add-ons" such as safety nets and the protection of health and education spending. At the international level, global rules, the activities of

Table 1. Globalization and health: priorities for research

Linkage(s) through	Area(s) of Research	Reason for Prioritization
Health sector (direct)	Effects of GATS agreement and implications of possible modifications	Country decisions pending GATS 2000 negotiations
	Trade in health services	Developing country interest in promoting trade in health services
World markets/ health sector	Effects of TRIPs agreement on pharmaceutical prices Migration of health professionals	Country decisions pending implementation. Persistent problem for low-income countries; selective immigration and recruitment policies in developed countries
Population health influences/individual health risks	Marketing of unhealthy products and lifestyles	Rapidly increasing cross- border marketing activities with health effects
	Implications of competition and consolidation among companies in health-related sectors	Major consolidation in key sectors, with implications for marketing strategies and pricing
National economy/ health sector	Effects of globalization on fiscal constraints and input costs, e.g. through exchange rate effects	Serious fiscal constraints in low-income countries; risk of further financial crises in middle-income countries
National economy/ household econ- omy/individual health risks	Effects of globalization on livelihoods and income distribution	Ongoing policy-making in response to globalization

intergovernmental organizations, and the external policies of the governments of major developed countries need to be directed towards removing constraints to, and maximizing the incentives for, developing country governments to pursue these policies.

A genuinely health-centred process of globalization can be achieved only by ensuring that the interests of developing countries and vulnerable populations are fully represented in international decision-making forums. This requires international institutional reform, including changes in voting structures and negotiation processes, an increased role for civil society organizations, and definition of the appropriate role of private companies. Financial and technical assistance to developing country

governments is also required, to enable them to participate effectively in international negotiations on global issues. In addition, the ongoing process of globalization must be managed in such a way as to limit negative effects on health and increase opportunities for its improvement. This requires the development and implementation of a research agenda oriented towards current problems and trends at the country level and forthcoming international decisions, to allow informed decisions to be made. Such an agenda, structured in terms of the five key linkages highlighted above, is set out in Table 1.

Conflicts of interest: none declared.

Résumé

Mondialisation et santé : un cadre pour l'analyse et l'action

La mondialisation représente un défi majeur pour la santé publique, surtout dans les pays en développement, mais ses liens avec la santé sont complexes. Même si des publications de plus en plus nombreuses sont consacrées à ce sujet, il s'agit de travaux disparates souffrant de l'absence d'un schéma reconnu d'évaluation des effets directs et indirects des différents aspects de la mondialisation sur la santé. Dans le présent article, nous présentons un cadre conceptuel applicable aux relations entre la mondialisation de l'économie et la santé, et qui pourra servir de base pour effectuer la synthèse de la documentation pertinente, identifier les lacunes de la connaissance et en fin de compte élaborer des politiques nationales et internationales plus favorables à la santé.

Le cadre proposé couvre à la fois les effets indirects sur la santé, qui s'exercent par le biais de l'économie nationale, de l'économie domestique et de secteurs liés à la santé comme l'eau, l'assainissement et l'éducation, ainsi que les effets plus directs sur les facteurs de risque pour la santé au niveau de la population et de l'individu et sur le système de santé. Nous proposons également un ensemble d'objectifs plus vastes pour un programme d'action visant à optimiser les effets de la mondialisation sur la santé. L'article conclut en indiquant les priorités de recherche correspondant aux cinq liens identifiés comme critiques du point de vue des effets de la mondialisation sur la santé.

Resumen

La globalización y la salud: marco de análisis y acción

La globalización constituye un reto clave para la salud pública, sobre todo en los países en desarrollo, pero los vínculos entre ese fenómeno y la salud son complejos. Aunque se han publicado muchos trabajos sobre el tema, se trata de estudios poco sistemáticos, que carecen de un marco convenido de evaluación de los efectos sanitarios directos e indirectos de los diferentes aspectos de la globalización. Se presenta aquí un marco conceptual donde inscribir las relaciones entre la globalización económica y la salud, con la intención de que sirva de base para sintetizar la literatura pertinente, identificar lagunas en los conocimientos y, en último término, desarrollar políticas nacionales e internacionales más favorables a la salud.

El marco abarca tanto los efectos indirectos en la salud, mediados por la economía nacional, las economías domésticas y otros sectores relacionados con la salud -como el abastecimiento de agua, el saneamiento y la educación-, cuanto los efectos más directos en factores de riesgo sanitario poblacionales e individuales y en el sistema asistencial. Se propone asimismo un conjunto de objetivos generales para un programa de acción destinado a optimizar los efectos sanitarios de la globalización económica. El artículo concluye estableciendo prioridades de investigación que se corresponden con los cinco vínculos identificados como decisivos en cuanto a los efectos de la globalización en la salud.

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