Globalisation, Structural Adjustments and Public Health in South Asia: What does it mean for International Networking in Health Research and Researcher Training?

(Draft 1 August 2001)

Zulfiqar Ahmed Bhutta
MB,BS, FCPS, FRCP, FRCPCH, PhD
The Husein Lalji Dewraj Professor of Paediatrics
The Aga Khan University
Karachi, Pakistan

"Globalisation is a reality, not a choice. Globalisation is here and inescapable, because it corresponds to the present phase of historical development and because it has the power to fulfil many human wants" (Chen & Berlinguer 2001)

Despite the running battles in downtown Seattle, the back streets of Davos or the plaza in Genoa, the ongoing debates between the supporters and opponents of globalisation are a testimony to the fact that we live in an increasingly shrinking world. Whether we like it or not, we do live in a global village with vastly increased opportunities for sharing information, communication between individuals and societies.

Globalisation is variably defined and broadly interpreted to indicate a process of global interconnectedness; its core components consist of global economic integration and universal standards of free markets for trade and investment (Lee K 2000). Globalisation is also defined as the process of increasing economic, political and social interdependence and global integration that takes place as capital, traded goods, persons, concepts, images, ideas and values diffuse across state boundaries" (Hurrell and Woods 1995)

The important domains of globalisation include

- Technological globalisation (especially of information and communication technologies)
- Cultural globalisation (Dominant and popular culture of the US and English language)
- Globalisation of ethical and judicial standards

A detailed discourse on globalisation is beyond the remit of this paper, which will principally focus on issues of the impact of globalisation, economic change and structural adjustments on public health. The paper will also explore the potential impact of these global trends on researcher training and the role of networks.

Globalisation and public health

"Public health is the art and science of preventing disease, promoting health, and extending life through the organized efforts of society" (Acheson D 1998).

Some of the earliest examples of public health measures in the South Asia can be seen in the ruins of Moenjodaro in upper Sind (5000 BC), a city which boasted one of the best drainage systems of its kind. In relatively recent years, the roots of public health can also be seen in Avicenna's publications, who expounded on the virtues of sewage disposal and benefits to public health. The realisation that public health is closely intertwined with shrinking borders and movements of people along trade routes, was also key to the first International Sanitary Conference in Europe in 1851. However, at no stage in human history has the pace of globalisation increased to levels that are seen today and thus the challenge of the impact of these measures on public health is that much greater.

Public health does not merely represent superficial measures related to health and hygiene but consists of a broad and inclusive enterprise that extends to political, social and environmental leadership and management. The two principal tasks of public health measures include

- Determination and amelioration through social policies of the underlying factors and determinants of health inequalities (Reduction of health and social inequalities)
- Sustainability of good health within populations by assuring long-term changes in the social and natural environments (Striving for health sustaining environments)

At the beginning of the last decade Roemer and Roemer (1990) had expressed faith in the benefits of globalisation for public health. In support of this they cited empirical evidence that cross-national exchanges had facilitated the diffusion of technological innovations such as

- Effective means of contraception
- Low cost techniques for obtaining safe drinking water
- Low-cost refrigeration
- Efficient transport and communication technologies
- New therapeutic agents for tropical diseases

Others have been less effusive in their support of globalisation as a means of improving public health and indicated that it could at best prove to be a mixed blessing (Kinnon CM 1998, McMichael & Beaglehole 2000). Table I summarises the various aspects of globalisation that may impact public health based on an analytical framework developed by Yach & Bettcher (1998).

The new economic order and structural adjustment programs

“Tension persists between philosophy of neoliberalism, with the self-interest of market-based economics and the philosophy of social justice that sees collective responsibility and benefit as the prime social goal” (Gray J 1998)

Although the post World War 1 international development project initially anticipated that countries would converge towards western models of participatory and national democratic capitalism, instead the process has of late largely evolved towards developing and building an integrated and de-regulated free-market global economy (McMichael 1996). These models of international open and competitive markets assumed fair and open competition among member states. However, as practiced, this is hardly the case. Competition implies survival of the fittest and many developing countries cannot compete fairly as the playing field is not even. What the developed countries have achieved over almost a century or so of development, is now expected of developing countries within a much shorter time frame and also without the requisite protections.

Many developed countries have failed to open their markets to imports from poor countries on a variety of pretexts including application of anti-dumping laws, linkage of trade with child labour, environmental conditions and social standards. In general disillusionment about globalisation and the new economic order among developing countries stems from the following counts

1. Despite commitments in the Uruguay round, the agreement on removing agricultural subsidies by developed countries was not adhered to. The net worth of these subsidies exceeds $ 35 billion, more than the entire agriculture export from developing countries
2. The implementation of the WTO agreement of phasing out textile quotas over 10 years has been painfully slow
3. Developed countries have adopted “anti-dumping” measures to obstruct import from poor countries that they are trading at prices below cost
4. The agreements to help alleviate the debt burden of poor countries have been largely unfulfilled. Even moves to write off the debts of the most heavily-indebted countries have been at a snails’ pace.

In addition to the aforementioned issues concerning the new world economic order, a major source of disquiet has surrounded the qualified level of funding and loan repayment strategies adopted by the major donor agencies and financial institutions. The promise of the much hyped global poverty alleviation strategy has remained largely unfulfilled, and the benefit of other initiatives such as the new Global Fund remains debatable.

In the south Asian context, few measures can rival the impact that structural adjustment programs (SAPs) have had on economies, especially public health spending. The long-standing World Bank/IMF sponsored SAPs refer to a set of measures that countries need to implement in order to qualify for loans from these agencies. In 1987 these SAPs were expanded to create an enhanced structural adjustment facility, with the facility for developing countries to borrow from it subject to their agreement to accept the IMF conditionalities. These include all or most of the following measures

- Privatisation of government-owned enterprises and government-provided services
- Reduction in government spending
- Orientation of economies for the promotion of exports
- Liberalization of trade and reduction of tariffs for imports
- Increase in interest rates
- Elimination of state subsidies on consumer items such as foods, fuel and medications
- Taxation increase
- Currency devaluation and control of monetary supply

In contrast to other bank policies, the SAPs are primarily geared towards achievement of fiscal and balance-of-payment stability, rather than stimulation of economic growth. The ostensible purpose of these economic measures is to improve debt repayments, reduce fiscal deficits, encourage private sector investment and move towards an export-oriented economy. The measures are targeted to allow the governments to undertake better long term planning. It is thus anticipated that the consequent improvement in national economic efficiency will lead to stimulation of growth with subsequent “trickle-down” benefits to the poor and vulnerable groups of the population. While the arguments supporting the association between long-term growth and reduction of poverty in developing countries are persuasive (Dollar & Kraay 2000, Asian Development Bank 2000), the evidence supporting the benefit of SAPs on reduction of poverty and socio-economic inequalities is at best tenuous. In particular, there is little data on the benefits of SAPs on sustainable economic growth in the long term (Costello et al 1994).

Pre-requisites for SAPs and Social Safety Nets

In general many of the premises of SAPs make intuitive sense and are overtly geared towards improving the general socio-economic conditions and indirectly, the health of the population (Abbassi 1999). In parts of the developing world, many state-sponsored or subsidised industries do produce low quality non-competitive goods with little market competition. While they provide employment, the long-term sustainability and economic viability of such an industrial base is often questioned. In general this is the very basis for policy shifts in the development process that favour agriculture over industrialisation in much of the developing world.

It must be emphasized that there is little inherently wrong in the principles that underlie SAPs, and that in an ideal and equitable world the “trickle-down” benefits of fiscal discipline and growth would be shared by the masses (Behrman 1990). In reality however, we hardly live in an ideal world and most of the countries targeted by the Bretton Woods institutions namely the World Bank and the IMF, are either under autocratic rule or boast fragile democracies. Thus several pre-requisites of ensuring that the burdens of structural adjustment and austerity measures are equitably distributed do not exist. These pre-requisites include social justice, good governance, true democracy (as opposed to the sham-democracy of the privileged elite or feudal class) and gender equity. Other factors determining a just sharing of the benefits and burdens of socio-economic change in many countries include the level of corruption, monitoring of social welfare programs and systems for redressing grievances.

In a response to the call from UNICEF for “Adjustment with a Human Face” (Cornia et al 1988), several social safety nets were introduced in many developing countries to mitigate the effect of SAPs. These include adequate budgetary allocations for health and education, food subsidies, social action programs etc. In the absence of these safety nets, it is not too difficult to imagine that the economic burdens would be passed disproportionately to the most vulnerable in society, namely the women and children. However, despite the presence of these measures, their protective benefit and impact on alleviating poverty and protecting child health is questionable (Laurell & Wences 1994). A major problem with the way SAPs work is that while the IMF and World Bank make the requisite loans and agreements, there is little stomach for monitoring and oversight of the associated social safety nets and safe guards. In the words of one of the World Bank’s senior economists, while explaining the assistance to South Asia, “we go there three times a year and we sit round the table to discuss progress, and if it is good then we continue assistance” (Abbassi 1999). Unfortunately this system of monitoring progress by remote control hardly paints the true picture, and is entirely dependent upon the level of integrity of the reporting mechanisms. This failure of the proponents of SAPs to adequately assess and monitor social safety nets and evaluate the grass root impact of such programs is one of major reasons for the disquiet surrounding them.

Global evidence of the impact of SAPs

Has the SAPs strategy worked successfully elsewhere in the developing world? In an internal evaluation of the impact of SAPs, the IMF concluded in general that the overall economy and social sector spending improved in 23 countries following the introduction of SAPs (IMF 1993). However, these very findings have been seriously questioned on their content and the methodology employed (Costello et al 1994, Kolko 1999). Other evidence indicates that outside of a few examples from relatively robust economies such as Thailand and South Korea, the long held promise of economic benefits of SAPs on society has been largely misplaced. It is also important to understand that the landmark UNICEF publication on the societal impact of SAPs and possible cushions, assessed a relatively early stage of these programs and only evaluated short-term impacts (Cornia et al 1988). Little has happened over the last decade to indicate that the promise of sustained benefits of SAPs has borne fruit. To illustrate, UNICEF’s hope for a positive outlook for African economies in the post cold-war era (Cornia 1992) have not only been misplaced but in many instances the converse has happened.

In an evaluation of the impact of SAPs in various parts of Africa, Loewenson (1993) concluded, “there was a deep contradiction between SAPs and policies aimed at building the health of the population”. Other studies indicate a close link between structural adjustments and increase in poverty in Ghana and its widespread consequent negative social impact (Anyinam 1989). In an in-depth analysis of the socio-cultural context of such programmes, Kanji et al (1991) argue, “SAPs serve to exacerbate inequalities and threaten to reverse the social gains of the majority achieved through the struggle for independence, in the interest of the indigenous capitalist class”. Across the Atlantic, the evidence from the economic crisis of the 80s in Brazil clearly indicates that there was a major and perhaps disproportionate effect of SAPs on the health and welfare of children (Macedo 1988).

SAPs and their impact in Pakistan: the evidence

At a macroeconomic level the basic thrust of SAPs in Pakistan have been to improve its balance of payment position by improving exports of cash crops, closure of public sector industries and removal of subsidies on food items and utilities. Although it is evident that the benefits of such a fundamental shift in policy must be closely intertwined with the prevalent system of land ownership and agriculture, in Pakistan’s predominantly feudal system with large-scale land holdings by a privileged few, it is unlikely that the benefits of increasing agricultural support and subsidies will automatically translate into benefits for the largely poor and disenfranchised farmers. It has been argued that true liberty and democracy in many developing countries must be coupled with an egalitarian society (Gradstein & Milanovic 2000) and equitable distribution of income and assets (Deininger & Olinto 2000). This has hardly been the case in Pakistan.

The recent socio-economic trends in Pakistan starkly illustrate the point. Pakistan has been a signatory to the structural adjustment program of the IMF for almost 10 years. Despite assurances to the contrary and the imposition of IMF conditionalities, the same period has seen a dramatic rise in the proportion of national budget devoted to debt servicing and a corresponding rise in the incidence of poverty (Government of Pakistan. Economic Survey of Pakistan. 1997-1998, & 1999-2000, SPDC 2000) (Figure 1). While there is a paucity of reliable information on whether this increase in poverty has led to an increase in rates of malnutrition, at the very least available data indicate that trends in critical nutrition indicators such as childhood malnutrition and maternal anaemia have hardly changed (Bhutta 2000, Khan & Bhutta 2001) (Figure 2). There is a clear link between household income and food intake and enough evidence exists that when purchasing power is limited, food quality and intake of the vulnerable suffers (Scandizzo & Tsakok 1985, SPDC 1999). The evidence pointing to the association between increasing poverty and debt with maternal and childhood malnutrition from other parts of the world is well documented (Martin-Prevel et al 2000, Ramphal 1999), and there is little reason to doubt that Pakistan will be any different. Perhaps the most poignant and readily evident effect of this socio-economic change is the dramatic increase in the rate of suicides in society directly attributable to unemployment and financial difficulties. These have registered a dramatic increase in Pakistan over the last few decades (Ashraf M 1964, Ahmed & Jamil 1981, Sabir 2001and Khan Murad, 2001 personal communication).

As part of SAPs, many developing countries with predominantly agrarian economies are encouraged to move away from industrialization to cash crop farming and agricultural exports. This suggested shift away from basic industrial production to agriculture under the guise of globalization, does reflect a mind set that most developing countries cannot develop a stable and competitive industrial base, and would therefore need to depend upon raw material and agricultural exports, usually of cash crops. This economic dogma has often been labeled as a form of neo-colonialism and also has its conceptual counterparts in international health (Walt 1998). In the same context, the current economic dictates of the IMF also imply a great deal of confidence in prevalent international markets and supply, which are frequently too fickle and volatile. In the wake of the current global economic downturn, there is considerable likelihood that the closure of cement or fertilizer production units in Pakistan, as desired by the IMF prior to the current standby agreement (Dawn 2000), will not only translate into a gradual complete and expensive import dependency in this area, but lead to serious unemployment.

Such a trend is already evident in the field of pharmaceuticals and biotechnology. From a situation where much of the vaccination needs of Pakistan for basic EPI (Expanded Program for Immunizations) vaccines were met internally in the 1980s, today the country is entirely dependent upon external aid and subsidies for the supply of even basic oral polio vaccines. The irony is that in response to a proposal for revitalizing a once vibrant and effective vaccine-production capacity, the cash-starved Pakistan government has seriously questioned the very need to have an indigenous vaccine production facility, under the notion that subsidized and donated vaccines may be available *ad-infinitum*.

The contrast with India is striking, where a fledgling indigenous pharmaceutical industry was supported for decades by state subsidies and protection and can now not only meet national needs but also hold its own against competition in the region. In comparison to the vibrant industry in India, the pharmaceutical industry in Pakistan is largely import-dependent and despite various price control mechanisms, has been unable to provide low-cost medications to the common populace. Although several additional factors are involved, these issues may have a bearing on the relatively faster decline in infant mortality rates in India, which currently stand at 70 versus 90 per thousand live births in Pakistan. Table II indicates the comparative local prices for several essential medications and childhood vaccines in the local market over the last 15 years in Pakistan, in comparison with Rupee/Dollar parity, per-capita income and average annual inflation rates.

It can be argued that this economic downturn reflects a general deterioration in the economy of the country and that in the absence of an IMF sponsored restructuring program, the rate of economic deterioration would have been much faster. It is this writer's considered opinion that this assumption is without a sound basis. There is usually an unholy nexus between rampant corruption, vested interests and economic mismanagement. Pakistan received approximately US $ 31 billion in external assistance and IMF loans between 1985-2000, yet the amounts actually spent on infrastructure and the social action program during this period have been miniscule in comparison. By some accounts, an amount roughly equivalent to the entire national debt lies in personal bank accounts in Switzerland and USA. Although the actual perpetrators in most instances are corrupt politicians and bureaucrats, the international lending institutions and the IMF are equally culpable for having turned a blind eye to this plunder and exploitation of the ordinary people of Pakistan.

The bulk of the impact of recent structural adjustments in Pakistan has been largely felt by the common man because of an immediate significant increase in the cost of utilities, higher fuel costs and withdrawal of food subsidies. It is hardly surprising to see that the privileged traders and industrialists are able to cushion these by transferring the burden to the consumers through price hikes. The feudal agriculturists and land lords are also protected by inexplicable exemptions from income tax, whereas the ruling elite and bureaucrats are largely provided facilities of free utilities and fuel by the State. There is thus little to no empathy on the part of the policy makers and power brokers as to the impact of these policy changes on common people. In response to IMF conditionalities and the lack of will to curtail current non-developmental expenditures, the development outlay has come down to a paltry 3.2% of GDP compared to almost thrice that figure from 1980-81 (Sultan 2001). Admittedly an elaborate social action program is in place to provide basic amenities and social support services at the community level, it is dysfunctional and inefficient.
While considerable demands are made in successive IMF agreements to increase tariffs on utilities and fuel and withdrawal of food subsidies, we have never seen an IMF conditionality demanding a 100% increase in the health or social action program budgets in Pakistan! Instead, the recent most agreement by the World Bank to accept the contention by government officials that funds for the social action program may only be available according to Pakistan's fiscal position, does not portend well for any change in this status-quo. In the exact words of a responsible government official "We have told the donors that we have to allocate resources for the social action program according to our own financial position and as such we should not be pressurised that we must arrange equal amount every year for this purpose" (Dawn 2001). As always, the government's contingency plans to meet the revenue targets for the IMF will continue to be a further reduction in the public sector development programme, rather than defence spending or non-developmental expenditure (SPDC 2000, Haque 2001)

It is important to understand the consistent failure of successive versions of SAPs in Pakistan against the background of a climate of poor governance (Human Development Center 1999). This combination of poor governance, lack of representation, institutionalised corruption and economic stagnation are potent ingredients for societal breakdown, disillusionment and the growth of militancy. The unemployed youth of Pakistan, who see little hope in traditional politics or way of governance, are attracted to the missionary zeal of the religious right wing. The rapid growth of Islamic militancy and obscurantism in Pakistan (Kaplan 2000, Hussain 2001), is a direct consequence of poor governance and economic stagnation, and in no small measure to the failure of the international financial institutions to provide firm and consistent support to Pakistan geared towards human development, rather than mere avoidance of loan defaults. There are no mechanisms in place to even remotely gauge these societal impacts of structural adjustments.

While a case has been made for achieving both the requisite structural adjustments while alleviating poverty, this is rarely evident in agreements drawn up in the relative comfort of offices and hotels far removed from the misery and squalor housing the bulk of the populace. If the IMF and World Bank are serious in financing and supporting economic change for human development in Pakistan then they must also face up to their responsibility of ensuring that the brunt of the burden of these structural adjustments are not borne by the impoverished and voice-less masses. I feel that this is possible. When a hiatus in governance exists, as it does in Pakistan today, then instead of focusing primarily on the narrow issue of solvency and debt repayments, there should be a deliberate investment in small-scale development projects at a local government level, rather than grandiose and limited high-profile programs (Bhutta 2001).

This challenge of linking social development at the grass roots with the requisite measure of accountability, is decried by many a vested interest group who instead favour a controlled top-down approach. This devolution of assistance and social safety nets to local governments and representatives of civil society may stimulate financial growth and enterprise, while maintaining social security.

Impact of Economic liberalisation on access to care and gender inequity in India

Despite a significantly more robust and growing economy, India has not emerged unscathed from these recent global economic trends. There is little systematic data available on the impact of globalisation and economic restructuring on health services and public health outcomes in India. However, in a recent analysis of the time trends of health service utilisation and gender inequity in India, Iyer and Sen (2001) have conducted an in-depth analysis of market trends and health sector reforms in India over the last five decades, indicating that gender inequalities in health care costs are widespread with significantly lower expenditure on health care among women (Table III). Their analysis is largely based on representative national surveys (NSSO 1992 & 1998) and provides strong evidence to indicate that economic liberalisation and health sector reforms in India have led to a serious increase in inequity and utilisation of health services. The effect of deregulation over the last decade has led to a significant increase in ambulatory health care costs, drug prices and costs of hospitalisation, with increased utilisation of public health hospital facilities.

In their paper Iyer and Sen conclude that "Untreated illness among the poor has clearly increased. Inequity by economic class appears to have worsened, and the divide between rich and poor in terms of untreated illness and expenditures on health services, as well in the use of both public and private health care institutions, has grown. The rich are now the major users of not only private but also public hospitals". (Table IV).

Implications for Research and Researcher Training

The aforementioned findings and data clearly indicate that the process of globalisation is a two-edged sword. While it opens enormous vistas for economic development, much of the fruits of globalisation can only be realised in a background of social justice, equity, inclusive democracy and good governance. Health professionals and researchers have a special role to play in this regard as they bear a special responsibility in terms of linking national public health policies to priorities. These functions include

1. Evaluation of trends and development of national health research priorities. Although some would argue against a narrow focus on applied research and regard most research and knowledge as a global public good (Mills 2001), it is equally important that in the wake of scarce national resources, that human and economic capital should be largely diverted towards addressing issues of national importance. The fundamental role of health research in directing and educating a health system must be supported. This function cannot be relegated to international agencies or "expert bodies" and there must be due emphasis on the development of national research capacity in public health.
2. It is equally important that the nature and scope of research not be limited to the narrow spectrum of health. Much of the public health problems in south Asia and their proximal or immediate causes relate to distal factors such as poverty, illiteracy, societal and gender inequities. These underlying issues and social factors must be understood in order to develop sustainable and meaningful solutions. Thus the integration of social science research with health and inter-sectoral collaboration is key.
3. There are several important areas for further training of health researchers and their integration with other disciplines in South Asia. It is imperative that training programs in social sciences especially socio-behavioural research be supported. This is an area in which there has been little and disparate research within the subcontinent, with negligible training programs. The meagre research that takes place is also largely ignored by policy makers and public health planners. The groups undertaking socio-behavioural research must link up with health research groups. Similarly the field of health economics must be both strengthened and integrated with classic biomedical research. It is largely true that health policy in Pakistan is primarily determined by the Ministry of Finance and public health planners are notably unable to put forward the case for cost-effectiveness of investing in health and nutrition as a means of economic development. The way to counteract this status and the adverse impact of structural

adjustments and worsening poverty on public health, is to improve the understanding of the vital link of health and development.

4. Indeed, global economic trends and needs can lead to a situation where the fruits and benefits of technology may not be equitably available to the local population nor address its public health needs. To illustrate, in an evaluation of the R & D expenditure of research-based firms in India Lanjouw and Cockburn (2000) found that only 16% of the expenditure was targeted on tropical diseases and the bulk of the research focused on disorders of the developed world such as cardiovascular disease, diabetes and cancer. Similarly, one can recognize the incongruity of the situation where Indian and Pakistani firms support much of the information technology and medical transcription needs of the developed world, while local public health management information systems remain abysmally disparate and dysfunctional. Surely the fruits of globalisation must also be realized by the needy locally. The challenge is to create an ethos among health professionals and researchers locally where this may be the corner stone of progress.
5. Given the enormous challenges of globalisation and increasing inequities, it is important that the all health workers and researchers be equipped with sound knowledge of human rights, equity and ethics. These must be an integral part of all training programs in health research. If the fundamental basis of research in developing countries is to improve the health status of the population and reduce the equity gap, then application of the principles of bioethics to the process will greatly help in addressing them. It is time to put ethics at the very core of the development and equity debates (Leon & Walt 2000, Benatar et al 2001). It is somewhat disappointing to note that much of the international debates over ethical standards and guidelines have largely ignored the voices of developing country researchers and public health professionals. Much of the debates are also around the semantics of guidelines rather than on addressing fundamental inequities (Benatar et al 2001, Bhutta 2001). Increasing capacity for ethical design, review and conduct of health research in south Asia will clearly add to increasing awareness of the yawning inequities in health in the region. Given the challenges imposed by the new world economic order, the development and fostering of this capacity among local researchers and health professionals is critical (Alvarez-Dardet & Ruiz 2001).

Is there a role for national and international networks?

Just as transnationals assume a key role in driving and setting the agenda in a global economy, the key role of international networks has also become evident. The classical models of such groups were the Greenpeace and Physicians Against Nuclear War, which largely existed within the developed world. Others health organisations such as Medicines Sans Frontiers (MSF), Voluntary Services Overseas and Child Health International have largely played humanitarian roles in times of crisis. These have also played an increasing watchdog role in developing countries on broader issues of health, equity and development. The warning about the destruction of public health structures in Africa by external aid and vertical programs also came from such organisations (Save the Children & Medact 2001). Notably, the whistle blower in the case of the recent controversy over unethical drug trial by Pfizer in Nigeria was also an aid worker from MSF.

These established international organizations have largely functioned independently and there is little coordination between them as well as with the local public health researchers. This remains an enormous untapped opportunity

In the context of public health research there are several examples of international organizations and networks that have served to bring people close together. The International Clinical Epidemiology Network (INCLEN) is an important example and has spearheaded several important public health projects and training programs in South Asia. The exponential advances in internet usage and communication technology have made these linkages feasible as viable national and international networks. The recent move spearheaded by the WHO to improve access to scientific literature and information resources in developing countries is but on example of the positive aspects of globalisation that can be tapped.

There is a virtual mushrooming of many such networks at a national level in Pakistan such as the Pakistan Public Health Network, Vaccinations and Public Health (VacPak), Pakistan Unsafe Injections Alliance and several Reproductive Health Networks. This list of such groups and networks in India is several folds longer. The challenge is now to focus on quality linkages, on channelling energies to issues of national and regional importance and developing sustainable linkages with effective and reliable partners. Globalisation, economic liberalisation and the impact of structural adjustments on developing countries are issues that should be central to the development and equity debate. The issues are not reversal of the inevitable, but putting protective mechanisms and safe guards in place that make it possible to influence policy. This can really only be truly effective as a East-West partnership. The remarkable coordination among the activists of the anti-globalisation lobby in Seattle, Davos and Genoa was the very product of globalisation itself. It is time that such coordination and communication links were established among health professionals and researchers.

The need for networks among researchers and public health professionals in South Asia and alliances with committed partners in the West is further underscored by the enormous gaps in human development and wanton use of limited resources for warfare. An example of this is the daily expenditure of the equivalent of a public hospitals' budget on a high-altitude war with no possible winners! It is estimated that the annual costs of a maintaining a nuclear arsenal and delivery systems by India and Pakistan can more than offset the entire vaccination needs of children in South Asia for the next fifty years (Bhutta 2001). These are the yawning dividends of peace that have eluded the region. Given the jingoism that surrounds these issues in the volatile atmosphere of the subcontinent (Bhutta 1998), regional networks are an essential stepping stone towards building an atmosphere for peace and prosperity in the region.

Table I Globalization and Public Health (adapted from Yach & Bettcher 1998)

lobal Factors	Potential Benefits	Potential consequences
lacroeconomic rescriptions Structural adjustment olicies and downsizing Health sector reform priority-setting, privatisation nd decentralization) Internationally Mobile apital Chronic Unemployment	• Fiscal soundness and credit ratings • Improved investment climate and capital flows • Increased efficiency of health services and sustainability	• Marginalization, increasing poverty and inadequate social safety nets • Lack of investment and quality primary care. Inequality of access • Perpetuation and exacerbation of income differentials and conditions for poor health Higher morbidity and mortality rates
rade Regulation (WTO) Trade in goods (MTA) Trade in services (GATS) Trade in intellectual roperty rights (TRIPS)	• Increased foreign direct investment • Diffusion of new technologies to developing countries • Standards and recommendations for food safety • Liberalization of health services • Patent protection and innovation	• Promotion, marketing and trade in hazardous products • Illicit trade in weapons technology • Dumping of unsafe or outdated pharmaceutical products • Trade in contaminated food products • Transboundary movement of hazardous wastes
ood Security Increased demand for food n rapidly growing economies Increase in global food rade Reduction in food aid	• Improved competitiveness and pricing • Greater incentives for agriculture	• Volatile markets and incentives for agriculture in developing countries • Structural food shortages in poor countries with low liquidity • Food shortages, inadequate international response and movement of population
ommunication Technology	• Global connectivity • Instant communication • Benefits of information technology • Positive impact of global media as a watch-dog	• Digital divide will further increase inequity • Active promotion and global marketing of unhealthy practices and products • Cultural Imperialism and social impact in developing countries
nvironmental Impact	• Sharing of world resources • Environment Protection	• Resource depletion (especially access to fresh water) • Water and air pollution • Ozone depletion • Greenhouse effect and global warming
ravel and migration	• “Global village” and increased access	• Increased infectious disease transmission • Export of harmful life styles • Brain drain

Table II
Comparative trends of selected indicators in Pakistan

	1985	**1990**	**1995**	**2000**
Rupees (Rs) per US Dollar parity	16.0	22.0	33.0	59.0
Annual devaluation of Rupee (%)*	8%	10%	10%	26%
GNP per capita income (US $)	$380	$400	$ 460	$ 470
Annual Inflation rate (%)*	8.53%	6.15%	11.47%	8.30%
Cost per litre gasoline fuel	5.50	10.25	14.71	27.50
Amoxicillin oral suspension	8.50	8.50	12.70	16.60
Augmentin oral suspension	11.12	11.12	12.80	27.23
Cefotaxime Injection	137.30	168.04	215.00	240.00
Ceftriaxone Injection	196.80	287.40	416.5	477.70
Inj Methotrexate	610.00	779.00	916.60	1227.00
Ventolin inhaler/unit	47.50	47.50	62.80	82.30
Measles Mumps Rubella vaccine	180.00	230.00	280.00	390.00

All drug estimates based on daily dose requirements for a 10 kg child in Pak Rs
* Rates estimated as average for preceding five years

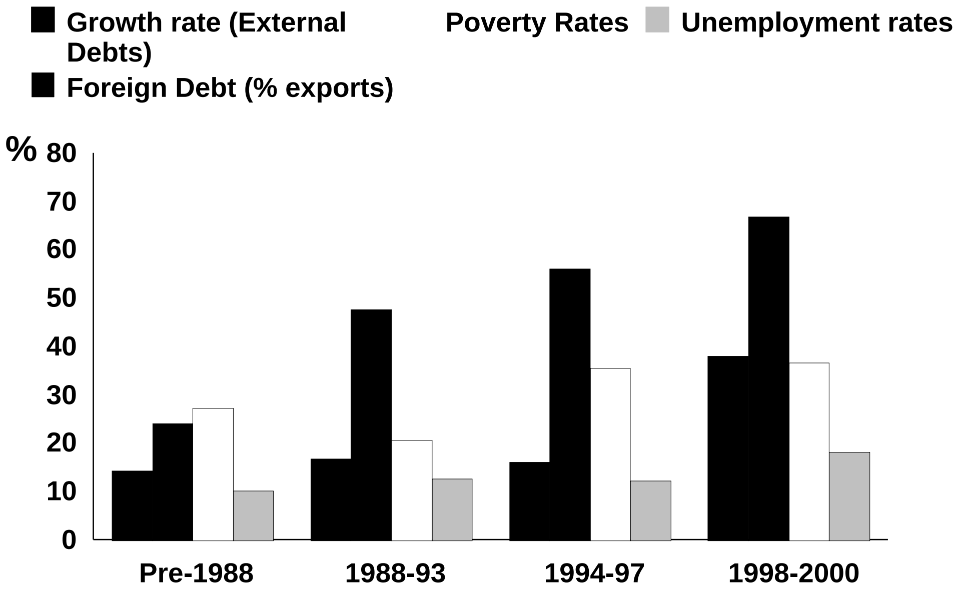
Table III
Costs of health care in India and gender differentials (1996-1997)

Average expenditure on hospitalisation (in Rupees)		
Male	889.89	1437.40
Female	532.39	1245.60
Total	736.86	1354.40
Average expenditure on outpatient care (in Rupees)		
Male	20.21	26.39
Female	19.96	25.46
Total	20.11	26.04

Table IV
Change in Public-Private Use for Health Care in India (1986 – 1996)

Health Sectors	**Outpatient Care**		**Inpatient Care**		**Outpatient Care**		**Inpatient Care**	
	1986 - 1987		1995 - 1996		1986 - 1987		1995 - 1996	
	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urba
Share of Public Sector	**25.6**	**27.2**	**19.0**	**19.0**	**59.7**	**60.3**	**45.2**	**43.1**
Public hospital	17.7	22.6	11.0	15.0	55.4	59.5	39.9	41.8
PHC/CHC*	4.9	1.2	6.0	1.0	4.3	0.8	4.8	0.9
Public dispensary	2.6	1.8	2.0	2.0			0.5	0.4
ESI doctor**	0.4	1.6	0.0	1.0				
Share of Private Sector	**74.5**	**72.9**	**80.0**	**81.0**	**40.3**	**39.7**	**54.7**	**56.9**
Private hospital	15.2	16.2	12.0	16.0	32.0	29.6	41.9	41.0
Nursing Home	0.8	1.2	3.0	2.0	4.9	7.0	8.0	11.1
Charitable Institution	0.4	0.8	0.0	1.0	1.7	1.9	4.0	4.2
Private doctor	53.0	51.8	55.0	55.0				
Others	5.2	2.9	10.0	7.0	1.7	1.2	0.8	0.6
Total	**100.1**	**100.0**	**99.0**	**100.0**	**100.0**	**100.0**	**99.9**	**100.0**

Recent economic trends in Pakistan

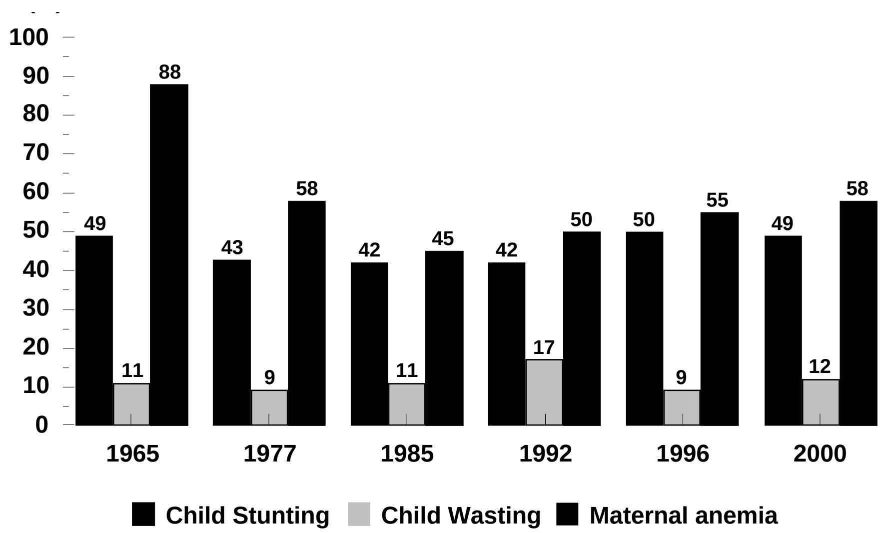


Estimates derived from Economic Survey of Pakistan 1997, Economic Survey of Pakistan 2000 and “Social Development in Pakistan. Annual Review 2000. Towards Poverty Reduction” (Social Policy and Development Centre) 2000.

Figure 1

Nutrition trends in Pakistan

(Pregnant women and children under 5)



Based upon data from UNICEF, National Nutrition Surveys of Pakistan 1988, and the National Health Survey of Pakistan 1994

Figure 2

References

"Assurance given to World Bank: complaints against Social Action Program being removed". Bureau Report. Daily Dawn. February 9, 2001. [http://www.dawn.com/2001/02/09/op.htm]

Abbasi K. The World Bank and world health. Focus on South Asia – II: India and Pakistan. Br Med J 1999;318:1132-35.

Acheson D. Independent enquiry into inequalities in health. London: H M Stationary Office 1998.

Adjustment with a Human Face. Cornia GA, Jolly R, Stewart F (Eds). (Volumes I and II). Oxford: OUP/UNICEF. New York. 1988.

Ahmed SH, Jamil H. Changing pattern of suicide and parasuicide in Karachi. J Pak Med Assoc 1981;31:76-78.

Ahmed Sultan. Going deeper into debt. Daily Dawn. February 8, 2001 [http://www.dawn.com/2001/02/08/op.htm]

Alvarez-Dardet C, Ruiz MT. What can doctors do to reduce health inequalities? J Epidemiol Comm Health 2001;55:449

Anyinam CA. The social costs of the international monetary fund's adjustment programs for poverty: the case of health care developments in Ghana. Int J Health Serv 1989;19:531-47.

Ashraf M. The problem of suicide in Karachi. Pakistan Armed Forces Med J 1964;14:156.

Asian Development Bank. Asian Development Outlook. 2000. New York. Oxford University Press.

Behrman JR. A survey on socio-economic development: structural adjustment and child health and mortality in developing countries. In Child Survival Programs: Issues for the 1990s. Seminar Report. Johns Hopkins University. 1990:189-265.

Benatar SR, Bhutta ZA, Daar AS, Hope T, MacRae S, Roberts LW, Sharpe VA. Clinical ethics revisited: responses. BMC Medical ethics 2001;2:2 [http://www.biomedcentral.com/1472-6939/2/2].

Bhutta ZA. Staring into the abyss: walking the nuclear tightrope in South Asia. Br Med J 1998;317:363-64.

Bhutta ZA. Why has so little changed in maternal and child health in south Asia? BMJ 2000;321:809-12.

Bhutta ZA. Beyond the millennium: what can be done to improve child health in South Asia? Indian Pediatrics 2001;38:127-131

Bhutta ZA. Structural adjustments and their impact on health and society: a perspective from Pakistan. Inter J Epidemiol 2001;30: 712-16.

Bhutta ZA. Ethics in international health research: a perspective from the developing world. Commissioned Paper. Working Group II, Commission for Macroeconomics in Health, Institute for Global Health & World Health Organization, 2001.

Chen LC, Berlinguer G. Health equity in a globalizing world. In Evans T, Whitehead M, Diderichsen F, Bhuiya A, Wirth M (Eds). Challenging Inequities in Health: from Ethics to Action. Oxford University Press, New York. 2001, pp 35-44

Cornia G, van der Hoeven R, Mkandawire T (eds). Africa's recovery in the 1990s; from stagnation and adjustment to human development. London: UNICEF/MacMillan, 1992.

Costello A, Watson F, Woodward D. Human face or human façade. The effects of adjustment on the health of mothers and children in developing countries. Working Paper Institute of Child Health.London. 1994. [http://www.cich.ich.ucl.ac.uk]

Dollar D, Kraay A. Growth *Is* good for the Poor. The World Bank. 2000 [www.worldbank.org/research/growth/absddolakray.htm]

Government of Pakistan. Economic Survey of Pakistan. 1997-1998.

Government of Pakistan. Economic Survey of Pakistan. 1999-2000.

Gradstein M, Milanovic B. Does Liberte=Egalite? A survey of the empirical evidence on the links between political democracy and income inequality. 2000. The World Bank.

Gray J. False Dawn: the delusions of global capitalism. London: Granta, 1998.

Haque I. "Revenue target to be met, IMF assured". Daily Dawn. February 11, 2001. [http://www.dawn.com/2001/02/11/op.htm]

Human Development Centre. Human Development in South Asia 1999. The crisis of governance. Karachi. Oxford University Press.

Hurrell A, Woods N. Globalization and inequality. Millennium J Int Stud 1995;24:447-70.

Hussain Z. Inside Jihad. Newsline. February 2001;12: pp 20-32. [http://www.newsline.com.pk]

IMF document on Standby Agreement with Pakistan. Daily Dawn. December 4, 2000. [http://www.imf.org/external/NP/LOI/2000/pak/01/index.htm]

International Monetary Fund. *Adjusting to development: the IMF and the Poor*. Boughton MJ, Bernstein B (Eds). Washington (DC). 1993. PPAA/93/4.

Kanji N, Kanji N, Manji F. From development to sustained crisis: structural adjustment, equity and health. Soc Sci Med 1991;33:985-93.

Kaplan RD. The lawless frontier. The Atlantic Monthly. September 2000 [http://www.theatlantic.com/issues/2000/09/Kaplan.html]

Khan A, Bhutta ZA. Maternal health and malnutrition in Pakistan: a situational analysis. Aga Khan University & UNICEF Pakistan. 2001.

Kinnon CM. World trade: bringing health into the picture. World Health Forum1998;19:397-406.

Klaus Deininger and Pedro Olinto. Asset Distribution, Inequality, and Growth. World Bank Working Paper #2375, June 2000. (Washington DC) [http://wbln0018.worldbank.org/Research/workpapers.nsf/568b4463f7c6e237852567e500514be6/3d38b10b0587e4f98525690b0054e45e/$FILE/wps2375.pdf]

Kolko G. Ravaging the poor: the international monetary fund indicted by its own data. Int J Health Serv 1999;29:51-57.

Lanjouw JO, Cockburn I. Do patents matter? Empirical evidence after GATT. NBER Working Paper No. W 7495. 2000.

Laurell AC, Wences MI. Do poverty programs alleviate poverty? The case of the Mexican national solidarity program. Int J Health Serv 1994;24:381-401.

Lee K. Globalisation and health policy: a conceptual framework and proposed research and policy agenda. Soc Sci Med 2000

Leon D, Walt G (Eds). Poverty, inequality and health, London, Oxford University Press. 2000.

Loewenson R. Structural adjustment and health policy in Africa. Int J Health Serv 1993;23:717-30.

Macedo R. Brazilian children and the economic crisis: the evidence from the state of Sao Paulo. In Cornia GA, Jolly R, Stewart F. Adjustment with a Human Face. (Volume II). Oxford: OUP/UNICEF 1988, pp 28-56.

Martin-Prevel Y, Delpeuch F, Traissac P, Massamba J-P, Adoua-Oyila G, Coudert K, Treche S. Deterioration in the nutritional status of young children and their mothers in

Brazzaville, Congo, following the 1994 devaluation of the CFA franc. Bull WHO 2000;78:108-118.

McMichael AJ, Beaglehole R. The changing global context of public health. Lancet 2000; 356:495-99.

McMichael PD. Development and social change: a global perspective. Thousand Oaks CA: Pine Forge Press, 1996.

Mills A. Technology and science as global public goods: tackling priority diseases of poor countries. Paper. Annual Bank Conference on Development Economics, Barcelona, June 2001.

NSSO (National Sample Survey Organisation). *Morbidity and Treatment of Ailments (Report No. 441), NSS Fifty-second Round. July 1995-June 1996*. 1998. New Delhi: Department of Statistics, Government of India.

NSSO (National Sample Survey Organisation). Morbidity and Utilisation of Medical Services (NSS 42nd Round 1986-87). *Sarvekshana.* 1992. No.52, Vol.XV No.4, April-June.

Ramphal S. ‘Debt has a child’s face’. In The Progress of Nations, UNICEF, New York, 1999.

Roemer M, Roemer R. Global health, national development and the role of government. Am J Public Health 1990;80:1188-92.

Sabir A. Karachi: one suicide every three days. Daily Dawn. January 2, 2001. [http://www.dawn.com/2001/01/02/op.htm]

Save the Children (UK) & Medact. The bitterest pill of all: the collapse of Africa’s health systems. 2001.

Scandizzo PL, Tsakok I. Food price policies and nutrition in developing countries. In Biswas M, Pinstrup-Anderson P (eds). Nutrition and Development. 1985. New York, Oxford University Press. pp 60-76.

Sen G, Iyer A, George A. Class, Gender and Health Equity: Lessons from Liberalization in India. 2001

Social Policy and Development Center. Social development in economic crisis. Annual Review 1999. Oxford University Press, Karachi, 1999.

Social Policy and Development Centre. Social Development in Pakistan. Annual Review 2000. Towards Poverty Reduction. Karachi. Oxford University Press. 2001.

Walt G. Globalisation of international health. Lancet 1998;351:434-37.

Yach D, Bettcher D. The globalization of public health, I. Threats and opportunities. Am J Pub Health 1998;88:735-38.