

Globalisation and Health Sector in India: Some Emerging Issues

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Abstract

The paper explores challenges emerging out of the impact of the globalisation process and its dynamics on the healthcare sector in India. The paper highlights that a lot many changes are taking place in the health sector ranging from health seeking behaviour to access to public health services and their financing to actual health outcomes going hand in hand with the rise in dual disease burden. Challenges emerging from WTO agreements related to public health, health policies and their compliance, and also from globalisation induced shift in development models of production and consumption having far reaching impact on physical environment threatening the healthy human life. These issues and challenges require an immediate attention by the government, development economists and policy makers.

Our concern in this paper is to bring out some of the key health related issues, which are likely to assume vital importance as globalisation process gets more intensified. More specifically, this paper introduces the context how health sector is being affected through globalisation process, critically reviews the health sector performance in India, highlights issues and challenges the country would be facing once the globalisation process gets intensified and takes the full circle. Accordingly, the subsequent discussion is organised in six sections.

I Introducing the Context

The success of a socio-economic transformation in any country should be evaluated in terms of benefits and opportunities made available to an ordinary individual. For an individual, a healthy and secured life – free from illness and ailments and a reasonable life span - remains a vital consideration. A good health benefits an individual by providing an opportunity to develop abilities required to achieve personal goals. Gains increase if the individual is poor and vulnerable, as a healthy body is the primary productive asset (WHO, 1999), which can be deployed for facilitating earnings and minimising the risk of falling deep in poverty. Healthcare, is also declared as the human right under article 25 of the Universal Declaration of Human Rights. A good health reflected in the declining incidence of morbidity, mortality and disability helps society by contributing to economic growth through higher work productivity, and releasing resources that otherwise would have to be spent on public healthcare. The health promotion, therefore assumes the role of a vital public good and a basic human right for the people.

In the area of health, multiplicity of changes are taking place at the micro and macro levels, ranging from healthcare requirements to health seeking behaviour to actual health outcomes. Issues, such as, inequitable access to basic services, inefficiencies resulting into waste and suboptimal utilization of existing resources, the poor quality and declining ethical norms, patient rights and citizens' entitlements to basic health services (preventive, promotive and curative) have assumed a great importance.

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At the same time, the world economy is changing rapidly with globalisation policies getting deep rooted and widespread all over challenging the established development paradigms. This is true for India too. In the late 1980s, India fell deep into the economic crisis with its internal and external economic imbalances reaching unprecedented heights and international creditworthiness questioned. The fiscal deficit (centre and state governments combined) as percentage of gross domestic product (GDP) reached 9.4 per cent; the current account balance as percentage of GDP plummeted to minus 3.1 per cent (RBI, Annual Report 2002-03, p.52), and foreign exchange reserves declined to US \$ 5.8 billion (Economic Survey 2003, p. S-68).

This backdrop created the compelling grounds for the country to adopt World Bank designed development paradigm by adopting a new market-oriented macro economic policy framework. In fact, mid eighties was the beginning of redesigning macro economic policies, which ultimately paved the way to realign the role of state and market to create more space for the private sector and increased outflow and inflow of goods, services and capital, along with raising the level of internationalization and exchange of other non-economic programmes. This process popularly captioned as liberalization, privatization and globalisation (LPG) has not only increased interdependence on and interconnection with the international markets, but it has brought far reaching implications for the administrative and socio-economic and political structures of the country (Arora 2002). Health sector, is not an exception. Five points are worth noting:

One, providing basic public health services free of cost has become a paradigm of past. With ever expanding financial requirements for health, both the centre and state governments are continuously looking for alternative options, more so, because global trends towards increasing share of 'for profit' healthcare and its marketisation through an increasing influence of multinational corporations across societies are firmly consolidated.

Two, with increased flow of information through print and electronic media and also through campaigns led by grassroots organizations, NGOs etc. people have become more right-conscious. With increasing awareness and expectations of the people, technological advances and improvements in access to healthcare infrastructure, both the demand and supply side perspective stand changed now.

Three, with the opening of the economy and the increased participation from the private sector, both domestic as well international, the health sector has been explicitly recognised as an industry as well as a service sector. Gains are considered to be substantial with the rapidly rising health sector (as pointed out by the study conducted by Confederation of Indian Industry (CCI) – Mckinsay Study 2002) and also from promoting India as a global health destination (Union Budget, 2003-04).

Four, liberalization of the economy has increased the responsibility of the government for providing an efficient health system covering health education, preventive programmes and curative services. The market-oriented development process has caused changes in lifestyles, increased urbanization and connectivity and enhanced access to information and services not available earlier. These and other factors, in one way or another, have profoundly impacted on the epidemiological and health seeking behaviour patterns of the people along with exposing inadequacies of the present health system — both in the public and private domains.

Five, globalisation policies are being aggressively pursued when structural changes are taking place in the health sector. During the 1990s, while mortality rates reached a plateau, there emerged a challenging dual disease burden. Communicable diseases have become more difficult to encounter because of the development of insecticide resistant strains of vectors, antibiotics resistant strains of bacteria; and the emergence of HIV infection for which there is no therapy (Tenth Five Year Plan, Part II, p.82). With India's health achievements not at pace with requirements, in spite of the fact that health development has remained one of the major thrust areas for the social development, the subject of health has grown complex. Despite being a signatory to the Alma Ata declaration of 1978, which aimed at achieving 'Health for All' by 2000, India is still lagging far behind from realising this dream even in 2008. This, however, is not to deny the improvement in the health status of the population as seen in reduced mortality and increased life expectancy by raising the access to and utilisation of healthcare infrastructure, family welfare and nutrition since India's independence in 1947.

II Healthcare Sector in India

Health outcome is the result of too many inputs and they are influenced not only by the structural and functional relationships that exist among different health related policy variables, but also by the socio-economic and political environment of the country (Arora and Gumber 2004, 2005). The current state of the health sector infrastructure in India has been shaped by many policy prescriptions and programmes adopted from time to time, constitutional commitments, changing socio-economic perspectives and the emerging global health challenges. The major contribution has come from Bhore Committee (1946), Five Year Plans, National Health Policies announced in 1993, 2002, Population and Family Planning programmes etc. From time to time, several expert committees⁴ were also set up to review to suggest important strategies for improving the public health infrastructure and delivery systems. The department of health has reviewed the performance since 1983 and formulated the National Health Policy 2002 that laid down specific goals to be achieved by 2015 as follows:

1. Eradicate Polio and Yaws	2005
2. Eliminate Leprosy	2005
3. Eliminate Kala Azar	2010
4. Eliminate Lymphatic Filariasis	2015
5. Achieve zero level growth of HIV/AIDS	2007
6. Reduce mortality on account of TB, Malaria, and other water-borne diseases by 50 %	2010
7. Reduce prevalence of blindness to 0.5 per cent	2010
8. Reduce IMR to 30/1000 and MMR to 100/100,000 live births	2010
9. Increase utilization of public health facilities from the current level of <20% to >75%	2010
10. Establish integrated system of surveillance, national health accounts & health statistics	2005
Source: National Health Policy 2002.	

India with more than a billion population exhibiting wide economic and social diversities with respect to caste, culture, religion, and governance patterns has made a considerable progress in health attainments and building up health infrastructure and manpower in government, voluntary and private sectors for primary, secondary and tertiary care. Table 2 lists some health indicators to highlight - achievements in the health sector and healthcare infrastructure.

	1951	1981	Current
Infant Mortality Rate (per 1000 live births)	146	110	57
Life Expectancy at birth, total (in years)	32	50	63
Male	37	54	62
Female	36	55	64
Birth Rate (per 1000)	41	34	23
Death Rate (per 1000)	25.1	12	7.5
Registered Medical Practitioners (RMP) per 10 thousand population	1.7	3.9	6.6
Beds (Private + Public) per 10 thousand population	3.2	8.3	9.5*
Malaria (million, cases)	75	2.7	1.8
Leprosy (cases 10 thousand population)	38.1	57	1.2
Polio (no. of cases)	29709	225	57
Notes: * Relates to 1990-91. Compiled from different Tables provided in Tables 10.6 & 10.7.			
Source: Economic Survey 2005-06, pp.212-15; 2006-07; & 2007-08, pp.252, & Table A-2			

As shown in Table 1, India's health performance seen in terms of longevity, mortality, immunization, and healthcare infrastructure is worth noting. Longevity has more or less doubled from 32 years in 1951 to 63 years in recent years; infant Mortality Rate (IMR) is about two and half times less; malaria has been contained at 1.8 million cases; and leprosy and polio are nearing elimination. Smallpox and guinea worms have been completely eradicated. Indian doctors are second to none in the world now; and they are technically proficient, and capable

of performing sophisticated procedures and that too at a fraction of the cost available in the West. These achievements turn out to be fast after the early 1980s when its health development policies witnessed a major shift. India after becoming signatory to the *Alma-Ata declaration* of 1978, designed its national health policy in 1983 to achieve the goal of 'Health for All by 2000 AD' set in Alma-Ata. This provided a comprehensive framework for planning, implementation, monitoring of health services and goals to be achieved in later years.

The 11th five year plan aims at working out a comprehensive approach, which could combine individual health care, public health, sanitation, clean drinking water, access to food and knowledge about hygiene and feeding practice. Primary health care system is focused by first emphasizing on integrated district health plans, and then on block specific health plans while involving all health related sectors and NGOs. National Rural Health Mission has been launched to address health problems in rural areas by combining the public health care while increasing the role of PanchayatiRaj Institutions to manage, administer and to make them accountable for health services to be provided at community levels. The next step is to make this to make it a Sarva Swathya Abhiyan to cover the health needs of the urban poor, particularly the slum dwellers. The 11th plan will recognize the feminine face of HIV and accord the highest priority to it, it would strive to achieve, the MDG goal for sanitation by 2010. This is a difficult area given our socio economic -cultural complexities and regional diversity.

III An Introspective Review

India has made a good progress on the income front, but has failed to ensure a relatively better quality of life of people. With per day per capita food availability increasing though marginally from 395 grams to 444 grams during 1951-2006 indicates India has ensured the level of food security for growing population, coupled with decline in poverty from about 57 per cent in 1973-74 to about 27 per cent in 2005. Poverty reduction and creating welfare provisioning of basic minimum services relating to food, education and health services, has helped India partly in improving health outcomes. The infant mortality rate no doubt has declined to 57 and life expectancy increased to 63 years; the pace of health achievement does not compare favourably with a number of developing countries as given in Table.3

Table 3. India's Global Position in Socio-Demographic Parameters (Current Level)			
	India	S Lanka	China
Life Expectancy at birth (years)	63	71	72
Infant mortality (per 1000 live births)	56	12	23
Maternal mortality (per 100,000 deliveries)	450	58	45
Under-five mortality (per 1000 live births)	87	15	37
Pop with access to improved sanitation (%)	30	91	44
Births attended by skilled birth attendants (%)	48	97	97
One yr olds fully immunized for measles (%)	58	99	84
Notes: Compiled from figures provided in Tables 10.6 & 10.7. Source: Economic Survey 2005-06, p.216; and 2007-08, p.252			

As evident in Table 3, life expectancy at birth, infant and under-five mortality levels are worse than those of Bangladesh and Sri Lanka (Table3). Smallpox, guinea worm disease and polio were eradicated by Pakistan much before India. India's healthcare problems, however, are still dominated by communicable, respiratory and diarrhoeal diseases including high rates of maternal, peri-natal and neo-natal morbidity. Under nutrition, micro nutrient deficiencies associated with health problems coexist with obesity and non-communicable diseases. With 16.5% of the global population, India contribute towards- a fifth of the world's share of diseases: a third of the diarrhoeal diseases,

TB, respiratory and other infections and parasitic infestations, and perinatal conditions; a quarter of maternal conditions, a fifth of nutritional deficiencies, diabetes, CVDs. India exhibits the second largest number of HIV/AIDS cases after South Africa. While morbidity due to common communicable and nutrition deficiency diseases continues to be high, it is progressively rising due to non-communicable diseases. Communicable diseases have become more difficult to encounter because of the development of insecticide resistant strains of vectors, antibiotics resistant strains of bacteria and the emergence of HIV infection for which there is no therapy (Government of India, 2002). The changing peoples' life styles and longevity resulted in the increasing prevalence of non-communicable diseases. Levels of malnutrition and rates of infant and maternal deaths stagnated during the 1990s.

The burden of morbidity and mortality has accentuated due to high incidence of anemia and other vitamin and micronutrient deficiencies, among children, women in reproductive ages and ageing population particularly belonging to poor and vulnerable sections of the society (Gumber, 1997). There are large inter and intra-state variations in disease burden. The widening disparities in health attainments and the quality of life across population groups and regions, partly explainable in terms of inequitable distribution of institutions and critical manpower, have assumed serious dimension.

During the last few years private health markets have emerged in India. The convergence of squeezed public investment, rising non-communicable diseases, an expanded demand for health care and the globalisation process since the 1990s has enabled the entry of the corporate sector in health. Several non-resident Indians (NRIs) and pharma companies are setting up super-speciality hospitals, capable of providing world-class care at for less cost as compared to the West.

The private sector, no doubt has specialist and technology and can provide service for many important diseases related to mental & dental health, vascular, cancer and communicable diseases, orthopedics etc. However, the welfare implications and public health goals remain ignored. International experience shows that the private sector guided by the profit maximization raises the overall cost of health care in the country necessitating pressures for increased budgetary allocations for government hospitals to stay competitive. There exists acute shortages of human resources.. Urban bias is serious. Supply gaps and distributional inequities are acute and uniform standards and treatment protocols are lacking. Cost controls and quality assurance mechanisms are not in place and appropriate regulatory mechanism to safeguard consumer interests are not effective. However, this is not to deny an enormous potential for India to become a hub for medical tourism.

Community-based health personnel require periodical in-service training, and an integral linkage with the organized health system. Motivation is low and absenteeism is high in general hospital. Dilution of standards is visible in laboratory technicians and pharmacists. India has an adverse nurse population or nurse doctor ratio as compared to other countries. Doctors are in short supply in India. with a doctor-population ratio of about 60 physicians for 1 lakh population, India fairs badly with more than 200 for every 1 lakh population in most developed countries. Distributional inequities in the availability of doctors can also not be ignored. The growth of India's pharmaceutical market, including both bulk drugs and formulations, during the last a few decades has been quite high, but ten of the top 25 drugs sold in India are of non-essential or hazardous nature having serious price implications. About 74 drugs constituting about 25 percent of the drug market are under price control. Analysis of the price trends would reveal that price increases in case of antibiotics, anti-tuberculosis drugs for cardiac disorders, anti-malarial drugs has been substantial etc. Thus, price rationalization at all level is essential.

Access to the latest technology through globalisation may help, but potential risks associated with increased prices and availability of essential drugs are also equally serious. Medical technology in India have generally focused on pharmaceutical drugs, diagnostics for sex determination of the foetus and corruption in public procurement. Policies for practicing and monitoring potential impacts of medical innovations on health expenditures have remained ignored. Technological changes in many advanced countries has led to a substantial increase in health spending mainly due to expanded utilization of medical devices and higher prices. Therefore, increased utilization of medical technology is required and should be encouraged.

In comparison to health outcome indicators, the magnitude of health spending in India is enormous. (WHO and World Bank put estimates between 5.5 and 6 per cent of GDP); but, in contrast to other developing countries, in India nearly three-fourths of health expenditure is private, i.e. households' out-of-pocket expenditure (World Bank, 1995). Some of Asian countries, such as, China, Sri Lanka, Indonesia, Philippines and Thailand who spend between 2 to 5 per cent of GDP, have achieved much better quality of life (measured in terms of life expectancy, infant and child mortality, maternal mortality, child malnutrition, etc.) when compared with India (Arora and Gumber, 2004).

In the federal economic setup of India, health is a state subject; but health sector is jointly managed by the centre as well as states (Arora 1983, 1991). Public spending (i.e. expenditures incurred by health departments of Central and State Governments) on health gradually accelerated from 0.22% in 1950-51 to 1.05% during the mid-1980s, and stagnated at around 0.9% of the GDP up to 2004-05. It increased thereafter to 1.1 in 2006-07. In terms of per capita expenditure, it increased significantly from less than Re 1 in 1950-51 to about Rs 215 in 2003-04 to Rs. 268 in 2006-07 (Berman and Ahuja 2008). As percentage of GDP, Public sector health expenditures⁵ of all combined governments have declined from 1.25 in 1985-86 to 1.05 in 1995-96 and increased thereafter to reach about 1.2 percent in 2006-07. As percentage of gross expenditures, trend in the corresponding years are similar (Table 4). At state level, budgetary allocations are not only deplorably low, they exhibit glaring inter-state differentials. Inter temporal analysis shows that during the 90s, grant in aid to states from the central declined; so was the case with capital investment in public hospitals.

	1974-75	1980-81	1985-86	1990-91	1995-96	1999-00	2006-07
1. As %age of total public expend	4.19	4.57	4.54	4.30	4.33	4.42	4.44
2. As %age of GDP	0.80	1.13	1.25	1.15	1.05	1.18	1.15
3. Centre's share of health exp in expend of the General Govt.	11.31	10.32	14.61	11.18	11.99	12.22	15.4
Notes: (i) General Government is defined as governments of Centre, States and Union Territories of India. (ii) Expenditure includes expenditures on medical, public health, sanitation & water supply both on revenue and capital accounts. (iii) Total expenditure used here is adjusted for intergovernmental transfers like grants and loans. (iv) GDP at market prices is used.							
Source: (i) Government of India, Indian Public Finance Statistics, different years.(ii) Economic Survey 2007-08 for GDP.							

Health financing situation in India seen in international perspectives as regards spending on preventive and promotive care is equally discouraging. The Indian healthcare spending in sharp contrast to a number of other Southeast Asian countries. is far less. India spends only one-third on preventive and promotive healthcare, whereas this proportion is as high as two-thirds in China and Sri Lanka. Further, out of the total curative care spending, nearly three-fourths is spent on secondary and tertiary hospitals - primarily located in urban areas. Given that 70 per cent of population resides in rural areas, the government spends too little on the day-to-day healthcare needs of the rural India. This pattern needs to be reversed. Government's share in the total health spending is just one-fifth indicating that the household out-of-pocket expenditures on healthcare are enormous. In contrast, the government health spending ranges between 70-90 per cent in OECD countries (including Canada) and between 50-65 per cent in several Southeast Asian countries(Arora and Gumber, 2007).

The situation has changed since April 2005. The share of government health expenditure in GDP increased from 0.97 percent to about 1.05 in 2006-07 on account of new initiative National Rural Health Mission(NRHM) taken in line with Government's commitment to raise public health spending from 1 % GDP to 2-3% one the next five years; and increased for use confirm devolution to states meant for health schemes (Berman and Ahuja , 2008)

The analysis of Central and State Government Budgets reveals that there was a stepping up in allocation only in recent years, nevertheless the extent of allocation in real terms is not substantial and volatility has also been considerable (Berman and Ahuja, 2008). Still public expenditures are dismally low if seen in the international perspectives and given the health care requirements and emerging disease burden in India. The low public spending and rising requirements for healthcare needs particularly at secondary and tertiary levels in hi-tech curative and super specialty and in the provision of services in the remote areas are compelling reasons to explore new methods of healthcare financing⁷. Globalisation induced competitive life styles not only cause stress related diseases, but also exacerbate new public health threats (spreading of HIV infection, injury etc.) and increase health risks due to the rising prevalence of alcohol and tobacco consumption.

The success of the health system can be better gauged by morbidity levels and patterns and accessibility and use of health services⁸. The key features emerging from the analyses of large scale survey data on health service use pattern collected by National Sample Survey Organisation (NSSO) and National Council of Applied Economic Research (NCAER) as analysed in an another study (Arora and Gumber, 2004) highlight that levels of morbidity are rising with quite wide inter-state differences in both rural and urban areas when compared to the national average; the probability of not seeking treatment is found to be higher among females, elderly (aged 60 years and

above), and the never married individuals. Reliance on Government Facilities is not only declining, but the provision of free health services by the public sector is also diminishing. The cost of treatment and differentials between Public and Private Providers have risen also both for out-patient and in-patient care both in rural and urban areas as compared to the mid-1980s. The financial burden of treatment is also distributed unequally across different population groups reflecting on inefficiency in the public delivery system and indicating the potential for voluntary comprehensive health insurance schemes for the poor section of the society. The public sector health subsidies benefit the better off more than the poor.

Issues related to accessibility, efficiency, and quality of the health delivery continues to haunt the policy makers and development practitioners. Huge gaps in the placement of critical manpower in primary healthcare institutions exist with wide inter-state and intra-state variations in rural and urban settings. The overall health system continues to be functioning inefficiently and poorly partly due to mismatch between personnel and infrastructure, lack of skill up-gradation and orientation programmes, absence of well established linkages between different system components, and lack of appropriate functional referral system. All these issues deserve attention of government and health economists and development practitioners.

IV Globalisation Process and Health: Important Linkages and Channels

Globalisation seen in the historical perspective has evolved out of a gradual process of progressive integration of the world economy through falling barriers to trade, exchange, and greater mobility of information, capital and labour. This integration goes hand in hand with intermeshing of social groups in almost all areas - economic, social, religious, political, legal and cultural. This is also associated with a general direction of change towards market-oriented environment and increase flow of cross-border economic transactions navigated by conscious human decisions coupled with the enhanced role of multinational corporations (MNCs) in international economic flows (Arora 2002).

All these developments, no doubt brought the world closer, also introduced a tremendous change in the nature of the world trade architecture with MNCs assuming a vital role in integrating the diverse economic and other activities through trade, finance, investment, technology transfer and relocating their manufacturing plants near the sources of cheap raw material or labour or markets, keeping in view their global interests.

Globalisation policies, particularly in the context of a developing federal democratic country like India, has the potential of being a great force of change, given its indirect but multidimensional links with income growth and development, national policies, governance and institutions. The greater liberalization, privatization and deregulation of domestic economic activities requires changes in macro economic policies in order to increase - international trade (in goods and services including banking, insurance, shipping, finance, education, and health care etc.) - flow of international capital especially of foreign direct investment (FDI) and technology in print and electronic media. Such a process requires not only realigning the role of 'state' and 'market', but also a quantitative diminution of the role of 'state' in one or the other way.

Seen in this background, Globalisation and health linkage is extremely complex as is evident from the following (Arora and Gumber 2004):

- Globalisation effects are mediated by a number of factors like expected income increase, improvement in income distribution and poverty reduction on the one hand, and the initial conditions like the level of development, the on-going growth pattern and its quality, accompanying economic policies facilitating this growth, the level of human capital development and the infrastructure available of the reforming country on the other.
- Both globalisation and health consequences are greatly influenced by a number of other factors like the socio-economic macro policies, and political will with which these policies are implemented, technological developments, economic pressures, changing ideas and increasing social and environmental concerns.
- Health gains are likely to be positive only if globalization led economic growth creates economic inequalities which are moderate, domestic markets are competitive and non-exclusionary, access to healthcare infrastructure is evenly spread out, regulatory instruments are effective and strong, social safety nets are well placed, and rules to access to global markets are non exclusionary (Cornea, 2001).

IV Globalisation and Health: Impending Dangers

Health consequences of the on-going globalisation process and its dynamics are going to be serious though the channel how globalisation will affect the health sector is not very explicit. Given below are some of the points which show how healthcare sector both as an industry as well as service will be affected:

In an integrated global economy, global institutions like World Trade Organisation (WTO), International Monetary Fund (IMF) etc. assume greater importance not only in designing international policies and frameworks and but also in enforcing international rules, standards and structures. WTO Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS) especially with regards to pharmaceuticals is supposed to ensure compliance to IPRs by protecting patents. But, unfortunately, they can not provide for the health care needs of the poorest people. As rightly pointed out, “. . . Despite agreement at Doha to reform the treaty, TRIPS continues to be a tool available to those wishing to curtail the discretion of governments pursuing access to medicines for all” (Pollock and David 2003, p. 1075).

WTO clauses on public health, public order and slave labour set out in Article XX of the GATT and in sanitary and phytosanitary measures (SPS) are deep rooted in trade considerations. Given the undefined nature of these public health measures, it is feared that in the dispute settlement, the decisions of the WTO (DSB) will centre around trade priorities given the non-transparent nature of the DSB.

The WTO rules stipulate that in trade disputes, products must be compared to ‘like’ products disregarding the production practice. Thus, imports of a product can not be restricted even if its production involves risks to health, or the environment. For example, a country importing beef derived from cows fed with hormones or antibiotics have to be treated similar to the normal beef without hormones or antibiotics, even when such practices are banned by local laws. Similarly in case of production process involving GM organisms, genetically modified (GM) products have to be technically treated ‘like’ non GM products. Infact, ‘quite like’ products have to be treated ‘similar’ even if they differ in fat, alcohol, fibre, nicotine or any content. Similarly, it will be a problem of discrimination if market access is restricted by imposing higher taxes on (like tobacco, alcohol) having negative health impacts (Koivusalo, 1999 and Rowson, 2000). Although labeling which has been suggested to guide matters of health concern, can improve consumer choice, but its effectiveness remains questionable, as it shifts the responsibility to regulate and make decisions on health and safety issues on the individual. (Koivusalo, 1990).

The WTO focuses not only on trade issues, but on all such issues, which are linked to the economic interests of the rich countries. All the important agreements related to Agriculture (AOA); intellectual property rights (TRIPS); trade in services (GATS); and on technical barriers to trade (TBT), sanitary and pytosanitary measures (SPS) linked to human, animal and plant health protection have far reaching implications for health and safety.

The SPS Agreement deals with issues related to trade in food and its food safety and animal and plant health laws. It recognizes the rights of governments to protect human, animal or plant life based on sound principles and scientific evidence of international standards. However, it is not clear who should be the body setting international standards. This creates scope for industry led self regulation. There is always a danger that commercially driven voluntary standards and codes of conduct do not match the international standards to be used (Koivusalo, 1999).

International standards in food as used in WTO disputes are the Codex Alimentarius (CA), which are defined by the Food and Agriculture Organisation (FAO) and the WHO. But the fact remains that CA is dominated by commercial interests. Quite often, DSB panels constitute individuals with competence in trade policies and laws, but judge the legitimacy of national regulations related to health in which they have no expertise. This is against all rules of fairplay and justice in the absence of open process (Koivusalo, 1999). Based on Koivusalo’s (1999) research, all such cases where scientific evidence does not exist; and a scientific evidence and risk assessment procedures are protected for commercial reasons like in GM foods, bio- and gene technology products etc. are likely to be the potential for future disputes.

The Agreement on Technical Barriers to Trade (TBT), covers a wide range of food, products related to health, medicine, medical devices etc. Their impact on quality standard, labelling, production and packaging of pharmaceuticals, foodstuffs biologicals, and other technology assessments are likely to be serious (Koivusalo, 1999). The TBT Agreement requires member states to apply internationally agreed standards as a basis for their technical regulations, but unlike the SPS Agreement, it does specify the international standards particularly for trade disputes arising for biological substances (e.g. vaccines and blood products). It is also not clear whether

to apply WHO's standard or those of industry as both are recognised under the TBT Agreement (Kinnon, 1998).

The Agreement on Trade Related Aspects of Intellectual Property (TRIPs became applicable since 1995 onwards. It requires minimum standards in areas like patents, trademarks, copyright, industrial design, geographical indication, trade secrets and computer programming and circuit design, pharmaceuticals and transgenic crops. It prescribes that the poor countries have to adjust their laws in conformity with TRIPs by 2000, while the least developed countries by 2016. In fact, standards of the rich conflict with those of the poor as all knowledge based production is subject to strict intellectual rights protection.

Given sharp differences in economic power and technological potential and capabilities between the rich and the poor, TRIPs can be used as an instrument of 'technological protectionism' and/or to widen international division of labour with rich for innovations and the poor countries for markets. TRIPs will badly affect the poor countries by widening the knowledge gap and shifting bargaining power towards the producers of knowledge most of whom are the rich and industrialised countries (Koivusalo 1999). It needs to be stressed that the strengthening and enlarging the scope of intellectual property rights (IPRs) would mean increased costs through royalties and other payments and reduced resources for local R&D limiting the scientific research and free dissemination of research analysis. This would reduce the prospects of improving the social and economic conditions of the poor (Correa, 2000:33).

Patents are concentrated in too few a countries. As brought out by UNDP (1999, p.68), in 1993, ten countries accounted for 84 percent of global R&D; 95 percent of patents granted in the US over the past two decades were conferred on applications from ten countries; 70 percent of global royalty and licensing fee payments were between parent and affiliate in TNCs; and more than 80 percent of the patents that have been granted in the Third World countries belong to residents of industrial nations. The rising influence of IPRs will adversely affect the health by promoting privatisation of medical knowledge, restricting its access and removing the free flow of scientific exchange for the public good, more so, if there is a shift of research and innovation towards the corporate sector.

Trademarks are being increasingly used by the TNCs to promote their products particularly having toxic and undesirable contents. They resort to indirect advertising i.e. through the placement of a logo in tobacco, alcohol and infant formulas to circumvent national bans on advertising.

Under TRIPs, patents are granted and the conferred rights are used without discrimination with reference to the place of invention, the field of technology or place of production. This will adversely affect the access of poor countries and the pharmaceutical industry in poor countries in price and cost level. (Koivusalo, 1999). The Indian Drug Manufacturers' Association anticipates national health disaster after the implementation of TRIPs as in India only 30 percent of the population can afford modern medicines in spite of the fact that drug prices in India are one of the lowest in the world (Correa 2000:35). With foreign exchange outflow and increased costs, self reliance in drugs will be undermined as is the case in India, where both public sector and small drug firms have been forced to close down or taken over by the TNCs (Jan Swasthya Sabha, 2000:40). Essential drugs are outside the domain of patents, but drugs like HIV are not; and diminishing access of poor countries to essential drugs and technology would have serious implications by affecting the domestic production of medicines and the supply of innovative quality drugs. These poor countries cannot afford to wait 20 years before they can make life-threatening drugs for their people as the HIV/AIDS pandemic is getting serious everyday.

The required uniform regime of Intellectual Property Rights (IPRs) recognises and protects the privatisation and exploitation of genetic resources for profit. It would legitimise the private appropriation of community-based resources and undermine indigenous knowledge. The poor world who is the source of about 90 percent of the world's biological resources has suffered as the plant knowledge of local people for years have been stolen and used by bio prospectors for profitable uses. For example, the rosy periwinkle found in Madagascar contains anti-cancer properties was used by Eli Lilly to develop a drug and made \$100 million in annual sales, but nothing for Madagascar (UNDP, 1999).

Patenting of life forms and biological materials created many adverse health implications. Transgenic organisms including bacteria, fungi, animals and fish have entered food chain. Such genetically modified food can cause allergies, toxicity and antibiotic resistant organisms. The use of Monsanto's genetically engineered bovine growth hormone (BgH) in cows to enhance milk supply had adverse health effects on the dairy cows. The milk produced was contaminated with high levels of hormones and antibiotics, which poses a threat to

human health. The milk is sold unlabelled to many countries including India.

Trade agreements in the past focused on reducing tariffs, eliminating trade barriers like quotas on goods produced in a country and sold elsewhere. However, there is a drastic change in recent years as the services sectors have expanded and are growing in importance to the rich countries. The GATS as per WTO covers about 160 separate sectors including telecommunications, insurance, postal services, environment, tourism, the real estate and construction industry, entertainment industries etc.

Opening up the health and social sectors means privatisation and competition from the private sector and giving space to private corporations through legal protection to take over the health services of countries for profit. The GATs negotiations include (i) cross border trade e.g. telemedicine, and internet services; (ii) consumption abroad through involves movement of consumers eg health resorts, spas and tourism; (iii) foreign presence, through international hospital and managed care chains; (iv) health insurance firms, and the movement of physicians, consultancy services, nurses etc. In all the modes of service supply, the obligations under the Agreement relate to the treatment accorded to the service or the service supplier and not to the consumer of the service (Das 1999: 334).

GATS requires remove all barriers to foreign participation in their health and social services sector. There would be serious implications for redistributive health services. These policies will conflict with the principles of universal health care. The issue of universality and equity comes under fire and would be replaced by consumer sovereignty (Price, Pollock, & Shaoul, 1999:1892) as health care would be dominated by insurance companies, pharmaceutical firms and enterprises involved in technologies for treatment and diagnosis. This will lay stress on private insurance in health promoting curative technical fixes e.g. genetics linked to new health technologies in place of preventive measures and ethical and political concerns.

Globalisation, privatisation and liberalisation induced economic reforms has created a development model of production and consumption with far reaching impact on the physical environment worldwide. The deterioration of the global environment manifested as climate change, ozone depletion, degradation of food producing systems, depletion of fresh water sources, loss of biodiversity, the spread of invasive species, and chemical pollutants are threatening the biosphere and its capacity to sustain healthy human life. Global warming and extreme weather conditions linked have threatened societies with extremes of temperatures, increasing dust storms, fiercer winds, deadlier floods, tornadoes, longer droughts (the El Nino effect), tsunamis, hurricanes and cyclones(UNDP,1999). This can eliminate predators and competitors creating opportunities for new species to take up residence, thereby threatening the balance of nature. The exposure to pathogenic microorganisms has increased and human existence has been weakened giving birth to a new diseases and have staged a comeback of old diseases (Harvard working Group,1996).

Infrastructure development, poverty and pollution have combined to create new niches for pathogens (disease causing agents). There is a major threat of new epidemics of malaria as a result of changes in land use associated with development activities. Sewage and fertilisers draining into marine ecosystems, the over-harvesting of fish and shellfish, the loss of wetlands and myriad climatic changes have contributed towards an environment for diverse communities of microorganisms having serious health impacts through changing the geography of vector borne infections (such as malaria,denude,cholera ,yellow fever etc.This emerging disease pattern cannot be understood ,analyzed and handled in isolation from the emerging economic,social.ecological,epidemiological and evolutionary contexts. Since this network of factors is interconnected and complex, conventional classification of diseases as generic(Harvard working group ,1996).This poses a greatest challenge to institutions that govern global health policy.

Increasing trends of trade and capital flows and advances in information and communication technologies coupled with global governance undermine state's own control over its economy and create compelling reasons for individual states to look for cooperation with each other and in the non-state sectors. The public health witnessed a shift from national to global governance in the mid-19th century out of concern about infectious diseases (Fidler, 2001:p.843), without experiencing any let down in the cost of treatment of the deadly diseases. For instance, cost for standard treatment of AIDS has gone so high partly due to rise in drug prices that puts this treatment out of reach of most people in the poorest world with 95 per cent of the people with HIV (Matowe and Katerere, 2002:).

Globalisation induced movements of personnel across countries may benefit individuals to some extent in personal promotion, but does not bring many health and economic benefits to developing countries in the short run except in very few cases. Modern transportation has made possible the large scale movement of goods and people rapidly. This increases the probability of global microbial traffic through vectors and non human carriers of disease

being introduced into other areas often with fatal results. Compelling evidence exists to show that national governments lose rights to regulate and protect non-economic values and principles, which matter in public service provisioning through the cross-cutting pressures of GATS and uncertainty about exemptions, limitations, and discretion the treaty permits (Pollock and David 2003).

Economic openness while changing the scale and scope of cross-border flows of goods (including food and related products, services, and capital) not only allows some unscrupulous medical products to enter (Matowe and Katerere, 2002); but also involves more frequent traveling and migration. This exposes communities to various health risks. The most dramatic example is of the influence of tobacco marketing and the HIV/AIDS epidemic - a deadly infectious disease spread through cross-border transmission, travel and migration. China - the most quoted success story of economic reforms have shown that sexually transmitted diseases that were nearly eliminated in the 1960s have spread rapidly (Dollar, 2001: 830). Globalised tourism industry inseparable from the sexual exploitation of children, adolescents, and adults in third world countries (Buss, 2002), has aggravated the infectious diseases. Even the child health is endangered (indirectly at least) by the growth in economic activity by women if it is not accompanied by the development of adequate child care infrastructure and nutrition levels (Cornia, 2001).

Globalisation policies do not work in vacuum, and can not be divorced from India's political-economy federal structure. Economic liberalization pressures go hand in hand with administrative decentralization, federal restructuring, and fiscal devolution. There has been a great effect on ways in which the different levels of government conduct their business and interact amongst them and, also with the private sector. Healthcare sector is a typical example, which shows a paradigm shift.

In the 1990s, while discarding the concept of 'free of cost' health services, the Ninth Plan advocated that user charges be levied in addition of evolving mechanisms for collecting funds and their utilization for hospitalization and other services (Government of India, 2002: p.135). In India, private medical practice known for a long time received a boost with the increasing globalisation led marketisation of healthcare, products equipment, technology and services pharmaceutical with in the last quarter of the 20th century. MNCs have assumed an important role in shaping national policies in defining health sector priorities, disease control pattern, provisioning of healthcare medical research at national level and approach and policy agenda of multilateral agencies and global institutions like World Bank, WHO, WTO, etc at the international level.

The increased importance of for-profit' health sector and restructuring of public institutions on market principles has made the healthcare difficult for the poor. The proportion of those who were unable to access care because of financial reasons went up significantly in both rural and urban areas as did the proportion who said that there was no medical facility available. The declining share of public hospitals and dispensaries in public health expenditure (Shariff et al., 1999) coincided with growing state support for privatization of healthcare sector and specific involvement of private providers in the public health system. The setting up of the Health System Corporation, involving private participation in managing the priority health problems- non-medical essential services like laundry, equipment maintenance, catering, media- allowing private specialists and hospital for first referral services - enlisting of retail outlets and private practitioners- allowing setting up autonomous societies for easy fund disbursement and operationalise programmes like AIDS control, Blindness control, and reproductive and child health programme are some of the important instances (Sen et al., 2002).

In order to ensure better health care, the present independent health care institutions may have to be converted into integrated disease management process, in which the role of e-health solutions including electronic medical records, telemedicine applications (telemonitoring, tele-diagnosis etc can be substantial. This may particularly be true in a society, where demands on health care services are ever growing with the rapidly rising ageing population. It has been well acknowledged that key factor for substantial health gains is technical progress, even when income growth is slow or stagnant. There is thus a need to promote technical progress which should also include institutional and managerial innovations, social changes, economic transformations, cost-effective health interventions and new policies that support quality health care delivery and reduce barriers to access, and mobilizing additional financial and human resources.

Raising the participation level of civil society and designing institutional mechanisms to create built in incentive systems; and reducing the disease burden by ensuring access to a minimal balanced diet; evolving systems to ensure enforcement of regulations and encourage flexible and innovative approaches, toward efficient and effective governance, professionalization of health care persons and facilities at all levels through skill formation, continuous training etc keeping in view the local specificities, working out package service while simultaneously reducing household health expenditures are other issues requiring attention.

V Conclusions

Health is a vital consideration for development. India's health achievements, building up health infrastructure and creating manpower though considerable, still fall short of requirements and do not compare favourably as compared with a large number of countries. The country is witnessing structural changes causing changes in disease pattern load, increasing share of 'for profit' healthcare and its marketisation by MNCs. Accessibility, efficiency, healthcare financing, and quality of the health delivery in the face of glaring inter and intra-state variations, insignificant public spending particularly on preventive and promotive are important issues. Globalisation not only adds to the complexity, but further poses many challenges to the health sector as the relationship between health outcomes and the process of globalisation is far from straightforward and mediated by a number of factors. Challenges emerging from WTO agreements including AOA, TBT, TRIPS, GATS, and their compliance over the period, and also from globalisation induced development models of production and consumption having a wide ranging implications for global environment threaten a sustainable human health. WTO is supposed to ensure compliance to promote free trade environment, but, unfortunately, cannot provide for the health care needs of the poorest in the poorest countries by promoting transfer of health technology, R&D, or innovations.

Notes

¹ These factors are:(a) the emergence of great economic co-operation among various countries and international institutions like the International Monetary Fund (IMF), the World Bank and the General Agreement on Trade and Tariffs (GATT) now transformed into World Trade Organisation (WTO); (b) the economic collapse of the former Soviet Union demonstrating the dangers of economic and administrative centralization, and disenchantment with the expansion of the institution of public sector; (c) macroeconomic imbalances in several countries, such as Argentina, Brazil, India and Nigeria particularly during the 1980s forcing these countries to undertake serious redesigning and realignment of macroeconomic policies to go global under the IMF-World Bank led development paradigm; (d) the emergence of the European Union (EU) as an economic entity underlining the advantages of having an enlarged common market with a distinct regional identity; and (e) the continued advances in computer, satellite, laser and microchip technologies relaxing time and distance constraints by allowing large business corporations to maintain a regular, a direct and an instantaneous contact with affiliates virtually located anywhere in the world.

² The government withdrawal in the perspective of economics implies fiscal retreat by the government - as a producer of commercial goods - as a provider of fiscal incentives meant for promoting certain socially and economically desired production lines and other relevant activities - as a supplier of "merit" and related public and social goods including education and health and - as a regulator of the social economy by deregulating the hitherto regulated areas.

³ Quantitatively, they play a much bigger role in the production of goods and services, finance, investment, management and technical spheres. Qualitatively, they assume a more deep rooted role in international economy by accessing foreign markets through many alternative routes, such as alliances, joint ventures, and sub-contracting without even requiring transfer of capital across international border, locating their critical activities in countries that best serve their own interests, and organizing their cross-national trade and capital flows in cross border value chains largely outside the control of national governments.

⁴ Such as Mudaliar Committee (1962), Chadha Committee (1963), Mukherjee Committee (1966), Jungalwala Committee (1967), Katar Singh Committee (1973), Srivastava Committee (1975), Bajaj Committee (1987) and Bajaj Committee (1996)

⁵ As pointed out by National Health Policy 2002 the central budgetary allocations for health as percentage of the central budget has been stagnant at 1.3 per cent during the eighties and nineties, while that in the States it declined from 7 per cent to 5.5 per cent for the same period. This figure is too low as compared with 5.5 per cent of the world's GDP being spent on health, and 60 per cent of all health spending. The spending is disproportionately low in demographic and socially backward states. As a result, fertility, infant and child mortality, maternal mortality and other health indicators in these states have remained far from the desired level.

⁶ Preventive and promotive healthcare services include: immunisation, antenatal, maternity and postnatal care, contraceptives and other family planning measures; community based services such as spraying for malaria, and health education.

⁷ The different methods suggested include - public private partnership including the NGOs – evolving an appropriate health insurance for individuals, institutions, industries and social insurance for the marginal, poor and the socially disadvantaged population groups - adopting dual pricing system - increasing user fees, and the registration fee – undertaking health planning in socio-economic context - enforcing effective private sector regulation - and achieving cost effectiveness at all levels in the healthcare system. Many of these issues have been dealt with at some other place by the authors (Arora and Gumber 2005)

⁸ Morbidity defined as incidence of sickness, injury or pain affecting a person can be measured either by clinical or self-perceived reporting (Gumber and Berman, 1997).

References

- Arora, G.K. and A. Gumber. 2005. Globalisation, External Assistance and the Health Sector: Some Emerging Issues in India. Paper Accepted for presentation at Centre for Studies and Research on International Development, Permont-Ferrand, France (Dec 1-2), Session B1.
- Arora, G.K. and A. Gumber. 2005. Globalisation and Healthcare Financing in India: Some Emerging Issues. *Public Finance and Management*. 5 (4) pp. 567-596. [http://www.spaef.com/PFM_PUB/v5n4.htm]
- Arora, G.K. and A. Gumber. 2004. Globalization and Health Effects in SAARC Region: Evolving a Framework of Analysis. *International Journal of Economic Development*. 6 (4) pp. 55-88. [http://www.spaef.com/IJED_PUB/v6n4.html]
- Arora, G.K. 2002. *Globalisation, Federalism and Decentralisation- Implications for India*. Delhi: Bookwell.
- Arora, G.K. 1991. An Analysis of Central Transfers in India: A Study of Selected States. Unpublished Ph.D thesis submitted at Jawaharlal Nehru University, Delhi.
- Arora, G.K. 1983. An Analysis of Public Expenditure in India: A Study of Selected States. Unpublished Ph.D thesis submitted at Jawaharlal Nehru University, Delhi.
- Berman, P. and R. Ahuja. 2008. Government Health spending in India. *Economic and Political Weekly*. XLII (26 & 27) pp. 209-16.
- Bhat, R. 2000. Issues in Health – Public Private Partnership. *Economic and Political Weekly*. XXXIV (52 & 53) pp. 4706-16.
- Buss, P.M. 2002. Globalisation and disease: in an unequal world, unequal health!. *Cadernos de Saude Publica*. 18 (6) pp. 1783-89.
- Cornea, G.A. 2001. Globalisation and health. *Bulletin of the World Health Organisation*. 79 (9) pp. 834-41.
- Dollar, D. 2001. Is Globalisation good for your health. *Bulletin of the World Health Organisation*. 79 (9) pp. 827-33.
- Fidler, D.P. 2001. The Globalisation of public health: the first 100 years of international health diplomacy. *Bulletin of the World Health Organisation*. 79 (9) pp.842-49.
- Government of India. 2001. *Indian Planning Experience*. New Delhi: Planning Commission.
- Government of India. 2002. *Tenth Five Year Plan 2002-07*. New Delhi: Planning Commission.
- Gumber, A.1997. Burden of Disease and Cost of Ill Health in India: Setting Priorities for Health Interventions During the Ninth Plan. *Margin*. 29 (2) pp.133-172.
- Gumber, A. 2002. Economic Reforms and the Health Sector: Towards Health Equity in India. In *Reform and Employment*. Institute of Applied Manpower Research (Ed.). New Delhi: Concept Publishing House, pp. 235-284.
- Gumber, A. and P. Berman. 1997. Measurement and Pattern of Morbidity and Utilization of Health Services: A Review of Recent Health Interview Surveys in India. *Journal of Health and Population in Developing Countries*. 1 (1) pp. 16-43.
- Gumber A and G.K. Arora. 2006. Health insurance: still a long way to go. *Seminar*. 568, December.

Joe, W., U.S. Mishra *et. al.* 2008. Health Inequality in India: Evidence from NFHS-3. *Economic and Political Weekly*. XLIII (31).

Jamison *et. al.* 2006. *Disease Control Priorities in Developing Countries*. , 2nd edition (DCP2), different Chapters

Kumar, G. 2003. Promoting Public-Private Partnership in Health Services. *Economic and Political Weekly*. XXXVIII (29) pp. 3041-45.

Mahal, A., J. Singh; F. Afridi; V. Lamba; A. Gumber; and V Selvaraju. 2002. *Who Benefits from Public Health Spending in India?* New Delhi: National Council of Applied Economic Research.

Matowe, L. and D.R. Katerere. 2002. Globalisation and Pharmacy: A View from the Developing World. *The Annals of Pharmacy*. 36 pp. 936-38.

Petras, J. and H. Veltmeyer. 2001. *Globalization Unmasked*. Delhi: Madhyam Books.

Poolock, A.M. and D. Price. 2003. The Public Health implications of world trade negotiations on the general agreement on trade in services and public services. *Lancet*. 362 pp. 1072-75.

Sen, G., A. Iyer; and A. George. 2002. Structural Reforms and Health Equity. *Economic and Political Weekly*. XXXVII (14) pp.1342-52.

Shariff, A., A. Gumber; R. Duggal; and M. Alam.1999. Healthcare Financing and Insurance: Perspective for the Ninth Plan, 1997-2002. *Margin*. 31(2) pp. 38-68.

World Bank.1993. *World Development Report 1993: Investing in Health*. New York: Oxford University Press.

World Bank. 1995. *India: Policy and Finance Strategies for Strengthening Primary Healthcare Services*. Washington DC: Population and Human Resources Operations Division, Report No. 13042-IN, World Bank.