SHARP Results

MARCH 2006

SHASTRI APPLIED RESEARCH PROJECT

SOCIAL DEVELOPMENT AND HEALTH

Impact of Liberalisation and International Trade Regimes on Access to Medicines and Health Services in India

THIS study on the impact of liberalisation and international trade regimes on access to medicines and health services in India has three distinct but related components. The first is an in-depth study of the pharmaceutical industry in India. The second is about healthcare delivery (including medicines) in Canada to determine whether the Canadian experience might provide a model for India. The third is a household survey in Punjab and Haryana, and an analysis of all-India data on public expenditures on health to find out whether primary healthcare services are accessible and affordable.

A detailed study of the pharmaceutical industry is useful in addressing India's concerns with the implementation of the Trade Related Intellectual Property rules (TRIPS) that make product patents mandatory. The study discusses strategies for the Government of India and civil society organisations to ensure that medicines are accessible and affordable for the Indian population.

The research on the Canadian experience with drug pricing revealed that Canada has successfully lowered prices of patented drugs by establishing the Patented Medicine Price Review Board. This establishes and supports the need for an agency in India that will monitor and regulate drug prices for off-patent drugs and that

RECOMMENDATIONS

Community

✓ Lobby the government to ensure support for R&D in neglected diseases and for basic infrastructure such as clean water, sanitation and waste management in rural areas.

✓ Undertake educational programmes on sexually transmitted diseases including HIV-AIDS.

Programme Providers and Planners

✓ Make direct investments to promote R&D in neglected diseases such as drug-resistant malaria and tuberculosis, etc. to meet the health needs of the most vulnerable population in India.

✓ Develop comprehensive reproductive and child health to include educational programmes about sexually transmitted diseases and HIV-AIDS.

✓ Develop universal health coverage and appropriate institutional mechanisms to finance a National Health Insurance Plan, as well as undertake fiscal restructuring to adequately fund the states for healthcare costs.

Policy

✓ Ensure an effective drug control administration that sets standards and monitors the quality of medicines.

✓ Monitor and regulate drug prices for off-patent drugs and develop criteria for the price of patented medicines based on a detailed study of countries such as Canada.

Research

✓ Undertake a detailed study of the Canadian healthcare system to evolve a healthcare plan appropriate for both the rural and urban poor in India.

will develop criteria to fix the price of patented medicines.

The household survey in Punjab and Haryana sought to find out whether primary healthcare services were accessible and affordable. It revealed that although both states have higher per capita income compared with other states in India, the primary healthcare system had many identifiable gaps. The most fundamental of these are lack of an adequate supply of clean water, good sanitation and waste management for all sections of society; it is most important to address these issues to ensure a reduction in morbidity.

Pharmaceutical Industry, WTO and Drug Policy

THE study shows that the extraordinary growth of the pharmaceutical industry in India has been facilitated by government legislation; public investments in research and development (R&D) and manufacturing; a close collaboration between government laboratories and the private sector, and the entrepreneurial spirit of the private sector in India.

India introduced product patent protection in pharmaceuticals in January 2005 to conform to the Trade Related Intellectual Property rules (TRIPS) of the World Trade Organisation. Compulsory licensing is one of the ways in which TRIPS attempts to strike a balance between promoting access to patented drugs while promoting competition, ensuring compensation for patentees through royalties and R&D into new drugs. However, India has not been able to take advantage of the compulsory licensing provisions in TRIPS.

The language in India's amended Patents Act for compulsory licenses is ambiguous, difficult to interpret and operationally not useful. The procedure for its application is cumbersome, time consuming and much more legalistic than required by TRIPS. These difficulties allow powerful patentees to manipulate the process through litigation and prevent others from getting licenses. Even in cases of special provisions relating to a national emergency, extreme urgency or public non-commercial use, it is difficult to manufacture under compulsory licensing due to possibility of such litigation.

Liberalisation and Healthcare Services

THE team also traced, using secondary data, the shifts in drug price control over two decades in Canada, especially after it signed the North American Free Trade Agreement (NAFTA) with the USA and Mexico and found that despite the changes in patent laws extending patent protection up to 20 years, Canada has successfully managed to lower prices for patented drugs compared to those in the USA, by establishing the Patented Medicine Price Review Board. This study also shows that universal healthcare as practiced in Canada offers possibilities both for provision of medicines and health services for the entire population in India.

The team also analysed secondary data on public expenditures on healthcare in India from 1980 onwards. These are linked to the health sector reforms and a fiscal restructuring process initiated in the past decade. Social sector expenditure, as a percentage of income and expenditure was, respectively, 6% and 40% in 1990-1991 in contrast to 5.4% and 35.8%, respectively, in 2000-01, indicating a decline across the board in almost all states with a few exceptions.

A comparison of the share of expenditure by the state and the centre in the early and late 1990s suggests a decline in the state's share in most categories, including health. In the case of rural family welfare, the allocations first declined in the mid-

1990s before picking up in the late 1990s. This shift in the centre-state restructuring has meant a shift to targeted-disease control programmes and an emphasis on family planning rather than comprehensive healthcare. The fiscal burden for health has shifted to the states, resulting in a clear decrease in health expenditures and an overall decline in health services in all the states of India.

Furthermore, the decline in the transfer of funds from the centre to the state has led to the neglect of social spending and the state no longer directly provides social services leading to state-specific health sector reforms. These reforms were intended to create self-sustaining health corporations in lieu of the public departments of health.

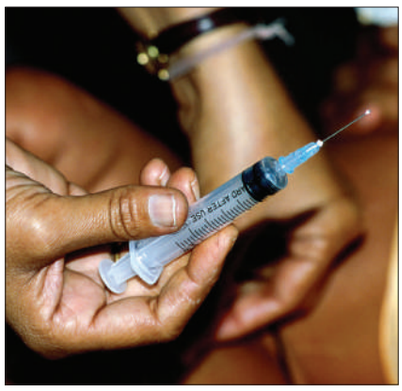
R&D OF MEDICINES FOR NEGLECTED DISEASES

IN the past Indian pharmaceutical companies focused their R&D on developing new processes. Since the implementation of TRIPS, some Indian companies have started investing in R&D for new drugs and a number of new chemical entities are at different stages of development. However, none of the companies are engaged in the entire process of drug development because they lack the capacity to undertake this on their own. Instead they license the newly developed molecules to a multinational corporation during the early stages of clinical development for further development.

As a result, Indian companies are targeting diseases that interest the multinational pharmaceutical companies (MNCs) rather than doing R&D for drugs against neglected diseases. The study found that, by and large, the MNCs have not invested in R&D for medicines to treat neglected diseases of developing countries.

Privatisation of Primary Healthcare

PRIVATISATION of primary healthcare in Punjab led to the creation of the Punjab Health Systems Corporation (PHSC) in 1996. Its objective was to expand, improve and better administer curative and preventive secondary healthcare. About 150 community health centres, sub-divisional hospitals and district hospitals were brought under the PHSC (86 medical institutions in rural and 64 in urban areas). It was financed through a soft World Bank loan (70%), state government (20%) and bank loans (10%) to develop dispensaries and hospitals, and to purchase equipments and drugs.



The PHSC had to plan, construct and maintain commercial complexes and to charge fees for hospital stays, diagnostic services . The treatment and the profits generated were to be used for the improvement of hospital and dispensaries. However, only 70% of the outlay was spent by 2001 and the project ran into difficulties with the funders.

Without continued budgetary support, self-sustainability of such experiments is difficult. Considerable funds were wasted in acquisition of equipment for diagnostic services, which were never instituted. Although it was rational not to charge user fees for people with an income below Rs. 2000 a month, there was no sliding scale of payment for higher income groups, who could afford to pay differential fees resulting in poor cost recovery. Recovery from user fees remained a miniscule percentage (0.7%) of the total outlay of this project at the end of the third year.

The existence of two parallel systems of health caused greater chaos in the health services, and problems with the earlier system: corruption, poor administration, favouritism, etc. continued in the new structure as well. The state ended up with more debt and a worsened health service. Finally, the State Disinvestment Commission recommended closing down PHSC in 2002. Privatisation of primary healthcare in Punjab turned out to be a costly experiment and led to a severe decline of healthcare infrastructure.

Health Status and Access to Healthcare

THE household survey provided considerable gender-specific information on the health status of the people in Punjab and Haryana. For example, long-term morbidity was marginally higher amongst women in both states; lifestyle diseases were more common amongst females than males in Punjab but not in Haryana. Asthma appeared to be more frequent amongst females, which correlated with the use of the traditional stove (*chulha*) for cooking.

There was a higher incidence of tuberculosis (TB) in Haryana and of malaria in Punjab amongst the scheduled castes (SC) and lower income groups. Lack of basic infrastructure for clean drinking water, sanitation and hygiene was found to correlate with short-term morbidities. For example, two-thirds of those reporting diarrhoea use drinking water from an open well or hand pump in both the states.

The Shastri Applied Research Project seeks to address urgent issues in social development and health, economic reform and environmental management. Canadian and Indian researchers are collaborating on 19 studies on various topics. SHARP is implemented by the Shastri Indo-Canadian Institute and funded by the Canadian International Development Agency.

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A detailed analysis indicated that despite its shortcomings, public healthcare facilities are used more in Punjab than in Haryana. For example, 89% of women accessed antenatal care in Punjab government facilities, in contrast to 58% in Haryana. In Punjab 41% in comparison to 28% in Haryana reported visits from the healthcare visitor; iron and folate tablets were distributed to 75% and tetanus shots were given to 90% of the women. Local midwives attended close to 50% of the deliveries while public doctors attended 30% of the deliveries.

Over 80% of the children were immunised in the vaccination programmes provided by public services. Reproductive services were limited to provision of birth control while little attention was paid to sexually transmitted diseases suggesting a narrow interpretation of reproductive and child health services.

The study found a greater reliance on private health facilities. Lower income groups use public facilities more frequently. Lack of doctors and shortage of medicines are reported to be the most important problems with public health services. Private health services are preferred because they save time and provide better care. However, they are expensive, require repeated visits, and lack transparency. Poor households report over-prescribing of medicines. The survey shows that people experience more caste discrimination when using public facilities and more gender discrimination when using private healthcare services.

Finally, when well-designed programmes are available such as the vaccination programmes, they are accessed and utilised by the people. Even in the most developed states of India such as Punjab and Haryana, absence of basic hygiene and sanitation is a significant cause for short-term morbidity. If public healthcare is not easily accessible, it is inevitable that the private sector will charge higher prices. While private competition could lead to expanding choices for people, it does not provide quality healthcare for all sectors of society.

Impact of the Study

THIS study has helped the team rethink health policies in India that promote quality, accessible and affordable medicines and healthcare services with gender equity for the marginalized population. The findings provide an understanding of the constraints, and possibilities of providing medicines and health services despite the challenges posed by TRIPS and liberalisation. Amongst these is a decline in public infrastructure, such as sanitation, clean water and waste management that poses significant barriers to health.

The researchers believe if some of the proposed recommendations are implemented, a significant improvement in delivery of healthcare can be made. They hope civil society organisations dedicated to making healthcare accessible will find the research useful in their campaigns.

SHARP Results

MARCH 2006

SOCIAL DEVELOPMENT AND HEALTH

Promoting Healthy Ageing Through Community Development in India: A Study of Kerala

RECOMMENDATIONS

Community

✓ Distribute manuals on eating habits and other activities related to healthy ageing

Policy

✓ Setting up of geriatric medical facilities at both government and private hospitals and medical colleges

✓ It is necessary that the National Policy for Older Persons include an evaluation framework and use of evidence in formulating ageing policies

Programme Providers and Planners

✓ Develop policies and programmes to help the elderly to live healthy and disability-free life

Research

✓ Repeating survey among the elderly living in institutions in Kerala and replicating the aging survey in other parts of India to assess a comparative perspective and suggest suitable polices at regional and national levels.

PROLONGED life does not necessarily mean continued health and prosperity. Population ageing, which is believed to be humanity's greatest triumph, is also one of the greatest challenges of the 21st century. There has not only been a significant increase in life expectancy but also a decline in the fertility rate in most of the developing countries. This combination of low mortality and declining fertility rates has resulted in an increase in the proportion of the elderly (60 years and above) at a substantial pace.

Among the 35 states and union territories in India, Kerala has registered the highest proportion of elderly. The aged in Kerala constitute 11% of the population. Between 1961 and 1991, there has been 160% increase in the population of older adults, the majority of them being women. Their population, which was 9% in 1991, is expected to increase to 37% by 2051.

Kerala is significant not only as an 'ageing state' but also as the state where a large number of persons in the age group of 23-34 years migrate to the Persian Gulf countries in search of jobs. The increasing number of elderly and decreasing number of children available to lend support and a stagnant economic infrastructure are a threat to the ageing population.

This research aimed at identifying the health needs of older adult population and suggesting appropriate solutions including programmes and policies to counter health problems of the ageing population.

The main approach for this research was a population-based epidemiological survey entitled the Kerala Aging Survey. Also, sample surveys and interviews with the eld-

erly have formed the base of this study, which has examined the determinants of healthy ageing within the Kerala context. By adopting the community health approach, the research has involved older adults, health service providers, non-governmental organizations and policymakers.

Kerala Ageing Survey

THE Kerala Aging Survey (KAS), conducted among more than 5,000 elderly (2,271 men and 2,722 women) in 14 districts of Kerala, was the keystone of the study. The survey had detailed modules on socio-economic and demographic characteristics, about children and grandchildren, old-age support systems, subjective well being inventory, general health questionnaire, social interaction, property ownership, labour force participation, pensions and social security, social support, lifestyle and life satisfaction, personnel health, healthcare utilisation, recent medical record, activities of daily living scale, instrumental activities of daily living scale, falls, behavioural factors, physical activity, food frequency questionnaire, eating behaviour and mini-nutrition assessment. These modules were developed around the World Health Organisation's Determinants of Healthy Ageing framework.

The results of the survey have shown that the age of participants ranged from 60 to over 100 years of age with 54% being women. The study showed that joint pains were the most often reported morbidity among elderly, with women reporting higher percentage (53.5%) compared to men (43%). Other common health problems include: loss of memory or forgetfulness, sleep problems, lack of energy, chest pain and stomach problems. Common chronic illnesses among the elderly in Kerala are diabetes, heart disease, high blood pressure, and arthritis.

Osteoporosis, an emerging chronic disease, was reported less often. However, the incidence of falls and fractures were considerably high resulting in further disability. This incidence of falls and fractures suggests that the prevalence of osteoporosis is underreported. Prevalence of disabilities was high with over 75% reporting vision problems.

For medical needs, close to 40% accessed public hospitals and 56% used private hospitals. The reasons for access to private versus public varied. Most accessed public hospital for the free service provided whereas those who accessed private hospitals did so for the availability of better services, better care, and attention. In the study, only about 30% had routine medical check-up and over 80% were under regular medication. Health practices of the older adult population were also examined. The gender difference was clear in behavioural factors with men smoking cigarettes and drinking alcohol and women chewing betel leaf.

Self reported participation in physical activity decreased with age. Approximately 60% of the young old (less the 70) participated in physical

SAMPLE SIZE OF KERALA AGEING SURVEY

District	Sex		Total
	Male	Female	
Thiruvananthapuram	218	266	484
Kollam	178	175	353
Pathanamthitta	142	185	327
Alappuzha	149	168	317
Kottayam	221	263	484
Idukki	52	46	98
Ernakulam	257	317	574
Thrissur	155	203	358
Palakkad	184	205	389
Malappuram	225	253	478
Kozhikode	237	271	508
Wayanadu	31	48	79
Kannaur	180	250	430
Kasargode	62	72	134
Total	**2,291**	**2,722**	**5,013**

activities mostly in the form of household activities. This reduced to 35% in the oldest old of 80 plus age group.

Dietary patterns showed that most elderly people consume three meals a day with a greater tendency for older groups to skip meals. The type of food changed from non-vegetarian to vegetarian as people aged. Approximately 30% were on a special diet such as a diabetic diet or a low salt diet.

Implications of the Results

IT often costs less to prevent a disease than to treat it. Old age in itself is not associated with increased medical spending. Rather, it is the disability and poor health often associated with old age that is costly.

In Kerala, which has the highest proportion of elderly in India, the extent of policies and programs for the elderly is limited. The overall coverage of the population of government and non-government schemes is only 25%. Institutionalised services for the elderly are also not very congenial. Given the limited resources available for the elderly, it is not surprising that there are no current programmes related to health promotion among elderly, targeting the determinants of healthy ageing.

Although the well being of older persons is mandated in the Indian Constitution, and the National Policy on Older Persons visualises extension of state support to the elderly, these policies have not been put to action. This is especially so in the area of health promotion. Healthcare operates mostly on the medical model of treating diseases rather than preventing them through heath promotion initiatives. Kerala is not an exception, although the state offers some level of social security to its elderly. The researchers for example reveal how in Thiruvananthapuram, 60% receive subsistence from past or present work while 25% are dependent on their children and another 20% on pensions and savings.

IT IS NEVER TOO LATE TO START BEING HEALTHY

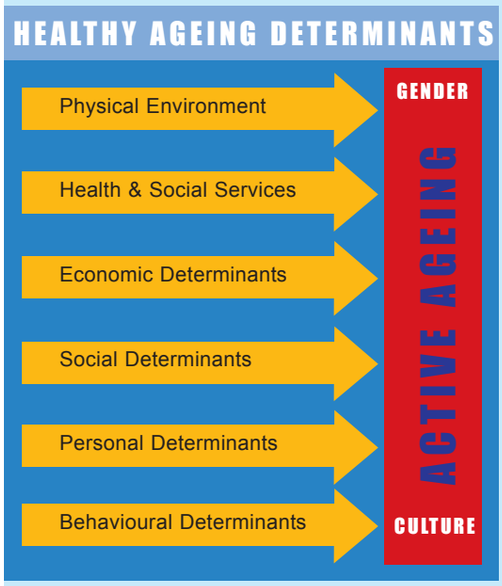
THE study showed that the health practices of elderly are less than optimal to promote healthy aging. In India, very few elderly exercise on a regular basis and individuals get more and more inactive as they get older. This further leads to disability. Also, there is a greater tendency for the older age group to skip or miss meals and change the type of foods consumed from non-vegetarian to vegetarian.

Approximately 30% are on special diet for conditions such as diabetes, high blood pressure or heart disease. The study suggests that:

- There is need for further research into the effectiveness of health promotion strategies such as exercise and nutrition for elderly in India.
- Educational programmes should create better awareness of healthy aging among young and old alike.
- Community health professionals need to provide health promotion options to senior citizens.

FRAMEWORK OF HEALTHY AGEING

THE World Health Organisation's discussion paper on health and aging states, "We can afford to get old if countries, regions and international organisations enact 'active aging', policies and programmes that enhance the health, independence, and productivity of older women and men. The time to plan and to act is now." Active aging is the process of optimising opportunities for physical, social and mental well being throughout the life course in order to extend healthy life expectancy, productivity and quality of life in old age. Active refers not only to physical activity but also to continuing involvement in social, economic, spiritual, cultural and civic affairs. In order to provide research, programme and policy direction, WHO has created a comprehensive list of factors that affect the health of the elderly population across the globe. These factors were included while conducting the Kerala Ageing Survey.



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FALLS AND FRACTURES AMONG SENIOR CITIZENS

THE results of the study show that falls and fractures are a significant issue among older adults. As the population ages, the problems related to falls and fractures are expected to grow and pose an even greater challenge to the health care systems. Meeting these challenges requires a clear understanding of the prevalence and nature of falls, innovative planning to develop prevention programmes, systems and structures which will support falls prevention initiatives, and substantial reforms and policies at the local and national levels.

In many developing countries including India, osteoporosis resulting in fractures is not recognised as a source of concern. Responding to the caution of world experts and addressing the issue will avert the anticipated osteoporosis epidemic. A majority of falls are predictable and therefore preventable. Community-based falls registries and surveillance systems should be set up to better understand the prevalence, nature, and the trends of unintentional injuries at the population level in India.

Several promising strategies such as exercise programmes, environmental modification, and other educational opportunities for preventing falls and fractures exist. However, further research is needed to assess the effectiveness of these strategies for the Indian elderly.

Osteoporosis is an emerging health issue in India resulting in the higher rate of fractures. There is a need for extensive education and communication programmes to be undertaken through various media as well as governmental and non-governmental organisations.

Appropriate government investment is required to develop a screening tool appropriate for public awareness campaigns, in collaboration with academic institutions with expertise in research and development of screening tools.

It is also necessary to investigate the effectiveness and feasibility of using new and innovative diagnostic and screening devices such as calcaneal ultrasonometry. These are not only cost effective and innovative but could provide a practical tool for the effective and efficient delivery of osteoporosis prevention programmes. Identifying the bone status of individuals of all age groups would be an effective way of increasing osteoporosis awareness.

Guidelines to address the prevention and treatment of osteoporosis should be developed taking into account the cultural dimension to food choices and appropriate physical activity. Dietary diversity should be promoted as a way of ensuring adequate amounts of nutrients to maintain bone health.

Recommendations

BASED on the observations during the study, the research team proposes a set of recommendations. For the community, the study recommends distribution of manuals on eating habits and other activities related to healthy ageing. The primary policy recommendation of the study is to set up geriatric medical facilities or wards at both government and private hospitals and medical colleges. For programme providers and planners the study urges to develop policies and programmes to help the elderly to live a healthy and disability free life in the later years of life.

The study also recommends further research. It advocates repeating the survey among the elderly living in institutions in Kerala and replicating the aging survey in other parts of India to access a comparative perspective and suggest suitable policies at regional and national levels.

SHARP Results

MARCH 2006

SHASTRI APPLIED RESEARCH PROJECT

SOCIAL DEVELOPMENT & HEALTH

Trends in Family and Social Structure and Their Impact on Health in India: A Case Study of the Urban Poor in Bhopal, Madhya Pradesh

ALTHOUGH India lives mostly in her villages, increasing numbers are making their way into the cities. Today, more than 285 million Indians (about 30%) live in urban areas. Desperate and acute rural poverty forces millions of families to migrate to cities in search of a better livelihood. This trend towards urbanisation is more due to acute rural poverty than to the economic opportunities available in urban areas.

No Shangri-la awaits the migrants. They end up living and fending for themselves in habitations totally unfit for humans. It is almost as if the urban slums and the millions that inhabit them do not exist for city planners.

The migrants eke out a survival amidst very hostile environs, where they lack the support of the homogeneous and caring communities of their villages. Unlike the extended families in the countryside, urban migrants are more likely to be nuclear families, causing a disruption in familial roles.

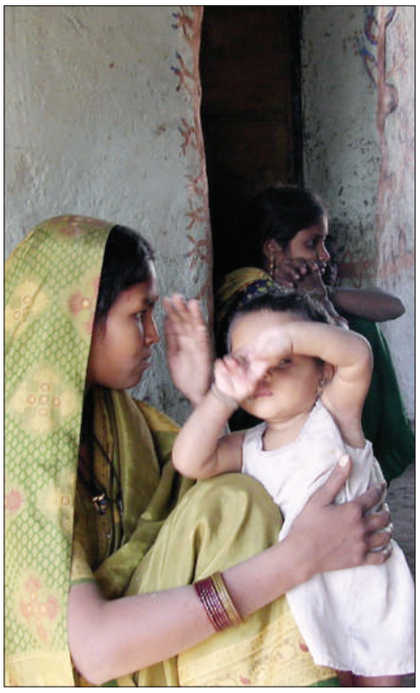
The implications these have for the health and development of the migrants are staggering. It is perhaps better explained by examining the different categories of migration. Some migrants come to cities alone and live alone, without any family support. From the health point of view, they are considered high-risk groups for sexually transmitted infections such as syphilis, gonorrhoea and AIDS.

Others migrate with a few other family members who can contribute to the workforce in urban areas. Young people in these divided families may get involved with antisocial elements and get into alcoholism, drug addiction and urban violence. Often the economic burden shifts to women and they are forced to work as servants and street vendors to support the family.

The women and children suffer the most in terms of health. Dire poverty and gender disparities ensure that they do not get even the requisite amount of calories or nutrients. Proper nutrition is further impaired by non-food factors such as inadequate sanitation facilities,

RECOMMENDATIONS

- ✓ Public health facilities are the most important source of healthcare, especially for the poorest. Hence, these need to be strengthened.
- ✓ In the context of health sector reforms that are being undertaken, the health system has to respond appropriately to the very high need for basic primary healthcare.
- ✓ Alternative forms of healthcare through community health workers, partnership with NGOs should be seriously considered.
- ✓ The study highlights the need for quality assurance of services provided through the private sector.
- ✓ Special attention has to be given to squatter-like slums.
- ✓ Proper sanitation and water supply is central to deal with a large proportion of morbidities.
- ✓ Non-communicable diseases cannot be ignored.
- ✓ Although there is a high utilisation and coverage for maternal and child health services, problems such as weakness, joint pain, pain in limbs and anaemia need to be addressed.



insufficient housing and lack of access to clean drinking water.

Against this background, it became essential to study the impact that changing family and social structures have on the health status and health-seeking behaviour of the most vulnerable urban populations. This study looked at Bhopal, the capital of Madhya Pradesh (MP) for some answers.

The emphasis of the study was on seeking to establish how family and social structures, health status, morbidity and mortality patterns, health-seeking behaviour, migration, and other socio-economic-demographic determinants affect the most vulnerable urban population in the city of Bhopal.

Why Bhopal?

BHOPAL, with a population of 1.43 million and an area of 284.9 sq km, was considered suitable for this study on many counts. According to the Planning Commission's Estimates of Poverty of 1997, based on 1993-94 figures, MP had the highest urban poverty ratio of 48.4% when the Indian average was 32.4%. MP also ranks among the three worst states in India in its health indices, with a high infant mortality rate of 106 per 1,000, crude death rate of 12.6 and average life expectancy of 53.6 years.

As with many other aspects of poverty, the problem of health is often one of governance. Therefore the assessment of the impact of health among vulnerable populations also calls for understanding the link between macroeconomic adjustment policies, health sector reform, household-level access to healthcare and the quality of healthcare.

Survey of Slums

A survey of selected slums in Bhopal was conducted, in addition to interviews to collect data for case studies and focus group discussions. The slums were grouped broadly as slums in the central city suburban slums and slums on the city's periphery.

A total of 1,460 households from these slums were chosen. Quantitative household level data was collected using a detailed questionnaire. Qualitative data was collected by conducting interviews (formal and informal), case studies and focus group discussions. In-depth interviews were conducted with 30 households.

Data collection was launched in Bhopal by establishing contact with Bhopal Municipal Corporation, the Departments of Health and Family Welfare (Government of Madhya Pradesh), NGOs and the United Nations Fund for Population Activities (UNFPA).

Students from the well-known Sarojini Naidu Girl's Post Graduate College in Bhopal conducted the field survey between December 5 and 17, 2004. These students were oriented towards this survey with a 3-day training programme on survey methodology to ensure high-quality data collection.

SAMPLE AREA & SIZE

Category	Slums	House holds
Central city	3	516
Suburbs	4	377
Extended suburbs	3	567
Total	10	1,460

Note: A 10% sample of the total households from each slum was selected by systemic random sampling

SAMPLE COMPOSITION

Age	Sex		Total
	Male	Female	
<5	447	418	865
5-9	510	552	1,062
10-14	616	582	1,198
15-24	995	886	1,881
25-34	561	608	1,169
35-44	509	443	952
45-54	300	228	528
55-64	162	179	341
65+	139	100	239
Total	4,239	3,996	8,235

The study population consisted largely of migrants. A majority of the population was from rural MP, especially from districts like Hoshangabad, Raisen, Sagar, Vidisha and Sehore, the largely rural underdeveloped districts of MP. Population from other states living in the slums were largely from Uttar Pradesh and Maharashtra, two adjoining states.

More than three quarters of the population has been there for more than 10 years. Yet they lived in squatter-like temporary settlements in the studied slums. Migration was coupled with forced resettlement as well as voluntary internal movement of households from one slum to another.

Migration was not a one-time event for most of the poorest families. Manoeuvring with migration and family composition was a very important strategy employed by the most vulnerable families. Close to 30% of the households were joint or extended households and 10% were headed by women.

The survey population comprised scheduled castes, scheduled tribes and Muslims. The population was characterised by very low levels of education (63% with education up to primary) and unskilled employment (less than 4% of the 15-64 year old population was in the organised sector).

A large number of women and men reported that they were unemployed (77% women and 28% men). Income levels were very low with 65% reporting monthly incomes of less than Rs 2,000. More than half the families were in debt. Close to a quarter of the families reported debts of more than Rs 10,000.

Abysmal Standards of Living

GIVEN these figures, it was not surprising that most households suffered from abysmally low standards of living in terms of crowded housing and poor water supply and sanitation. The situation was worse in squatter-like settlements. Less than a seventh lived in *pucca* (brick and mortar) houses, with

only 47% of the households having some form of toilet facility. A meagre 12% of the households had access to modern toilet facility with flush. A considerable majority - 85% of the households - reported that garbage removal and drainage were unsatisfactory. During rains, the inhabitants faced the additional problem of water logging.

Morbidity in the population was studied in terms of five categories: minor communicable diseases, major communicable diseases, non-communicable diseases, other diseases or health problems and physical disabilities.

The survey found that a majority of people suffer from minor communicable diseases, with 32% suffering from common cold and cough and 20% suffering from fever in the recall period one month before the survey. More than half the children below five years had cough or cold and 27% had fever during this period. Diarrhoea, dysentery, worm infestation and conjunctivitis accounted for almost 3% of the total reported illnesses.

Among the major communicable diseases, malaria was the most commonly reported illness with about 4.3% reporting it. This was however lower than the state average. TB was reported by 0.8% and jaundice by 2.2% of the population. These figures are higher than the state averages.

In the category of other diseases or problems, weakness, joint pain and pain in limbs was frequently reported (13.5%). Among women this problem was reported by 21%. Among women in the 15-45 years age group, 28% reported stomach pain. Anaemia was reported among 12% of the women. Among women in the age group 15-64, this figure was about 27%. Moderate and severe anaemia was reported among 13% of the women.

Among non-communicable diseases, the most commonly reported problem was blood pressure (2.6%). Asthma was reported among 1.3%. Among physical disabilities, vision impairment was most common, reported by 2.3% of the population.

Morbidity Differentials

MAJOR as well as minor communicable diseases were reported more in the lower income groups. The female population reportedly had higher levels of morbidity. The survey revealed that more morbidity was reported in the slums located in the vicinity of the gas plant (now closed) that caused the disaster.

People living in these slums displayed the lowest levels of income, crowding and very poor civic and other amenities. A majority were squatter-like settlements. It is also possible that the gas tragedy and related compensation issues, and political awareness could have contributed to higher or over reporting of illnesses in this area.

Healthcare Utilisation

SIGNIFICANTLY, across all categories, government allopathic facilities were utilised by the maximum number of households. 56% of the households reported that they usually visit a public health facility. This fact should actually stem the ongoing privatisation philosophy that seeks to diminish the role of the state in health.

The proportion of households who reported that they usually go to private healthcare facilities was as high as 56% in slums that are located in the outskirts of the city. The proportion utilising private health facilities is more among households with higher monthly incomes. Public health facilities were used more for major health problems.

It was also found that coverage for basic antenatal, postnatal and immunisation services was very high. However, there was substantial under-coverage in the sense that most women of poorer sections did not complete the entire required antenatal or follow-up visits. Visits were delayed in a substantial number of cases. Similarly, immunisation coverage was high but there is a substantial delay in case of Diptheria, Pertussis and Tetanus (DPT) and Bacillus Calmette-Guerin vaccination (BCG provides protection against tuberculosis).

Healthcare Expenses

CLOSE to one fifth of the households cited medical expense as their most important expense. Another one fourth of the households reported medical expenses as their second most important expense. Households with higher monthly incomes and those in the organised sector spent more on medical care. But even among those households with monthly income of less than Rs 1,000,

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A TRAGEDY THAT REFUSES TO DIE

FOR more than two decades, Bhopal has been associated with the biggest gas tragedy in the world caused by leaking gas from a Union Carbide factory. There is no separating the two, and as this research team found, there is no escaping it.

The gas tragedy formed the dominant backdrop against which the field research was carried out. And one of the main reasons was the field data collection period - December 2004 - coincided with the 20th anniversary of the gas disaster.

That was also the time when compensations were being paid out to those affected by the tragedy. The city was virtually covered with posters and marches were being organised to mark the anniversary.

When the project researchers arrived in the central city slums, which are located near the former Union Carbide factory, armed with the thick interview schedules, there was an immediate buzz around them. The slum dwellers crowded around wanting all their names to be included in the survey. They assumed that this survey was for determining the beneficiaries for compensation and no one wanted to be left out. The team had to exercise utmost tact to convince them otherwise.

The researchers faced difficulties when families not selected for the survey demanded to know why. The angst was deep. Ramila Bisht of Tata Institute of Social Sciences, Mumbai used the one analogy that she thought the people would understand. She told them that to test if the rice is cooked, you check a few grains from the boiling cauldron. You do not check each and every grain. Similarly, the families selected for the survey would point the researchers towards determining the health of the rest of the community. This slice of native wisdom did appeal to them.

about 20% had spent more than Rs 1,000 over a period of one year.

Conclusion

IT is clear from the study that there has to be better interaction between departments concerned with health, sanitation and water supply. Similarly, better interaction between government and non-governmental organisations is needed. An issue of concern is the lack of special attention to squatter-like slums, which in turn means that the state lacks a proper slum rehabilitation and development policy.

The study highlighted core policy areas such as health needs of poor women, men and children, the state's responsibility for the urban poor, sharp disparities between the rich and the poor in accessing healthcare, adverse effects of health sector reforms and the implications for public-private partnerships in healthcare.

The project had set up an informal local advisory committee consisting of members representing all such bodies that work in the field of health and urban development in Bhopal. The committee shared its experiences in dealing with health and related issues. It also provided support in building rapport with the community.

MARCH 2006

SHARP Results

SOCIAL DEVELOPMENT & HEALTH

Urban Poverty Issues, Policy Evaluation and Public Participation in Mumbai

FINDINGS

✓ Slums are an integral part of the urban areas and the aim should be to integrate slum settlements and their populations into the urban area

✓ The resettlement housing provided by the state is inadequate and not sensitive to the specific livelihood and social needs of the poor

✓ The women have to bear the double burden of coping with familial needs and the break up of their own supporting networks when demolitions take place

✓ The malnutrition among slum children is very severe, especially those whose homes have been demolished

RECOMMENDATIONS

✓ The government must finalise its policy for slum dwellers (it is in draft stage for over five years) and also implement its policies on urban street vendors and social security for workers in the informal sector

✓ The state should establish a framework for upgrading and developing slums that involves all stakeholders

✓ Slum upgradation should be implemented around former mill lands

INDIA'S financial capital Mumbai has the dubious distinction of housing a majority of its population in slums. About 60% of Mumbai's inhabitants live in slums, a term that describes habitations ranging from one-room pucca (brick and mortar) structures to shanties hugging urban walls.

Interestingly, it is these very slums, which contribute significantly to the city's economy through their labour market contributions and informal production activities. According to the 1996 report of the Mumbai Metropolitan Region Development Authority, a whopping 70% of the city's workforce is engaged in the unorganised or 'informal' sector, mainly through casual or contract labour and self-employment. The 'informal' sector typifies low and irregular income, lack of social security or regulation in work, and absence of legal protection.

There is however no compassionate recognition of this fact by authorities. The state considers slums and slum dwellers an unseemly sight, offensive to the urban elite's sensibilities. They are also seen as obstacles to transforming the city in to a 'Shanghai'. With space being at a huge premium in the city, the state's way of dealing with it is 'resettling' the slum dwellers in far-flung areas, away from the elitist gaze, in housing lacking even the basic essentials like water and electricity.

Given these realities, the project decided to investigate two aspects of urban poverty. One, how do the poor organise themselves to meet their basic needs of survival? What are the employment, health and spatial concerns they have? What is the political economy of space in a city where it is at such a premium?

Two, how do the urban poor organise themselves in order to intervene in policies of the state? What is the role of NGOs and civil organisations in mobilizing people and developing leadership skills amongst slum dwellers?

The project dealt with these questions at both the macro and micro levels. At the micro level, field research was carried out in three slums (Vakola, Govandi and Kurla), one large resettlement site (Deonar) and the original settlement of Worli village, which is under threat of eviction. The project investigated the ways in which the state seeks to 'help' the poor and the dire implications such help has for their shelter and livelihood.

During the research it was noted that women in slums prefer to work in groups even if the work did not involve group activity. In the absence of common spaces, the women have to work within the confines of their small homes. Working together was a way of building social networks, which help them in times of need. But this network is now breaking up. The women in resettled colonies were further disadvantaged since the contractors who gave them home-based work refused to come over to the new place.

But this study's most startling revelation came in the health and nutrition survey of slum children. The project team found that the children in slums are more undernourished than children in drought prone tribal areas of the state. This issue was even discussed in the state legislature.

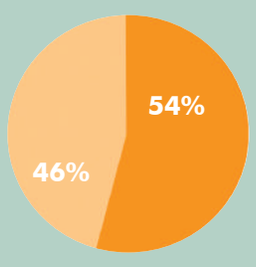
A similar study conducted a year after the massive demolition of slums in the city found that children in the demolished slums were even worse affected as far as health and nutrition are concerned.

The Political Economy of Space

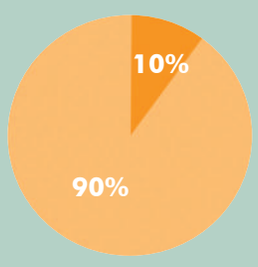
AT the macro level, the project sought to understand the reasons for the high premium on space in Mumbai. It is a well-known fact that the real estate price in Mumbai is among the highest in the world. This boom peaked in the early 1990s when a stock market crash led to movement of domestic equity into real estate. This, plus the influx of multinationals and NRIs after liberalisation led to an unprecedented rise in prices of real estate in South Mumbai where the rates soared by 700% during 1991-95, while in Central Mumbai, including the former mill areas, prices moved up by 450%.

Further, in common with other global and gateway cities that have experienced a significant influx of both domestic and international investment capital, Mumbai has experienced a significant 'rent gap' since the mid-1980s. The Rent Control Act set in 1942 and based on annual assessments that are

CHOKING IN MUMBAI'S SLUMS



54% of Mumbai's total population is slum dwellers



10% of the city's surface area is slums

WHY DO WOMEN NEED SPACE?

THE research on the slums and the resettlement site was related mainly to how women cope in these situations. What are the networks they build for ensuring work and in times of crises?

Most women in these slums are engaged in home-based work. This is given to them by contractors and includes work such as stitching labels, price tags, buttons and collars on garments, making food items such as papads and pickles and doing embroidery or zari work.

The women form informal groups for doing their work. These women may perform their work individually but they prefer sitting in a group as this reduces the monotony of work and improves their productivity. These groups comprise mainly their neighbours who also largely belong to the same caste, region or religious group. These factors make the groups homogenous in nature and more reliable as far as the members are concerned.

The women use their groups to secure work or circulate information about new opportunities that some members have got. They also form their savings groups (known as *bisi*) based on their groups. The positive aspect of such groups is that they contribute towards increasing or securing income for these women. So, the notion of common space is very important to these women as it gives them the opportunity to interact with the others and also improves their productivity.

The women in this manner build up their social capital and solidarity if they need to intervene in improving facilities. In one particular slum the researchers found that the women's group had managed to get public water taps fitted by the municipal authorities. These groups also link up with others at times of distress such as slum demolition or in the face of calamities like the July 2005 Mumbai floods.

Thus, if denied a common physical space, as is the norm in the resettlement dwellings, the state deprives the women in the slums of an essential survival tool.

below market value means tenants in South and Central Mumbai pay much less than the market value for their rental properties. Hence, there is a large gap between potential and realised ground rent in the two zones of South and Central Mumbai.

Then of course there are the mill lands - lands from the former mill areas, which 'may' become available for low-cost housing, although this is presently in dispute. Meanwhile, five of the 25 NTC mills in Mumbai were sold between March and July 2005 covering an area of 50 acres. The sale price was a whopping Rs 2,020 crore. With this kind of demand, it is not surprising that there has been a general shift of the former working-class from the central zone to the northern and eastern suburbs. It has also engendered a recent policy of evictions, with slums in the central and southern zones being razed, while their residents have relocated to less 'expensive' areas.

In many cities, the process of redevelopment or gentrification of inner-city neighbourhoods (especially areas of former industrial predominance) has been accompanied by new forms of 'spatial enclosures and policing' that have been referred to as 'urban revanchism'. The McKinsey Report, commissioned by Bombay First, envisages a spatial relocation of manufacturing and workers to Thane and Navi Mumbai, i.e. outside the island city, putting an influential stamp of approval on revanchist policies. In 2004, the Vilasrao Deshmukh government reinvented the policy of slum clearances and in the demolition drive, which began that December, nearly 400,000 people were uprooted.

Aapli Mumbai

RECOGNISING the need to form a common forum on issues relating to urban development vis-à-vis urban poor on the whole, a network called Aapli Mumbai (Our Mumbai) was formed in August 2002. The Indian investigators of this project were already involved in an initiative called LEARN (Labour Education and Research Network), which was started in 2000 and which helps to run schools for dropouts. While working on this project the researchers realized that slum dwellers and NGOs needed to be more organised so that they work towards a common objective.

More than 30 organisations came together to form Aapli Mumbai. One of the first activities of Aapli Mumbai was the framing of a state slum policy intended as a 'base document' before the campaign was activated. The document suggests ways to integrate slum settlements and the communities residing within them into the urban area in a holistic manner. It further stresses that all urban informal settlements should have access to certain basic minimum services irrespective of land tenure or occupancy status.

Aapli Mumbai was provided an opportunity to swing into action with the demolition drive, which began in end-2004. Activists of Aapli Mumbai stormed Mantralaya - the state government headquarters - blowing whistles! The following month, nearly 25 activists dressed as

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DEMOLITION & MALNUTRITION: TWIN SCOURGES

MAHARASHTRA has a high incidence of malnutrition among children as well as adults, but the major policy focus has been on malnutrition among tribal children. The focus of this study was thus to compare the incidence of malnutrition among urban *kuttcha* (temporary) slum dwellers in Mumbai and tribal landless households in Jawhar and Mokhada tehsils of Thane district. These two tehsils have usually been in the news for malnutrition related deaths among tribal children. The study focused on children less than five years of age.

Three measures were used - weight for age (underweight); height for age (stunting) and weight for height (wasting). A sample of 1,006 *kuttcha* slum households was chosen from 10 Mumbai slums and a sample of 250 landless and marginal tribal landholders was chosen from six villages in Jawhar and Mokhada tehsils. The study also surveyed 500 households that were demolished in a drive a year ago and compared them to 500 similar households in the same locality that were not demolished.

It was found that children in demolished households have a greater incidence of malnutrition compared to those in non-demolished households. Children in demolished households were also found to have a much larger dropout rate compared to children in non-demolished households. Demolished households were also found to have an average per capita income of Rs. 664 per month, 15% below that of the non-demolished households, which is Rs. 776.

It is not just the lack of food and shelter that hits slum dwellers who have faced demolition. When demolition takes place, their very occupational mobility is hit. So livelihood, shelter, schooling, social networks, access to health, access to sanitation and drinking water are also effectively demolished. Their meagre assets, accumulated over a few years of city life, are also lost. This adversely impacts the possibilities that the poor have to escape poverty.

SEVERE MALNOURISHMENT AMONG CHILDREN IN SLUMS BEFORE AND AFTER DEMOLITION (IN PERCENTAGE)

	Demolished Slums	Non-demolished Slums
Stunting	4.44	3.87
Wasting	0	0
Underweight	3.88	0.88

dalits went to the Chief Minister, requesting him not to demolish their slums. This was because 70% of slum-dwellers are dalits. The police lathi charged and arrested activists when they tried to rebuild the slums in Rafi Nagar.

The project team has striven to disseminate its research findings to the people through workshops held in other cities such as Nagpur, Nasik and Solapur. Summaries of documents such as the draft national slum policy, national policy for urban street vendors and the proposed policy on social security for workers in the informal sector have also been translated and disseminated.