

# Changing the Indian Health System: Current Issues, Future Directions Executive Summary

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*This Report had as its starting point the terms of reference of the WHO-appointed Commission for Macroeconomics and Health (CMH). During the CMH meeting hosted by ICRIER in New Delhi in April 2000, detailed presentations made by four Indian states clearly brought out the diversity of socioeconomic conditions, health outcomes and approaches in different parts of the country. This diversity, together with the quality of research and data available, suggested that India could make a significant contribution to the CMH exercise. A team at ICRIER, led by Rajiv Misra, former Secretary Health, Government of India, prepared the Report with a view to making inputs into the CMH thinking and contribute to the ongoing debate on the National Health Policy. The Report thus evolved into a country-specific study with a focus on national issues relevant to Indian policymakers, while maintaining an international dimension that addresses the CMH terms of reference. The project was funded by the Bill and Melinda Gates Foundation.*

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## I. Introduction

It is increasingly recognized that good health is an important contributor to productivity and economic growth, but it is, first and foremost, an end in itself. In a poor country like India, where the only asset most people have is their bodies, health assumes even greater significance for their economic status. Good health, and its natural corollary, defense against illness, is fundamental to every man and woman and child, not only for their well being, but for their very survival. If the State exists to safeguard the right of its citizens to the fundamental prerequisites of survival, this same State must own up to its responsibility to protect its citizens from illness and premature mortality.

The Indian State has articulated this responsibility often enough. Since Independence, the government, ostensibly driven by socialistic goals, has expressed its intentions to discharge this responsibility in one Five-Year Plan after the other. Ambitious systems, programmes and schemes have been drawn up to alleviate poverty while promoting the goal of universal healthcare, although the close linkages between the two have not been fully appreciated.

There have indeed been large gains in health status since Independence. Life expectancy has gone up from 36 years in 1951 to 62 years in 1995. Infant Mortality Rate is down from 146 in 1951 to 71 in 1997. Crude Birth Rate has been reduced from 36.9 in 1970 to 26.1 in 1998, and Crude Death Rate from 14.9 to 8.7 in the same period. One of the major reasons for these gains has been the development of an impressively vast, three-tiered system of rural

health infrastructure, with sub-centres for each 5000 population, PHCs for each 30,000 population, and CHCs for each 1,00,000 population. Immunization to control communicable diseases has made a major contribution to these gains; success stories include small pox eradication, the near elimination of leprosy, and the extraordinary social mobilization for polio eradication. Improvements in determinants such as water supply and sanitation have also helped achieve outcomes. These aggregations, however, mask the wide differentials between and within states. The health indicators of Kerala are comparable to those of middle-income countries, while Uttar Pradesh, Madhya Pradesh and Orissa are almost at the level of Sub-Saharan Africa. There are huge disparities between urban and rural areas, and between developed and relatively remote areas inhabited by the marginalized sections of society.

Moreover, the figures regarding achievements present an impressive picture only when viewed in splendid isolation. First, a comparison of targets and goals dilutes the gains considerably. The National Health Policy 1983 set some targets for 1985, 1990 and 2000. A comparison of goals with actual achievements reveals the real picture: we are nowhere near targets, except for life expectancy, Crude Death Rate and polio immunization. Second, while India seems to have performed better than countries with the same level of per capita income, such a comparison is obviously misleading. With its knowledge base, its administrative and institutional strengths, and its growth potential, India is capable of much higher levels of achievement.

It is clear that those health systems that direct their resources and energies towards the health needs of the poor have a better overall health status. This is a logical association, since the poor carry the larger burden of disease. But the facts make a mockery of such logic as they establish the raw deal the poor are getting from the public healthcare system. A recent NCAER study reveals that the richest 20% enjoy three times the share of public subsidy for health compared with the poorest quintile. The poorest 20% of Indians have more than double the mortality rates, fertility rates and undernutrition levels of the richest 20%. The poor suffer disproportionately more from pre-transition diseases such as malaria and TB. On an average, they spend 12% of their incomes on healthcare, as opposed to only 2% spent by the rich. Treatment or hospitalization for chronic illness often means the liquidation of meagre assets, even permanent indebtedness. One episode of hospitalization is enough to wipe out all the assets of the family. It is no wonder then that the number of the poor who did not seek treatment because of financial reasons increased from 15% to 24% in rural areas and doubled from 10% to 21% in urban areas in the decade 1986-96.

The obvious question then is Why? If the State has universal healthcare and poverty alleviation as basic objectives; if there have been gains, however patchy and inadequate; if there are systems in existence if not actually thriving, why is the current health scenario so bleak?

The obvious and most important reason is that for a State that promises universal healthcare through the public health system, India has one of the lowest health budgets in the world. How is the objective to be met if there are no resources to put policy and schemes into actual practice? This gross mismatch between objectives and resources is at the heart of both the inadequacies and the inequities of the Indian health system. Higher public health expenditures are clearly and unequivocally associated with better health outcomes, and thus productivity, especially in a poor country. Any attempt at understanding the failures of the health system, and setting these derailed intentions and structures back on course, would involve, for a start, a much higher priority to the health sector. This higher priority will then have to be translated into increased allocation of resources. Otherwise financial risk protection for the poor, who are beset by illness as well as the threat of loss of work, will remain what it has been for the last several decades: pious declarations on paper.

The State's role in health has been so far from its declared intentions that not only has it failed to provide healthcare to the majority of the population through the public sector; it has also countenanced a large and thriving private sector to grow practically without regulation. In recent times, one point of view has offered the private sector as the panacea for all ills; another view perceives the private sector as a negative accompaniment to liberalization and links its growth with that of inequity. Neither view takes into account two facts: one, that in the context of a public health system that does not deliver services to those who need them, the private sector has grown to be the main provider of curative healthcare. It currently dominates both outpatient and inpatient care, and this evidence shows no significant variations by income group, rural/urban location, gender, caste or tribe. Two, the private sector is almost entirely unregulated so that its costs, its quality of care and its spatial distribution are for the large part incompatible with national health goals. It is not surprising then that the poor are forced into a situation where they have to pay for private healthcare they cannot afford. Their deprivation and vulnerability make the poor ill more easily; and illness makes them even poorer. There is no dearth of evidence that establishes this nexus. A recent analysis of the World Bank (*India – Raising the Sights: Better Health Systems for India's Poor*, May 2001) concludes that “the hospitalized Indian

spends more than half of his total annual expenditures on buying healthcare; more than 40% of hospitalized people borrow money or sell assets to cover expenses and 35% fall below the poverty line.” The same study also suggests that out-of-pocket medical costs alone may push 2.2% of the population below the poverty line in one year.

Given this context, the first task of policymakers is to define realistic goals and provide the necessary financial resources for their achievement. Besides, the lack of clarity on the relative roles of the centre and the states has caused the centre to focus on the day-to-day management of institutions and programmes, rather than concentrating on its stewardship role. The result is that even the meagre available resources have not been put to optimal use. Clearly, along with increased resources, the need of the hour is wide-ranging systemic reforms, both at the centre and the states. We believe that the reform process must begin with a thorough restructuring of the Ministry of Health and Family Welfare on the lines indicated in the Appendices of this Report.

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## **II. The Current Health Scenario: Issues**

### **1. Present Challenges**

*Communicable Diseases:* One of the biggest blots in the current health scenario is the failure to control communicable diseases, despite the availability of cost-effective and relatively simple technologies. These pre-transition communicable and infectious diseases constitute a major cause of premature death in India: they kill over 2.5 million children below the age of five and an equal number of young adults every year. The proportion of total deaths caused by communicable diseases (including maternity related conditions and nutritional deficiencies) continues to be unacceptably high at 42%. (Of the 269 million disability-adjusted life years or DALYs lost, communicable diseases accounted for 50.3%.) Despite the global eradication of small pox, and despite expectations that current efforts will ensure the elimination of leprosy and polio within the next five years, environmental and social factors impose severe constraints on the control of two of the communicable diseases that pose a special threat – malaria and TB. The total number of TB patients is estimated at 15 million. Moreover, India has been identified as a hot spot for Multi Drug Resistant (MDR) TB, which is both difficult and expensive to treat. The resurgence of malaria and TB in forms difficult to control or treat, along with the exponential rate of development of HIV/AIDS, have imparted a new sense of urgency to disease control. Special projects have been launched for

the control of communicable diseases such as malaria, TB and leprosy with the support of the World Bank and other donors, and they constitute an appropriate strategic response to the increasing threat. They have improved performance considerably through stable funding and programmatic reforms. However, except in the case of leprosy where the objective of elimination appears achievable, the coverage in other programmes is still low, and large uncovered areas have been receiving even less attention than before. These projects must cover the entire country, and central funding support must be extended to 100%, rather than matching 50:50 with the states, as in many cases at present. The sustainability of these special programmes once external assistance ceases also needs to be addressed.

- *TB*: India accounts for one-third of global TB, and the largest number of persons suffering from active TB in the world. According to available estimates, about 2.2 million persons are added each year to the existing load of about 15 million active TB cases. Of these new cases, about 800,000 are infectious, and about 450,000 die. Most disturbing is that 20% of 15 year olds are reportedly infected; and among women in the reproductive age group of 15-44 years, it causes more deaths than all the various causes of maternal mortality put together. Added to this are the facts that every sputum positive case carries the potential to infect 10-15 individuals in a year, and that TB is the principal opportunistic infection of HIV. The result is the alarming possibility that deaths caused by TB can go up to 4 million in the next decade. At present, the DOTS strategy is implemented under the aegis of the RNTCP in about 200 districts, covering a population of 350 million. The programme is supported by about Rs.746.76 crores of external funding. The results of the RNTCP are impressive, but nevertheless the future scenario of TB control appears grim. First, only an estimated 20-25% of TB patients in the country have been brought under DOTS. The same familiar reasons crop up as barriers to further expansion and better performance : low budgets; weak institutional capacity; the dangers of MDR exacerbated by unregulated private practitioners following their disparate, sometimes irrational treatment regimes, as well as unplanned, unprepared and hasty expansion of the programme. Multiple systems of TB control – conventional, SCC and RNTCP – are all being implemented with different financing mechanisms. And as in other programmes, poor community support is a hindrance. In addition to all this, the future of TB control has to be viewed in light of the ominous fact that nearly two-thirds of opportunistic infection among AIDS patients is TB, portending a dual epidemic of TB and HIV in the near future.

- *Malaria*: The prevalence of malaria was brought down to about 2 million cases by 1984; but in 1994, once again, there were several focal outbreaks resulting in high mortality. The most dangerous strain of malaria, caused by the parasite *Plasmodium falciparum* (Pf), has been steadily rising to account for almost half of all malaria cases in 2001. As expected, the disadvantaged sections are the worst hit: in Andhra Pradesh, the rate of Pf malaria among tribal groups accounted for 75% of malarial deaths in the state.

Several reasons have been cited for the failure to reduce malarial prevalence: parasite resistance to drugs and vector resistance to insecticides in some high endemic areas, environmental changes caused by development activities such as irrigation projects, and rapid urbanization. A three-pronged strategy was drawn up, which is now being implemented throughout the country under the National Anti-Malaria Programme (NAMP). The main objective of the strategy is interrupting the transmission of disease by

- early detection and prompt treatment to reduce the reservoir of infection;
- reduction of the vector population through selected vector control using anti-adult and anti-larval measures;
- enhancement of community based action, such as undertaking bioenvironmental control measures and promoting personal prophylactic measures.

The effectiveness of these efforts is hampered by weak and often non-functional public health systems, non-availability of required manpower, inaccessibility of areas most effected (e.g. tribal areas), and poor community participation. The removal of these constraints is a major challenge for the programme.

- *Water-related/soil-transmitted illnesses*: Acute diarrhea, worm infestations and digestive tract infections become illnesses to reckon with in view of their debilitating impact on the immunity system, particularly those of children and of those already undernourished. In addition to comprehensive health education – which would promote community hygiene and healthy living – India needs to make adequate investments in water supply, sewerage systems and sanitation to reduce the infectious disease load, and local bodies must be involved for coordinated action on these major determinants of health.
- *Acute Respiratory Infections (ARI)*: continue to take a heavy toll, particularly amongst children, despite the availability of inexpensive and effective anti-microbials, causing almost a million avoidable deaths every year. This again is due to a dysfunctional public health system, lack of access to quality

primary and secondary care. There is need to focus on interventions for treatment at all levels of care, as well as to address contributory factors such as air pollution through health education and community action.

- *Maternal and Child Health (MCH)*: Children below five and women in the reproductive age group make up 36.2% of the population of India, and in terms of survival and well being, they also constitute the most vulnerable group in society. Income levels and social exclusion only serve to exacerbate this vulnerability: health indicators for SC and ST women and children reveal that they are considerably worse off. As in other aspects of the health sector, the database so essential for planning and setting of priorities is not reliable. But the estimates available show that the Maternal Mortality Rate (MMR) continues to remain at an unacceptable level – 408 for 1,00,000 live births. The causes for these poor indicators of maternal health are well documented: the low socioeconomic status of women, the undernourishment and anemia rampant among them, the low proportion of institutional deliveries, and the absence of trained birth attendants in as many as two-thirds of cases. Again, only a revamping of the primary healthcare system, along with effective referrals for complications, and interventions to address under-nutrition/ anaemia will help improve antenatal and maternity care. Simultaneously, a fundamental link – between high mortality on the one hand and high fertility and age at delivery on the other – must be addressed to get a handle on the problem of maternal survival and health.

The poor status of maternal health is inextricably linked with the gender disparities that pervade all aspects of life in India. The results of the 2001 Census seem to indicate that the reported decline in the sex ratio during the last century has, at last, been not only arrested but also marginally reversed. But the sex ratio in the 0-6 age group has worsened, and this is cause for serious concern.

Again, the tempo of decline in Infant Mortality Rate (IMR) and under-5 mortality achieved between 1981 and 1991 has not been sustained. The critical point is that IMR has been hovering around 72, and under-5 mortality around 95 per 1000 live births, during the last few years. The rate of decline has, during the last four years, reached a disturbing plateau. Programme interventions continue to focus on the major post neonatal causes of death, though neonatal mortality now accounts for two-thirds of infant mortality. Policy and programmes must emphasise interventions that will address perinatal and neonatal mortality.

*Nutrition:* The threat of communicable diseases, as well as perinatal morbidity and mortality, looms larger because of the poor nutritional status of a substantial part of the population. Despite a nationwide programme for nutritional supplementation of pregnant women and children, NFHS II (1998-99) shows only a slight improvement over NFHS I (1992-93). The percentage of underweight children has only reduced from 52% to 47%, and of the severely underweight from 20% to 18%. 74% of children were found to be anemic; the same study found that 52% women have some anemia, which is a major cause of maternal mortality. There is an urgent need to focus on food/nutrition security as a high-priority intervention for improved health outcomes of India's population.

The present challenges of communicable diseases and maternal and child survival show up the weaknesses of the health system. But even as the system struggles to meet the current demands of disease control, a new challenge, again a communicable disease, is emerging in the form of HIV/AIDS, threatening to sharpen existing problems of resources, health infrastructure and inequities.

## **2. Emerging Challenges**

*HIV/AIDS:* The threat presented by the rapidly growing HIV/AIDS infection has not received the priority attention that it deserves, partly because of the long gestation period between HIV infection and the development of full-blown AIDS. Also, it is the opportunistic infections (such as TB) that get noticed; the root cause of morbidity and mortality often remains undiagnosed. The major route of transmission in India is sexual contact, but sex as a subject is weighed down with taboos in a traditional society. The high prevalence of STDs in India also makes the country particularly vulnerable to the AIDS threat. In the year 2000, the number of Indians infected with HIV was estimated at 3.86 million, or roughly a prevalence rate of 0.7%, quite low when compared to the prevalence rates of 25% and over in South Africa, Zimbabwe and Botswana. But the infection in India is no longer confined to high-risk groups or only to urban areas and it is spreading rapidly. And since the epidemic is more than a decade old, mortality due to AIDS is increasing: in 1999 alone, nearly 300,000 Indians are estimated to have died of AIDS. As of March 2000, 11,251 cases have been reported to NACO: 79% are males, 21% female. This is, however, only a fraction of AIDS morbidity in the country, reflecting the stigma and the ignorance surrounding the infection. Widespread discrimination against the infected hinders their access to healthcare. Similarly, the low income levels of the infected, coupled with lack of resources in the government funded programme – despite the manufacture and availability of the drugs in India at

more affordable prices – preclude the widespread use of highly active anti-retroviral therapy (HAART). As a result, morbidity and mortality of those infected continues to be high.

The most important contribution of the National AIDS Control Programme (NACO) has been sentinel surveillance; it has also heightened awareness regarding blood safety. The Programme has now begun its second phase, with preventive efforts as its focus, and targeted interventions among high-risk behaviour groups as a key strategy. But awareness levels are still low or uneven; information, education and communication (IEC) remain a crucial element. If India is to avoid the catastrophe that Africa is struggling with, far greater efforts will have to be made to keep the epidemic at bay. Fortunately, we have a model in the state of Tamilnadu, which has successfully arrested the increase in the level of infection by concentrating on high-risk segments of the population, by raising general awareness levels and by devising innovative mechanisms for programme implementation. India must act immediately and vigorously to control the level of HIV infection so that it does not grow beyond 3% of the population.

### **3. Future Challenges**

As if present and emerging problems do not present enough of a challenge to a resource-hungry and weak health system, there are also the challenges of the future for which provisions must be made. Projections of population increase indicate a changing demographic profile with profound implications for health planners and economists. The next two decades will see a significant increase in the 15-59 age group; the increase in longevity will almost double the population of the elderly (> 60 years). As more individuals survive to middle age, the years of exposure to the risk factors of chronic disease increase. Non-communicable diseases (NCDs) will gradually become the dominant contributors to the burden of disease – their share increasing from an estimated 33% in 1998 to 57% in 2020. In fact, even at the present stage of health transition, India contributes substantially to the global burden of NCDs. In 1990, India accounted for 19% of all deaths, 16% of all NCD deaths and 17% of all CVD deaths in the world. CVD in India alone accounted for around 2.4 million deaths, in contrast to nearly 3.2 million CVD deaths in all the industrialized countries put together. In addition, recent evidence suggests that impaired fetal nutrition, reflected in small birth size, results in programmed susceptibility to adult cardiovascular disease, diabetes and some cancers. Mental health disorders merit special attention, given the fact that neuropsychiatric disorders account for 26% of the NCD burden. They contribute to the burden of mortality too: suicides are estimated to occur at the rate of 11 per 100,000. Indications are that women bear a high burden of these disorders.

With NCDs positioned as a major public health challenge, the existing health systems will need to be reorganized and reoriented to deliver the expanded mandate of healthcare – involving the prevention, surveillance and management of chronic diseases along with primary and secondary healthcare. The emerging burden of NCDs poses a special threat to the poor due to the often prolonged and expensive treatment required for these conditions, as well as much greater exposure to risk factors like tobacco and alcohol.

The management of NCDs is often technology-intensive and expensive. Individual as well as societal resources are already being drained at a disproportionately high level by the tertiary care management of NCD, drawing scarce resources away from the unfinished agenda of infectious disease and maternal and child health. Though NCD epidemics usually originate in the upper socioeconomic strata, they diffuse across the social spectrum, with the social gradient ultimately reversing and the poor becoming the most afflicted.

At present, programmes for NCD control are either non-existent or functioning at a low level in India. The exorbitant costs of treating chronic diseases make prevention the most suitable option for India. Traditionally, public health approaches to NCD control has consisted of a high-risk strategy, targeting those with high levels of risk factors and employing interventions to reduce them, usually with drugs; and a population strategy that attempts to reduce risk factor levels in the whole community, usually through lifestyle-related measures. Along with these approaches, effective low-cost case-management strategies are required for those who manifest disease. Such technologies are available, but they await widespread dissemination and application. Tobacco control is a major public health imperative providing the largest benefit for NCD prevention. Tobacco-related cancers, CVD and chronic obstructive airway disease can be effectively prevented if the tobacco habit is discouraged and overcome among the population. Tobacco control has received some attention in recent years, but it still awaits the passage of proposed legislation as well as a vigorous public education campaign. The National Cancer Control Programme involves cancer registries at selected sites and strengthening of facilities for clinical care (such as radiotherapy). Pilot studies for the control of CVD and diabetes have been initiated but have not had an impact on policy and programme development. India was among the first developing countries to initiate a community-based National Mental Health Programme. However, the programme remains at its pilot stage in 22 districts of the country only, and awaits extension to the other districts.

Taken together, what do the present, emerging and future challenges imply? To begin with, they call for the high-priority control of communicable diseases to avoid the double burden of communicable and non-communicable diseases. They call for appropriate public health interventions to control the risk factors of NCDs such as tobacco and unhealthy lifestyles, emphasize preventive strategies, and set up arrangements for the early detection and cost-effective treatment of NCDs at the primary and secondary levels.

#### **4. Finance**

The recurring refrain in any discussion of the Indian health system is finance, a refrain that grows more shrill and urgent because of policy failures and State neglect. The crux of the problem is abysmally low public health expenditure – around 0.9% of GDP, below the average of low-income countries and even Sub-Saharan Africa. Despite the increasing urgency of problems in the health sector, public health expenditure as a proportion of total government expenditure has in fact *declined* over the years. This has to be seen against a background of fiscal deficits: the combined fiscal deficits of the centre and the states are estimated at 10% of GDP. Following a temporary stabilization in the early nineties, the fiscal situation has deteriorated, so that government ability to increase investments in health has been eroded further. Since the states typically account for about 75% of public health expenditure, their financial health is crucial for both general development and specific health outlays. But the combined gross fiscal deficits of the states, which ranged between 2.4-2.9% between 1993-94 and 1997-98, increased to 4.2% in 1998-99 and to 4.9% in 1999-2000. Fiscal crises have meant sharp reductions in the non-salary recurring expenditure in public health facilities, leading to further deterioration of quality. In addition, the increase in salary and pension liabilities after the Fifth Pay Commission has aggravated the resource crunch.

The share of health expenditure in the major states, in the range of 6-7% up to the 1980s, has come down to just over 5% in the 1990s. This is a significant decline in the proportion of health expenditure to the total expenditure in the states in over two decades. As far as the real per capita public spending on health is concerned, the evidence of 11 states at 1980-81 constant prices shows a steady increase, though in varying degrees. The sole exception is Uttar Pradesh, the most populous state; the declining per capita public spending in this state with very poor health outcomes is indeed a disturbing trend. Moreover, trends of the real per capita public spending on health of selected major states, and their distribution among primary, secondary and tertiary healthcare, show that between the period 1985-86 and 1998-99, per capita public spending increased at the primary and secondary levels by about 50%, while spending levels

increased by more than 100% in the tertiary sector. This has grave implications for both the equity and efficiency of the health system.

The declared policy was for the State to provide free universal healthcare to the entire population, but this policy objective has been totally divorced from the reality on the ground. In fact, India has one of the highest levels of private financing (87%), with out-of-pocket expenses estimated to be as high as 84.6%. The highly skewed pattern of health finance in India is a major contributor to the perpetuation of poverty. Indeed, the greatest failure of the Indian health system is its inability to develop a financing mechanism for the healthcare of the poor. It is clear then that the foremost objective of the Indian health finance system is financial risk protection for the poorer and weaker sections of the population. Access to health services should depend on individual need, not on ability to pay. The most efficient way of providing financial protection is to pool the risk between the rich and the poor, the young and the old, and the employed and the unemployed, to enable cross subsidization. At the international level, the main instrument used to achieve this objective is health insurance, but this has remained relatively undeveloped in India.

That there is a strong case for increasing the share of health in resource allocation is by now self-evident. But the extent to which tax revenues can be reallocated to the health sector would depend not only on political will, but also on the fiscal situation. In a poor country with a low tax base, mounting debt liabilities, undeniable security concerns and a legacy of poorly targeted subsidies, we cannot rest content with merely advocating reallocation of resources for larger investment in health. Generally speaking, the available tax resources should be used primarily for provision of public goods, the healthcare of the poor – particularly those in the informal sector outside the reach of insurance mechanisms, and for community financing. To the extent possible, resources should be raised from dedicated sources to eliminate competition, and to provide stable and growing sources of revenue. At the same time, there must be improvement in the targeting of public subsidies towards the healthcare of the poor. This implies taking *four* steps :

- Increase allocation for public health and primary and secondary healthcare, which is better utilized by low-income families.
- Utilize user fees at secondary and tertiary levels to reduce the price advantage of public services, reducing their attractiveness to the well off and simultaneously making arrangements for exemptions of the poor.
- Improve the efficiency of public services to encourage their greater utilization.

- *Promote the establishment of private sector facilities in under-served districts and regions to promote self-selection of private services by the better off.*

Various options for different categories of the population in different income groups need to be considered in the course of developing a framework. As far as the rich are concerned, voluntary private health insurance deserves government encouragement, but there is no justification for public subsidies such as the recent tax concessions. Increased competition would automatically spread the coverage of voluntary health insurance, leading to improved products and services. The State's role is essentially to develop an appropriate legislative framework, and to appoint a dedicated and independent regulatory authority that will monitor the insurance sector, and formulate procedures and regulations to help avoid well-documented market failures. But even in the absence of voluntary health insurance, the rich, given their financial resilience, could continue to depend on out-of-pocket expenses.

The objective for the middle income section is to cover all the employees in the formal sector via social insurance, primarily financed by employer and employee contributions. State participation should at best be nominal. People in the informal sector could join either voluntary health insurance schemes or community finance schemes wherever feasible. If none of these options is chosen, they could continue to rely on out-of-pocket expenses.

Schemes such as ESIS, CGHS, and employer-based schemes already cover the low-income formal sector, though ESIS and CGHS have demonstrated deficiencies of coverage and quality, as well as high administrative costs. These schemes could be replaced by social insurance, with the government playing facilitator and financier, but not necessarily provider of services. The services for social insurance could be contracted out; this would enhance efficiency and reduce costs. The manufacturing and services sector would grow with economic growth and industrialization, so that social insurance could play an increasingly important role. At present, approximately 10% of the population are covered by social insurance and employer-based schemes; this can be increased to around 21% of households, including all income groups, wherever social insurance is feasible.

An estimated 46.6% of the poor population is in the informal sector, and they deserve maximum State assistance since they are beyond the reach of social insurance. The preferred option is Community Financing Schemes. However, such schemes require strong local leadership and organizational capabilities, often provided by NGOs. Most current schemes do not receive any government support, but

state governments could design a package of incentives that will encourage NGOs to develop such schemes in designated areas, with the government contributing a fixed premium for every below-poverty-line (BPL) family covered by such schemes. Also, all donations to genuine community finance organizations should be exempted from tax. But most of the population would still need health cover by the State, calling for a more efficient primary and secondary healthcare system with a strong referral link. Moreover, even community financing schemes and access to public primary and secondary facilities do not provide financial risk protection to the poor against costs of hospitalization and serious illness. This requires the setting up of Sickness Funds in each district to directly reimburse such costs to the public or designated private facility. On current estimates, a fund to cover an approximate 300 million BPL population would require Rs.2,500 to Rs.4,000 crores annually.

The total health spending in 1998-99 is estimated at Rs.161 billion or Rs.16100 crores. This means the level of public investment will have to be more than doubled to reach the average of lower middle-income countries, or 2.2% of GDP. The strategy is to develop dedicated levies that provide a sustained source of finance to strengthen the health sector and insulate it, at least partially, from fiscal crises, emergencies and political upheavals, as has been done in the case of the road sector by the cess on petroleum products.

*Central Level:*

Reallocation from General Revenues: Considering the tight fiscal position and the competing claims of different sectors, diverting significant resources from other sectors to health does not seem feasible. But a 50% increase, or roughly an additional Rs.2000 crores, can be made available -- partly from General Revenues and partly by reallocation from other programmes that have failed to make the desired impact.

Increased External Assistance: From 1990 to 1995, the average disbursement of external assistance to the health sector has been 216 million dollars or Rs.1000 crores – around Rs.10 per capita. Considering the Indian context – population size, levels of income and the burden of disease – the quantum of this assistance is woefully inadequate. But despite this, external assistance has played a key role in directing resources to priority areas. Meanwhile, in view of a better absorptive capacity, it would not be unrealistic to expect assistance to increase to at least three times in the coming years. The resulting yield would mean an additional Rs.2000 crores a year.

The performance of externally aided schemes could be greatly enhanced by reforms at both donor and recipient levels:

- Better project preparations involving full consultation with all stakeholders.
- Timely release of funds allowing advance preparatory action for procurement against the next year's allocation.
- Sufficient provision for maintenance of facilities created for the project.
- Identification, training and positioning of the project team before the project begins, and not shifting them during the project period.
- At least one year's preparatory time for all major projects to complete formalities such as land acquisition, preparation of building plans, finalization of technical specifications and development of training modules.
- Improvement of monitoring mechanisms.
- Simplification of procurement procedures, avoiding multiple references to, and approvals from, donor agencies.

Tax on Tobacco: This tax has two main components -- the basic excise duty, a central levy; and additional excise duty in lieu of sales tax, which is levied and collected by the central government on behalf of the states. This is a buoyant source of revenue with a mechanism already in place for the imposition of a cess. The linkage between tobacco and disease is well established, and taxation serves the dual purpose of reducing consumption and yielding resources. There is a strong case for dedicating at least part of the revenue to preventive and promotive health, particularly to controlling the risk factors for NCDs. Even a 15% cess could contribute at least Rs.1,000 crores to the health sector without disturbing existing sources of revenue.

Revenues from Disinvestment: The government's ambitious programme of disinvestment in public sector enterprises has had a slow start because of political pressures, resistance from trade unions and procedural difficulties. But the establishment of a separate ministry for disinvestment, and the successful privatization of BALCO despite political opposition, augurs well for rapid progress. The Budget for 2001-02 set a target of Rs.12,000 crores from this source. Out of this Rs.7,000 crores is earmarked for restructuring public sector enterprises, and the balance of Rs.5,000 crores for investment in infrastructure and social sectors. Although infrastructure is a high priority, there are many other sources to support it, including the cess on petroleum products and private investment. It is in this context that we urge earmarking at least Rs.2,000 crores annually from disinvestment revenue for additional investment in the health sector.

### *State Levies:*

Levy on Excise: The rationale behind a dedicated levy on tobacco for health applies equally to a cess on state excise duties, which predominantly relate to taxes on alcohol consumption. Again, this is a buoyant source of revenue with an annual yield of about 15,000 crores -- and a 33% surcharge on existing excise revenue could yield 5,000 crores annually.

Property Taxes: There are three categories of property-related taxes. The first one, registration and stamps, is a tax on transfer of property, and yields an annual Rs.10,000 crores. A 20% surcharge could yield 2,000 crores annually. The second source is urban property tax, collected by local bodies. The estimated income, based on 1997-98 per capita estimates, works out to around 2,300 crores. This is a rapidly growing source and the present yield would exceed 2,700 crores. A 33% cess could provide Rs.900 crores per year for Sickness Funds and other healthcare services for the urban poor. The third source is land revenue, which yields around 1,500 crores a year; a 33% surcharge could yield 500 crores a year. Property taxes are currently both low and progressive, and could make a significant contribution towards the new mechanism of Sickness Funds. These funds could be created by a suitable cess on both rural and urban property as well as on their transfers, so that it takes into account both equity considerations and ease of administration and collection. The collections could be pooled state-wise, then allocated to district-level societies proportionate to the number of BPL families. The identified BPL family member would be given free treatment in public facilities and designated private facilities, and the costs charged directly to the Fund. These sources of earmarked levies could yield around 3,500 crores a year, sufficient to support Sickness Funds.

User Fees: This levy cannot be perceived only as a revenue raising mechanism. It discourages the overuse of public facilities by the affluent while correcting some distortions in the use of public facilities. Revenues generated from this source can be used to improve quality of care, in turn improving the utilization of these facilities. User fees can also involve the local community in managing public healthcare facilities, so that a sense of participation and ownership is fostered. The present yield from this source is small, but it is capable of considerable expansion, as indicated by new initiatives in MP and Rajasthan. There are, however, hurdles to a major expansion, and these include the lack of appropriate mechanisms to review user charges; the minimal level of cost recovery caused by low fee structure; the absence of mechanisms to exempt the poor; and the lack of adequate arrangements to ensure fund utilization at the point of collection. But again, recent state initiatives provide lessons that can be applied to overcome these weaknesses:

- The income from user fees should be credited to a hospital-based fund managed at the local level with the authority to review the charges.
- The income from user fees should be additional to the budget allocations for the medical facility.
- Use of the fund should be exclusively for improvements in the relevant medical facility by the local fund management committee, in accordance with state government guidelines.
- *All BPL families should have identification cards to secure automatic exemption. Additionally, effective mechanisms should be in place for the exemption of other indigent families.*

In sum, while resources must be mobilized to change the health system through measures such as dedicated taxes, particularly property taxes, the critical guideline for mobilization is that the resources must be stable as well as sustainable. Since the object of the entire exercise is to provide financial risk protection, insurance as a mechanism must be promoted wherever feasible. So should community finance, which calls, however, for strong leadership from NGOs and local bodies. What happens then to those who do not have access to insurance or community finance schemes? It is for these weaker and disadvantaged sections that mechanisms such as Sickness Funds are necessary; and most of all, an improved primary and secondary health system that delivers care to those who need it most.

## **5. Health Systems**

### **A. Public:**

Our vast rural health infrastructure received substantial financial support during the 1980s, or the Sixth and Seventh Five Year Plan periods. But this substantial investment has not yielded optimal benefits: many institutions are not fully functional as a result of staff shortage and the lack of drugs and consumables. One of the major and persistent causes of a malfunctioning healthcare infrastructure in the rural areas is a critical shortage of key health manpower, particularly of doctors in public facilities. This is partly due to management failures such as inadequate incentives, poor working conditions, and the lack of transparency in posting of doctors in rural areas. The result is that the under-served areas, where even private sector facilities are not available, are completely deprived of any healthcare facilities. An analysis of manpower shortage at the primary level suggests that more than shortfalls of personnel, it is the organization and management of existing human resources that is the key to better performance. The lesson is clear: efficiency in

the use of existing resources should take precedence over mobilizing additional resources.

The deteriorating environment, the lack of safe drinking water and poor nutritional status, all conditions that affect disease burden and health outcomes, are poverty-related. These health hazards threaten the growing slum population in cities – as much as 30-50% of the total urban population. But in the absence of functioning institutional mechanisms, it is difficult to put the required coordinated and integrated action into practice. Divisions within the MHFW have also aggravated compartmentalization. The Ministry is now divided into three independent departments of health, family welfare and ISM. Since population control was considered a priority, an independent department of family planning was created even though public health and family planning services had to be delivered through the common rural health infrastructure. The emphasis on family planning targets transferred the entire rural health portfolio to that department, divorcing it from other health programmes. The result was poor utilization; the PHC, in many states, was in the public eye, only a family planning facility.

An analysis of disparities in health outcomes shows that certain states in India have consistently worse health outcomes. Jean Dreze and Haris Gazdar advance the hypothesis in an analysis of development experiences in Uttar Pradesh, Kerala and the southern states that the relevant determinant of the development status of these states is the reach and functioning of public services, and support this argument with a comparative picture of select public services. This reinforces our hypothesis that public health sector capacity in terms of provisioning of services is a critical determinant for improved health outcomes.

That access to health services is a key mechanism for better health outcomes is also indicated by utilization data: states that have high utilization rates reveal lower mortality rates. NSS data shows that the percentage of people who did not access healthcare for reasons of location is higher in the poor performing states. The analysis indicates a strong association between health outcomes and equity in the public financing of healthcare. Health outcomes appear to be strongly associated with higher per capita public health spending, and with higher allocations to the secondary sector. Scarce financial resources are being inefficiently used, not only in terms of allocative patterns, but also in the management of fund flow and monitoring. Equity in terms of service coverage is important: states that are equitable in the delivery of basic preventive services to poor and disadvantaged groups, have consistently better health outcomes. This points to the need to focus on equitable access to services by disadvantaged groups, in particular SCs and STs, those living in

remote/hilly tracts, and urban slum dwellers, for whom there is no formal system for delivery of primary healthcare services. Access to healthcare is hindered not only by geographic, social and cost barriers, but also by inherent systemic and structural weaknesses of the public healthcare system:

- compartmentalized structures and inadequate definition of roles at all levels of care; inefficient distribution, use and management of human resources so that people have to contend with lack of key personnel, unmotivated staff, absenteeism, long waiting times, inconvenient clinic hours/outreach, service times, unauthorized patient charging;
- inadequate planning, management and monitoring of services/facilities; displaying insensitivity to local/community needs; ineffective or non-existent referral systems, resulting in under-utilization of PHCs, over-utilization of hospital services, duplication of services and cost-ineffective provision of services; inadequate systems to enforce accountability and assure quality;
- inefficient systems for purchasing drugs, supplies and services, which fail to ensure quality and value for money;
- inadequate attention to health education and public disclosure.

Most of these problems can be addressed by the reorganization/restructuring and better management of existing resources.

Setting priorities in health sector policy and planning is a matter of intense debate. International opinion emphasizes the bias in favour of hospital care and the need to reform health systems in favour of primary care. Our analyses suggest that the state must focus on both primary and secondary sectors simultaneously, linked as they are for the delivery of basic health services. The focus on secondary care in the context of referral linkages with the primary sector, and the welfare objective of insuring the poor against costs of illness, is considered as essential as the focus on primary care. Most important is reforming administrative structures to integrate primary and secondary levels through administrative and technical controls at the referral hospital level.

Capacity building to improve both management and clinical efficiency at all levels is considered essential. The capacity to lead and manage programmes is deficient in most health departments in states and needs to be addressed. The need to institute training programmes for improving clinical efficiency at all levels of care cannot be over-emphasised. Re-defining roles and responsibilities, building capacities, and instituting objective and transparent monitoring and evaluation systems that will hold health personnel at all levels responsible and accountable for specific outputs and outcomes is imperative. Simultaneously, an assessment of workloads

at the peripheral level must be undertaken to rationalise workload distribution, and to assess the need for additional multi-purpose health workers and community health workers at the village level. The anganwadi worker could perform the role of the community health worker to advantage, facilitating the convergence of health and nutrition services at the community level. Health personnel must also be supported with adequate infrastructure, drugs and supplies, laboratory services, communication facilities, and mobility to enable them to perform optimally. Information and communication technologies should be used to support health management systems.

The capacity of the public health system to monitor morbidity, and to respond to changes in disease patterns, is greatly hampered by the lack of reliable epidemiological data. The current reporting systems are confined only to public facilities that deal with barely one-fifth of the illness episodes. Hence the huge under reporting, generating a sense of complacency. The model developed by the Christian Medical College, Vellore, and implemented in Kottayam District, Kerala, needs to be replicated as soon as possible all over the country to improve the quality of epidemiological data.

Another important area that has suffered neglect is public health as a discipline. Even the highest technical positions in public health, whether at central or state level, do not require a public health background; specialized institutions as well as faculties of Preventive and Social (Community) Medicine remain in an equally sad state of neglect. Unless public health as a field gets the recognition and importance it deserves, the planning of health systems will continue to over-emphasize curative services.

The foremost problem in designing an efficient health system is the top-down approach with negligible community participation and ownership. Is it possible, for instance, to conceive of bioenvironmental control of vectors, or improvement in sanitation and hygiene, without the active participation of the people making up the community? Similarly, the monitoring and supervision of peripheral health services from state and district headquarters has invariably failed, underscoring the need for active local involvement.

One of the ways to address this deficiency is devolution of powers to local bodies (Panchayati Raj institutions). But the fact is that decentralization could have conflicting results without sufficient preparation of local bodies to take on this expanded role. The Kerala experience indicates that decentralization has to be preceded by a long period of planning, defining and clarifying responsibilities, capacity building and advocacy. Capacity building of local bodies as well as the community is an essential prerequisite to reap the full benefits of decentralization. It is evident that such devolution

encourages local bodies to consider health as integral to other development activities, facilitating coordinated action on other determinants of health such as water and sanitation. Simultaneously, it is imperative that inter-sectoral co-ordination mechanisms be institutionalised at all levels through the establishment of Cabinet Sub Committees, and inter-departmental committees at state, district and sub-district levels to facilitate convergence and co-ordinated action on health determinants that fall outside the direct purview of the health department.

The states provide several examples linking the issue of community participation with institutional autonomy and delegation of powers to local committees to raise and use resources for improvements in public health facilities. The experiences of Madhya Pradesh and Rajasthan, for instance, show a marked improvement in the quality of services, availability of drugs and consumables as well as patient satisfaction. These are welcome initiatives; but they are yet to be converted into a comprehensive policy to secure community participation in all health programmes.

#### B. Private:

Without in any way underestimating the importance of the public health system, it must be recognized that the private sector has grown to be the main provider of curative healthcare. At the all-India level, the private sector currently dominates both outpatient and inpatient care: 82% of all outpatient visits take place in the private sector. An important dimension to the utilization of in-patient care in the public and private health sector is the share between the rich and the poor. Overall for India, the percentage of the poorest quintile using private sector hospitalization facilities is, at 39%, almost half that of the richest at 77%. Tertiary care institutions, providing specialized and super-specialized care in the private sector, constitute only 1-2% of the total number of private institutions; and corporate hospitals, which have in recent times gained in visibility and publicity, actually constitute less than 1%.

The evidence is that the people of India, including the poor, make considerable use of the private health sector. But at what cost? This is a crucial dimension of the private health sector in India, unfortunately under-researched. NSS data reveals that the average cost of treatment in the private sector for rural inpatients is 2.1 times higher, and for urban inpatients 2.4 times higher, than in the public sector during 1995-96. Technology advances are usually associated with a decrease in costs, but the reverse holds true for the medical sector, where technological developments have been capital-intensive, making the provision of healthcare increasingly expensive. A proliferation of medical equipment and technologies in urban areas

has led to excess capacities, and the consequent unnecessary and irrational use of these technologies.

In sum, rather than private providers developing into partners with the State in the achievement of national health goals, the technical quality of care provided in the private sector is often poor – ranging from poor infrastructure to inappropriate and unethical treatment practices, to over-provision of services and exorbitant costs, to delivery by unqualified providers. Information asymmetry among users, arising out of a lack of information and an inability to make sound judgements about available types of healthcare, compounds the problem. The natural corollary to the concentration of qualified practitioners and facilities in urban areas, and the limited spread of the voluntary sector, has been the rise of unqualified, rural medical practitioners. The estimated one million illegal practitioners are said to be managing 50-70% of primary consultations, mostly for minor illnesses, and, in this sense, form the *de facto* primary curative healthcare system of rural India. A clear policy promoting private health facilities in the under-served areas, along with a set of clearly defined incentives, would correct these imbalances.

Given the extent of private sector dominance in the healthcare system, any significant improvement in healthcare is inconceivable without the active involvement and cooperation of the private sector, particularly the voluntary sector. According to a rough estimate, the number of voluntary organizations working in healthcare areas is more than 7000. Despite the lack of comprehensive documentation on the contribution of NGOs, there is no disputing the fact that NGOs have the potential to improve access, quality and equity of services, either through direct provision or through advocacy and other action. This potential to contribute substantially to public health goals has not been realized due to several reasons. Their limited size and spatial distribution is a major cause. That they are missing where they are most needed hinders effective partnerships with the public health system. The challenge is to find strategies that will facilitate a far more substantial participation by NGOs in the health sector, particularly in backward states and remote areas, and to ensure systems that will keep such participation accountable and transparent.

Public-private partnership would make a considerable contribution to the successful implementation of public health programmes. Also necessary are continuing medical education, and the active involvement of professional bodies – to disseminate standard treatment protocols for diseases such as TB and malaria, to check the irrational use of drugs, and to regulate unethical practices.

Equally important is the task of developing appropriate independent

mechanisms for the regulation of the private sector – mechanisms that involve all stakeholders, set up and enforce standards, ensure quality control, transparency of charges, control unethical practices and promote accreditation systems. The challenge is to devise innovative mechanisms that address the acknowledged distortions and malpractices, yet do not stifle private initiative – so important for the expansion of healthcare facilities to meet growing demand. The legislations under consideration in Andhra Pradesh and Karnataka, and the initiative taken by Maharashtra in developing accreditation mechanisms, deserve commendation.

Finally, each state needs to work out the problem of unqualified practitioners with a view to their eventual elimination. Awareness generation, strengthening and expanding the reach of public and private qualified health care, will in the long term, eliminate the demand for services of unqualified practitioners. In the interim, the registration and training of such practitioners, limiting the scope of their use of allopathic drugs for treating minor ailments, needs to be attempted as a temporary measure.

## **6. Drug Policy and Regulations**

The Indian pharmaceutical industry is already feeling the impact of globalization, even though the WTO mandated legislation to recognize product patents is to be brought into force only in the year 2005. The agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS) came into force with the formation of the World Trade Organization (WTO) in January 1995. TRIPS obliges all developing countries to make available 20 year patent protection for novel, non-obvious and useful inventions, whether products or processes, in all fields of technology including pharmaceuticals. Violations of TRIPS obligations can lead to trade retaliation or compensation to affected WTO members. India has so far recognized only process patents in pharmaceuticals, and legislation for compliance with WTO obligations is pending passage in Parliament. As of December 1999, only 16 WTO countries, including India, continued to exclude pharmaceuticals from product patent protection. India has no option but to fall in line; but the government should actively explore ways in which the advantages of the new regime can be maximized and the disadvantages minimized.

The public policy question will have to be resolved in such a way that a balance is maintained between the need to keep new drugs affordable to those who need them, while retaining strong incentives for the invention of new drugs and the development of new and better treatments. The selective use of compulsory licensing provisions for the manufacture of generic substitutes for patented drugs having major public health significance has to be explored with

international cooperation. So far, the Indian pharmaceutical industry has paid scant attention to research because of the absence of product patent protection, and concentrated its energies on producing generic substitutes for foreign patented and branded products. But the Intellectual Property Rights Regime (IPR) is set to change with the introduction of product patents in conformity with WTO mandated regulations. The Indian pharmaceutical industry already commands a major advantage over its rivals in the West since the cost of bringing a new chemical entity into the market is estimated at \$250-500 million in the US, but only \$90-100 million in India. According to a recent study by the Administrative Staff College of India (*The Indian Pharmaceutical Industry*, May 2000), "India has the potential to become the hub of pharmaceutical research." In order to harness the resources and skills of the Indian pharmaceutical industry towards the neglected diseases of the poor, the government needs to develop an appropriate incentive framework.

At present, the administration of drugs and pharmaceuticals is divided between the Ministry of Chemicals and Fertilizers (MCF) that is responsible for drug policy; and the Ministry of Health and Family Welfare (MHFW) that sets standards and deals with quality control, the introduction of new drugs and the enforcement of relevant laws and regulations. This arrangement prevents the government from taking a holistic view that includes the interests of both the industry and the consumer. Often, the policy of one ministry is at cross-purposes with that of the other. As early as 1975, the J. L. Hathi Committee recognized this dichotomy and suggested that an independent National Drug Agency be set up to take over all the drug-related functions performed by the two Ministries. The proposed NDA could be supported by a small cess on the manufacture and import of pharmaceuticals, conveniently collected along with excise and customs duties. Significant public sector support would be necessary to motivate the pharmaceutical industry to invest in R&D in diseases of the poor such as TB and malaria, and the proposed National Drug Fund could provide one such avenue of support. The current situation is unlikely to improve merely by tinkering with the existing system. The only option that would make a noticeable difference is an independent National Drug Authority, supported by adequate financial resources from the National Drug Fund.

Elsewhere in the Report, we have recommended greater decentralization and devolution of powers to the states. However, the indiscriminate licensing of drugs by the states, the poor enforcement of quality standards, and the open violation of laws regarding sale of prescription of drugs, compels us to suggest an enlarged role for the central authority. The proposed NDA, armed by a new law that provides for more stringent scrutiny before licensing, could weed out

irrational combinations and ensure stricter enforcement. The National Drug Fund should be used primarily to support the NDA, upgrade public health laboratories, and strengthen the enforcement machinery. The unauthorized and irrational use of anti-microbials by unqualified practitioners and registered practitioners of other systems of medicine, a situation encouraged by the free sale of prescription drugs across the counter, has been a major factor in the development of drug-resistant bacteria. Similarly, the proliferation of over 20,000 manufacturers without the requisite infrastructure to monitor GMP, and the large-scale manufacture and sale of sub-standard and spurious drugs, pose a major health hazard. Only stringent laws that are effectively enforced can check these problems.

## **7. Health Research**

India has great potential and unique capabilities in health research. Its acknowledged strengths in all knowledge-based activities, its infrastructure and trained manpower, its vast clinical material, rich bio-diversity, unparalleled heritage of traditional systems of medicine and a dynamic and technologically capable pharmaceutical industry all add up to this potential. But only a national health research policy that creates an incentive environment for both public and private sectors will help the country realize this potential to the fullest. Timely enactment of IPR related legislation would bring the present phase of uncertainty to an end. Next, a substantial increase of public investment in basic and strategic research is required, with a specific focus on the neglected diseases of the poor. The international support for health research has so far been nominal – the estimate is 5% of the total health R&D expenditure in 1992-93. Indian potential in this area justifies a major increase in external assistance. A priority should be health policy and systems research, to date a neglected area except for the recent interest shown by the World Bank and some bilateral donors.

The lack of available expertise in disciplines such as health economics, health finance and epidemiology is a major constraint on health policy and systems research, and special efforts need to be made to train researchers in these fields. Research capacity should be strengthened – with the improvement of infrastructure, the training of scientists, and through new collaborations with institutions in the North and the South. In particular, capacity needs to be developed quickly to undertake clinical trials for new molecules likely to be introduced for the various communicable diseases. At the same time, appropriate mechanisms have to be put in place for close monitoring and enforcement of ethical guidelines. Existing public sector institutions could produce higher quality of research with more appropriate management structures. Most important, for both public

and private sectors, is a network of alliances among academia, research institutions and industry. The utilization of basic and strategic research outputs by industry to take the process further toward product development should be the goal of such an alliance. The ICMR should develop suitable mechanisms to facilitate such an alliance, and the inter-mediation between research outputs from academia and research institutions, and the pharmaceutical industry along the lines of TDR in WHO. It is also essential to establish institutional mechanisms that will promote interaction between policymakers and programme managers on the one hand, and researchers on the other, for setting the research agenda and for utilization of research outputs.

## **8. Indian Systems of Medicine (ISM)**

The term ISM comprises six different systems – ayurveda, siddha, unani, yoga, naturopathy and homeopathy – out of which only ayurveda, siddha and yoga are entirely indigenous. India has a rich heritage in ancient systems of medicine that make up a veritable treasure house of knowledge, and these systems can make a significant contribution to the healthcare of the population. But despite a vast parallel infrastructure of hospitals, dispensaries and teaching institutions, and over 6,00,000 registered practitioners, this potential has not been realized. Over 90% of illness episodes are treated by allopathy. Even registered practitioners of ISM treat patients with modern drugs though they are not authorized to do so, often with undesirable consequences. The failure to evolve the synthesized national system recommended by the ICSSR/ICMR Committee has prevented the use of even proven ISM remedies in public healthcare facilities. Also, the vast army of ISM manpower has rarely been utilized for public health programmes. The failure to evaluate traditional remedies scientifically has prevented their wider acceptance in India as well as abroad. What is most important is for ISM to develop its strengths in providing relief in apparently incurable chronic ailments such as digestive disorders, asthma and arthritis. At the same time, ISM needs to popularize preventive practices such as yoga, which could be an important element in the strategies being evolved to cope with the threat of NCDs. Some recent initiatives of the new Department of ISM seem to address these deficiencies; but on the whole, this area requires priority attention to explore and realize its full range of possibilities.

## **9. Conclusion :**

The above analysis clearly underscores the need for a quantum jump in the public investment for health, accompanied by wide-ranging reforms at every level. This can be achieved only with strong political will and commitment, which can in turn be generated

only through a strong people's movement cutting across party affiliations. The first step is better awareness and the widest possible dissemination of information on health issues. It is only vigorous informed debate on health issues – in Parliament, in the state legislatures, in the media, and in various public forums – that will eventually grow and gel into a broader people's movement. It is in the context of this long and complex process that this Report seeks to identify, describe and analyze the current issues in Indian health and the future directions of change.

### **III. Future Directions: Summary of Recommendations**

#### **1. Communicable Disease Control:**

- Acceleration of India's epidemiological transition by vigorous public policy to control communicable diseases; malaria control to focus on those areas with an API above 2; rapid expansion of DOTS so that the entire country is covered for TB control.
- Enhanced investment in drinking water supply, sanitation and sewage systems for prevention and control of water and vector-borne diseases.
- Substantial increase of central funding for centrally sponsored schemes, without stipulation of matching contribution by the states.
- The central government to consider a more direct intervention in actual implementation in weak performing states, if necessary through trained personnel on contract; in well performing states, release of block grants for each national disease control programme against certain clearly defined deliverables to provide greater flexibility in the implementations of the programmes.
- Establishment of a comprehensive disease surveillance system in all districts with central funding.
- Vigorous and sustained efforts to prevent the spread of HIV/AIDS, with focus on IEC and interventions involving high risk population; simultaneously, arrangements for medical and home-based care of AIDS patients through clinical training in treatment protocols and sensitization of health workers, the community and families on HIV/AIDS patients.
- Co-opting the private sector in communicable disease programmes for reporting and training in standard treatment protocols; this should include continuing medical education and active participation of professional bodies like the IMA.
- Development of community-based strategies, including comprehensive health education to promote public and personal hygiene and healthy living.

## **2. Facing the Rising Threat of NCDs:**

- Focus on prevention: reduce risk factor levels in the whole community through
  - Widespread dissemination of information on risk factors and unhealthy lifestyles
  - Lifestyle linked community programmes
  - Tobacco Control Legislation
  - Injury prevention through institutionalised multisectoral mechanisms
- Institute cost-effective case-management strategies through:
  - Early detection of persons with risk factors and low cost interventions
  - Development of a menu of core components to provide an 'essential package' of chronic care with possible extension to an 'optimal package'
- Develop protocols for integration of prevention, surveillance and treatment services into various levels of healthcare.

## **3. Reduction of Infant and Maternal Mortality:**

- Targeting of high IMR states first, and within states, high IMR districts and regions; all CHCs and 24-hour PHCs in high IMR districts and regions to be fully equipped to handle institutional deliveries, basic newborn care and referral.
- Focus on the disadvantaged and poorest groups; trained CHWs to be located in identified remote and hilly regions; provision of essential MCH services in urban slums to be ensured.
- Policy and programme interventions to move from general focus on IMR to perinatal and neonatal mortality; clean delivery, timely treatment and control of newborn infections, treatment protocols for low birthweight babies.
- Comprehensive screening of every pregnant woman for anemia, hypertension, diabetes, urinary and reproductive tract infections, malaria, and TB, to be followed up with appropriate treatment.
- Arrangements to effectively screen and identify all high risk pregnancies and low-weight fetuses, and to follow-up each case for delivery in appropriately equipped health facilities; in general, active promotion of institutional deliveries by providing appropriate facilities and incentives including emergency transportation.
- Provisioning unmet needs for family planning, a necessary intervention to reduce MMR and IMR

- Developing specific protocols to address major causes of childhood morbidity and mortality at all levels of care : ARI, diarrhoeal diseases, measles, malaria, undernutrition.
- Converging action at the cutting edge level by using anganwadi workers to support delivery of basic health services on a case-payment/honorarium basis.
- Mobilising women's groups for improved health/nutrition seeking behaviour.

#### **4. Finance:**

- Public health expenditure to be more than doubled to raise the level of public investment from the present 0.9% of GDP to at least the level of the average of lower middle-income countries (2.2% GDP); additional resources to be mobilized largely through dedicated levies to avoid competition from other sectors and to provide increasing and sustainable funding.
- Increase of allocation for public health and primary and secondary healthcare that is better utilized by low-income families.
- Differential planning and deployment of budgets in line with the extent of disease burden, economic backwardness of the state/region and poverty levels; the government to bear a special responsibility to ensure good quality care through appropriate incentives and strengthening of facilities in backward and poorly developed areas/states, since public sector facilities may be the only facilities available.
- Utilization of user fees at secondary and tertiary levels to reduce the price advantage of public services, reducing their attractiveness to the affluent and simultaneously making arrangements for exemptions of the poor.
- Setting up of mechanisms such as Sickness Funds to provide financial risk protection to the poor against serious illness and hospitalization.
- Coverage of employees in the formal sector with social insurance primarily financed by employer and employee contributions; social insurance to replace low coverage existing schemes, especially in the low-income formal sector, with services contracted out to enhance efficiency and reduce costs.
- Package of incentives to encourage NGOs to develop community finance schemes in designated areas, with the government contributing a fixed premium for every BPL family covered by the scheme.
- Arrangements for systematic compilation of national health accounts and their regular analyses.

## 5. Health Systems:

- Restructuring of Central Ministry of Health and Family Welfare so that it withdraws from day-to-day management and concentrates on its stewardship role by strengthening its planning, analytical and public health expertise.
- Restructuring of the health systems of the states based on three principles: (i) decentralized authority, responsibility and decision-making; (ii) integration of preventive, promotive and curative services; and (iii) local community participation.
- Removal of identified constraints and inadequacies at the primary healthcare level to improve efficiency and utilization: reducing the load on over-utilized hospital services by providing essential drugs, consumables and diagnostics.
- Improving maintenance of facilities and transport, providing essential communication facilities like telephones, and rationalising development of manpower on the basis of workload assessments.
- Addressing manpower shortages through an appropriate combination of incentives, legislative measures, and management reforms: reservation of PG seats for those candidates in service with a record of rural service; making rural service compulsory for admission to PG courses; contractual appointments to fill vacancies; a transparent transfer policy that requires every doctor to work in rural areas by rotation for a prescribed period; preference for foreign training given to doctors with rural service records; better residential facilities, rural service allowance only for those certified by local authorities as staying in headquarters; allowing private practice only in under-developed areas where even private facilities are inadequate, legislating primary health services in notified areas as a priority service with attractive scales of pay.
- Instituting efficient procurement and distribution systems for drugs and consumables based on the Tamilnadu model
- Mapping the availability of health facilities in hilly regions and areas inhabited by tribal populations; the provision of mobile health teams and community health workers to cover identified gaps.
- Provisioning cost-effective primary health services for the urban slum population, through contracting existing private sector infrastructure/manpower/services.
- Decentralization and devolution of powers to local authorities after careful preparation and adequate training.
- Delegation of administrative and financial powers to public health facilities to be exercised through local committees to promote efficiency, accountability and mobilization of resources.
- Institutionalization of inter-sectoral coordination arrangements at different levels for effective action on major health determinants

outside the direct purview of health departments: nutrition, water supply, sanitation, sewerage systems, air pollution.

- Involvement of community self help groups and women's groups for people's participation in health programmes.
- Institutional arrangements for regulating the private sector with the participation of all stakeholders to set and enforce standards, control unethical practices, and ensure transparency of charges and non-denial of emergency care.
- Development of capacities for contracting out services to the private sector; promoting new partnering initiatives with the private sector for service delivery and management of public institutions.
- Development of an attractive incentive package for the voluntary sector to set up facilities in identified under-served areas.
- Promotion of expansion of private sector facilities in under served areas through monetary and non-monetary incentives.
- Promotion of accreditation networks for improved quality, for identified services and for ethical practices through professional bodies/ voluntary organizations.
- Empowering users through public disclosure to negotiate for better information sharing, quality of care and cost-containment
- Institutionalising arrangements to foster partnerships and promote trust between public and private sectors
- Eliminating the unqualified practitioners in a phased manner through awareness generation and strengthening of facilities in the public and private sectors. In the interim, containing the damage through registration and training of such practitioners wherever feasible, by limiting the scope of their use of allopathic drugs to treating only minor ailments

## **6. Drug Policy and Regulations:**

- Creation of an independent National Drug Authority to take over all drug-related functions, supported by a National Drug Fund financed by a small cess on the manufacture and import of pharmaceuticals; institution of a more stringent law to deal with the proliferation of sub-standard manufacturing units and irrational fixed dose combinations, poor laboratory facilities, sub-standard and spurious drugs, weak enforcement machinery, and open violation of law by chemists selling prescription drugs over the counter.
- Selective use of compulsory licensing to produce generic substitutes for patented drugs of public health significance, and to provide the necessary incentives and financial support to pharmaceutical companies for the same.

## **7. Health Research:**

- Development of a health research policy to create an incentive framework to promote research, particularly on the diseases of the poor.
- Higher investment in development of infrastructure for basic and strategic research in the public sector, with changes in the management structures to promote quality research outputs.
- Development of alliances among academia, research institutions and the pharmaceutical industry to promote the utilization of research leads by the industry for product development; ICMR to develop capacities for such inter-mediation on the lines of TDR in WHO.
- Emphasis on health policy and systems research and reducing the deficiency of researchers by providing training avenues in epidemiology, health finance and health economics.
- Creation of an incentive environment for the pharmaceutical industry to invest in research through tax concessions, pricing incentives for new molecules, facilitating clinical trials and regulatory approvals, and supporting promising products for the neglected diseases of the poor with financial support from the National Drug Fund.

#### **8. Indian Systems of Medicine:**

- Development of a national health system incorporating the best of all systems; including proven remedies of ISM as first drugs of choice in the public healthcare system.
- Encouraging scientific evaluation of traditional remedies.
- Utilization of ISM manpower in public health programmes.
- Emphasis on the special strengths of ISM in treating chronic ailments such as digestive disorders, asthma and arthritis.
- Popularizing ISM practices such as yoga to prevent and treat NCDs.