

ENSURING A HEALTHY FUTURE

by

Dr Jayaprakash Narayan

LOK SATTA

401/408 Nirmal Towers

Dwarakapuri Colony, Punjagutta

Hyderabad – 500 082

Tel: 040 3350778/3350790; Fax: 040 3350783

E-mail: loksatta@satyam.net.in; url: www.loksatta.org

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I. Impressive Record

Over the past five decades India recorded impressive achievements in the health sector. As the National Health Policy – 2002 ¹notes:

“Government initiatives in the public sector have recorded some noteworthy successes over time. Smallpox and Guinea Worm Disease have been eradicated from the country; Polio is on the verge of being eradicated; Leprosy, Kala Azar and Filariasis can be expected to be eliminated in the foreseeable future. There has been a substantial drop in the Total Fertility Rate and Infant Mortality Rate. The success of the initiatives taken in the public health field are reflected in the progressive improvement of many demographic/epidemiological infrastructural indicators over time.”

Table 1: Achievements Through The Years - 1951-2000

Indicator	1951	1981	2000
Demographic Changes			
Life Expectancy	36.7	54	64.6(RGI)
Crude Birth Rate	40.8	33.9(SRS)	26.1(99 SRS)
Crude Death Rate	25	12.5(SRS)	8.7(99 SRS)
IMR	146	110	70 (99 SRS)
Epidemiological Shifts			
Malaria (cases in million)	75	2.7	2.2
Leprosy cases per 10,000 population	38.1	57.3	3.74
Small Pox (no. of cases)	>44,887	Eradicated	
Guinea worm (no. of cases)		>39,792	Eradicated
Polio		29709	265
Infrastructure			
SC/PHC/CHC	725	57,363	1,63,181 (99-RHS)
Dispensaries & Hospitals (all)	9209	23,555	43,322 (95–96- CBHI)
Beds (Pvt & Public)	117,198	569,495	8,70,161 (95-96-CBHI)
Doctors (Allopathy)	61,800	2,68,700	5,03,900 (98-99-MCI)
Nursing Personnel	18,054	1,43,887	7,37,000 (99-INC)

Source: National Health Policy – 2002

As the National Health Policy notes, this improvement in health indicators is the outcome of specific health initiatives as well as other complementary initiatives in the developmental sector. One of the happy features of health care in modern world is that mankind is getting ever closer to full potential in terms of health, quality of life and life span. Most of preventable disease and avoidable suffering can now be eliminated or controlled. Health technologies can be transplanted with relative ease even on otherwise underdeveloped societies. Most effective health interventions are relatively inexpensive and can be widely applied to large masses of people. Modern communications revolution too makes it easy to generate demand for better health, and disseminate information on healthy practices. The real challenge is one of creating and sustaining viable, effective and responsive health delivery systems.

India enjoys a somewhat privileged position among developing countries though our level of health is still well below many other societies (India occupies 124th position in UNDP Human Development Index² - and 112th rank as per World Health Report 2000³). We have impressive technical capabilities and manpower availability compared to most poor countries. We have over half a million trained allopathic physicians. While the doctor, population ratio of around 1:2000 (UNDP HDI report 2002) is well below the norm for advanced countries, there is evidence to suggest that for our level of economic development and affordability, we have more physicians than we can gainfully employ. A World Health Organization (WHO) technical report on migration of physicians and nurses (1979) established a relationship between GDP per capita and the physician coverage available to the community. In other words, the number of modern doctors trained by expensive western methods that the society can gainfully employ depends **not** on the availability of doctors or the real needs of the population in terms of prevalence of morbidity and mortality, but on the stage of economic development. Based on a projection of available data (1970), it was concluded that India could sustain only 6 physicians per 100,000 population at that time. India had 21 physicians per 100,000 population then; today India has about 50 physicians per 100,000 population; while there is no data on how many of them are gainfully employed, it is certain that we have more than adequate number of physicians for our current economic status. The comparisons with rich countries and norms which suggest that we need a physician for every 500 population or so are somewhat unrealistic, as they have not taken into account the socio-economic realities. In fact Sri Lanka, which is ranked 89 (as opposed to India's 124th rank) in HDI, and whose health indicators are far superior to ours in many respects, has only 36 physicians per 100,000 population!

Table 2: Determinants of Migration

Differences between actual and sustainable number of physicians per 10,000 population in countries grouped according to GDP per capita (1970)

GDP group	Country	Physicians per 10,000 population		
		Actual	Sustainable	Excess or shortage (2-3)
	(1)	(2)	(3)	(4)
A. GDP less than US \$ 800 per capita	Brazil	4.6	3.2	+1.4
	China			
	Columbia	4.6	2.6	+2.0
	Egypt	5.5	1.6	+3.9
	Ethiopia	0.1	0.5	-0.4
	Gabon	1.9	5.5	-3.6
	Haiti	0.7	0.6	+0.1
	India	2.1	0.6	+1.5
	Indonesia	0.3	0.7	-0.4
	Iran	3.1	3.1	0.0
	Jamaica	2.5	5.2	-2.7
	Lebanon	8.1	4.4	+3.7
	Mauritius	2.5	1.6	+0.9
	Nigeria	0.2	0.9	-0.7
	Pakistan & Bangladesh	3.9	1.2	+2.7
	Philippines	3.5	1.3	+2.2
	Portugal	9.5	6.0	+3.5
	Rep. of Korea	4.8	1.9	+2.9
	Sri Lanka	2.5	1.2	+1.3
	Sudan	0.7	0.7	0.0
Thailand	1.3	1.3	+0.1	
United Rep. Of Cameroon	0.4	1.6	-1.2	
Uruguay	10.7	7.0	+3.7	
Yemen	0.4	0.5	-0.1	
Yugoslavia	10.5	5.1	+5.4	
B. GDP US \$800 to US \$ 2,000 per capita	Greece	16.7	9.0	+7.7
	Ireland	11.8	11.0	+0.8
	Romania	13.1	9.0	+4.1
	Venezuela	9.3	8.6	+0.7
C. GDP over US \$2,000 per capita	Australia	13.9	26.5	-12.7
	Austria	18.6	17.0	+1.6
	Canada	16.5	38.0	-21.5
	Federal republic of Germany	17.7	29.0	-11.3
	Israel	25.1	15.5	+9.6
	Japan	11.4	16.1	-4.7
	New Zealand	11.7	19.5	-7.8
	Sweden	13.8	40.0	-26.2
	United Kingdom	13.3	18.5	-5.2
	United States of America	15.5	49.0	-33.5

Source: WHO Technical Report - Migration of Physicians and Nurses (1979)

Similarly, India has impressive health research capability. But its expenditure on health research in both public and private sectors in 1998-99 (NHP-2002) was a paltry Rs 1150 crores, which constitutes only 1.5 % of total health expenditure. Even NHP-2002 goals are modest, the targets for public expenditure on health research being pegged at 1 % of total health expenditure in 2005, and 2 % in 2010. However the basic infrastructure, manpower and capability exist for quality research.

Yet another advantage is the impressive pharmaceutical industry in India which makes us largely self reliant in drug production. While there are obvious problems of adjustment on account of protection of intellectual property rights under the new world trade agreement, our industry has the resilience, skills and capability to serve our needs at reasonable costs.

Finally, the diagnostic and therapeutic skills of Indian medical manpower are second to none. Excellent hospital infrastructure is coming up. The cost of sophisticated medical and surgical interventions in India is only a fraction of that in the developed countries, while our safety and success rates are comparable with the best in the world.

These are impressive achievements for an otherwise poor country with relatively low level of human development. We need to build on these strengths and capabilities while devising and implementing effective strategies for ensuring a healthy future.

II. Economic Growth and Health

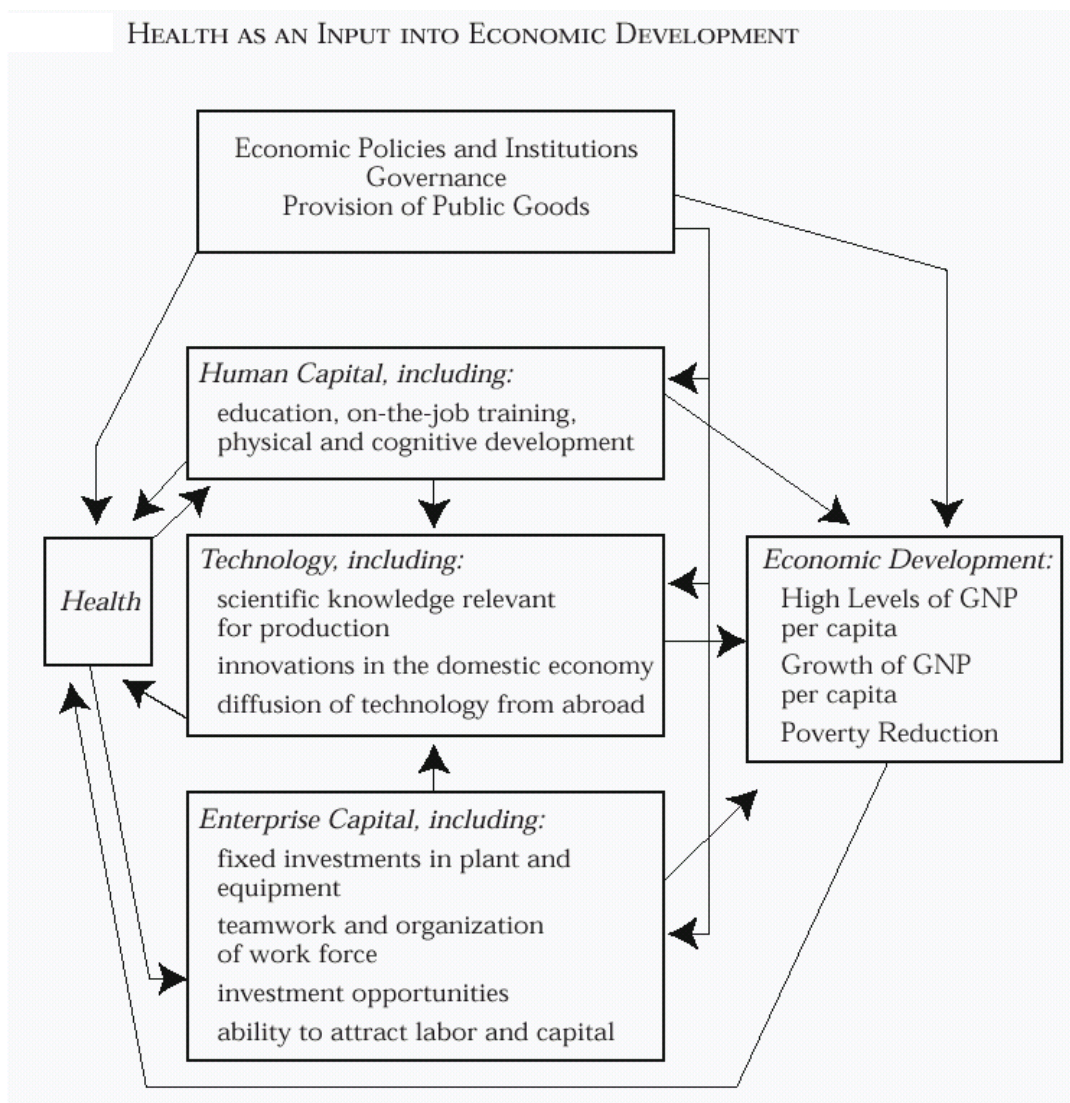
That economic prosperity and the state of health of a community go together is a self-evident proposition. As global prosperity improved after the Second World War, there has been significant improvement in health indicators. Between 1960 and 1995, life expectancy in poor countries rose by a remarkable 22 years⁴ (Economist: Dec 20, 2001). Infant Mortality Rate in poor countries, which was around 150 per 1000 live births, fell to 40 on an average. The reasons are not far to seek. With economic growth, there are higher investments in basic infrastructure. As access to safe drinking water and sanitation improves, most of the water-borne diseases disappear. With education come health awareness and skills to combat disease. And as more resources are devoted to public health, there is better immunization coverage, and greater access to primary and secondary health care. Much of health improvement witnessed in India too followed the same pattern.

However, the relationship between economy and health is not a one-way street. Just as prosperity improves health, better health promotes economic growth. High incidence of disease forces a society to spend disproportionate sums of money on health care, starving other critical sectors. The plight of many African countries ravaged by AIDS is a testimony to the devastating impact of ill health on a society and economy. The lessons of the past five decades are clear. Human development is the precondition for prosperity. In the 50's, wide prevalence of Malaria in Punjab meant that there were not enough workers on the farms. Sickness obviously reduces productivity. Once Malaria was brought under control, farm productivity went up. Health improvement was one of the significant factors behind the green revolution. At the level of the individual and family, the impact of poor health on economic well being is even more pronounced. Sickness

forces poor families to sell their precious, and often productive, assets to pay for medical care. Poor families in India spend 7 to 8 percent of their annual household income on health care⁵ (Charu C Garg :1998). World Bank studies show that hospitalized Indians spend 60 percent of their total annual expenditure on medical care, and a large share of this comes from borrowed funds. Sickness is thus one of the biggest contributors to impoverishment and indebtedness. When infant mortality is high, parents tend to have more children as they do not expect all children to survive. The resultant population growth, and consequent pressures on scarce resources and limited opportunities are only too evident in India to need elaboration. Education of a child is a low priority in a large family, perpetuating the low skills-poverty-sickness cycle. Epidemics and endemic infections discourage tourism and free movement of people, leading to economic isolation. The prevalence of Dengue fever and Chloroquin-resistant malaria in Eastern India, and fear of AIDS, yellow fever, malaria, Kala Azar and Leishmaniasis in many African countries have significantly curbed economic activity and trade. According to Economist⁶, by one estimate, malarial countries would be twice as prosperous today if the disease had never existed!

The Commission on Macroeconomics and Health⁷, chaired by Jeffrey Sachs in its report has succinctly summed up the interrelation between health and economic development:

“Because disease weighs so heavily on economic development, investing in health is an important component of an overall development strategy. This is especially true in poor countries where the burden of disease is very high. But investments in health work best as part of a sound over-all development strategy. Economic growth requires not only healthy individuals but also education, and other complementary investments, an appropriate division of labor between the public and private sectors, well-functioning markets, good governance, and institutional arrangements that foster technological advance. Private sector-led growth in the business sector must be complemented by an active role of government in several areas: ensuring core investments in health and education, guaranteeing the rule of law, protecting the physical environment, and working in cooperation with the private sector to foster scientific and technological advance. We are not claiming that investments in health can solve development problems, but rather that investments in health should be a central part of an overall development and poverty reduction strategy.”

Figure 1: Health As An Input Into Economic Development

Source: Macroeconomics and Health: Investing Health For Economic Development, Report of The Commission on Macro Economics and Health, World Health Organisation, 2001. p.26

As the figure shows, economic output is a function of policies and institutions (economic policies, governance, and supply of public goods) on the one hand, and factor inputs (human capital, technology, and enterprise capital) on the other. "Good policies determine economic performance for any given level of capital and technology, and also the pace at which capital and technology accumulate. Health has its most important economic effects on human capital and on enterprise capital through a variety of pathways, some obvious and others more subtle. Health itself is affected by the prevailing policies and institutions, the level of human capital (since education, for example, promotes health), the level of technology in the society,

especially in the health sector itself, and on the very growth in income and poverty reduction that better health engenders.⁸”

III. Efficiency of Health Expenditure

However, the relationship between economic condition and the health of a community is not always straight-forward. Kerala, Sri Lanka and Malaysia, showed significant improvement in health indicators even by 1980, despite relatively low levels of prosperity. Similarly, China and many communist countries showed health improvements faster than economic growth. Even relatively low levels of health expenditure can yield high returns in terms of health. Conversely, greater prosperity and high health care expenditure does not necessarily translate into better health. The US spends the highest amount per capita on health (\$4,600) in the world. But such high expenditure does not necessarily guarantee better health. Americans rank lower in Disability Adjusted Life Expectancy (DALE) terms than Japanese (health expenditure \$1,700), Spaniards (\$1,300), French (\$2,200), Italians (\$1,800) and Australians. Global health care spending, which was about 3% of gross world product in 1948, has now reached 7.9% (World Health Report, 2000)⁹, but more expenditure does not always guarantee better results.

At the lower end of the spectrum, the total health expenditure (public and private) in India (at 6% of GDP according to World Development Report, 1993; 5.2% of GDP according to National Health Policy, 2002¹⁰) is higher than expenditures in China, Sri Lanka and Indonesia in per capita terms. And yet, each of these countries is ranked higher than India in health terms, as measured by Disability Adjusted Life Expectancy (DALE). Clearly, higher per capita income and high expenditures do not ensure better health. Conversely, lower expenditure on health can yield better results if the resources are utilized wisely.

Table 3: GDP Per capita, Health expenditure DALE rankings

Country	GDP per capita (in PPP terms - \$)	Health Expenditure per capita ranking (in \$ terms)	Health Level Ranking (DALE)
Low Income Countries			
Sri Lanka	3530	138	76
China	3976	139	81
Indonesia	3043	154	103
Vietnam	1996	147	116
Pakistan	1928	142	124
India	2358	133	134
Bangladesh	1602	144	140
Egypt	3635	115	115
Nigeria	896	176	163
Middle Income Countries			

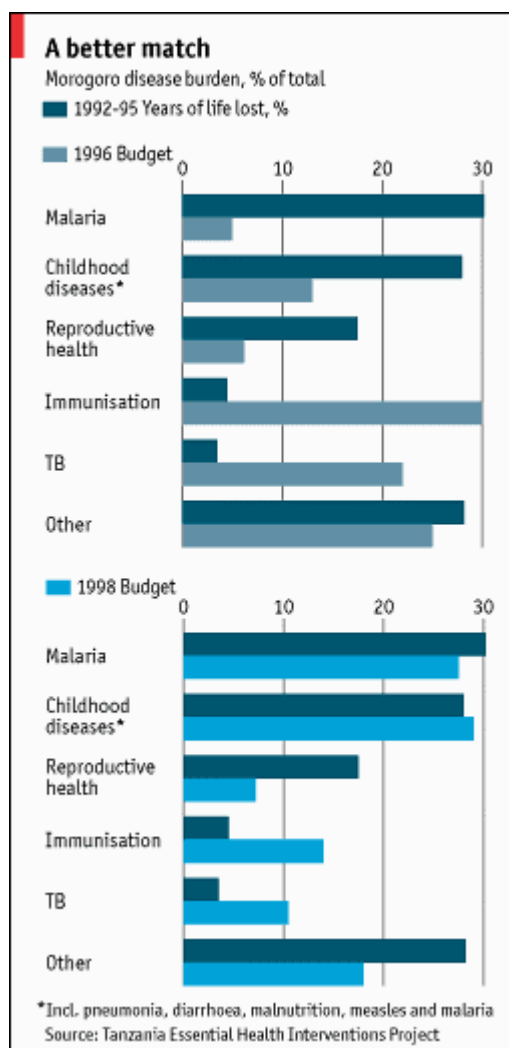
Russian Federation	8377	75	91
South Africa	9401	57	160
Malaysia	9608	93	89
Thailand	6402	64	99
Mexico	9023	55	55
Brazil	7625	54	111
OECD Countries			
United States	34142	1	24
Australia	25693	17	2
Canada	27840	10	12
France	24223	4	3
Germany	25103	3	22
Italy	23626	11	6
Japan	26755	13	1
Spain	19472	24	5
United Kingdom	23509	26	14

Sources: The World Health Report – 2000 and UNDP Human Development Report – 2002 (UNDP)

Significant improvements in health can result by merely changing the pattern of expenditure, with little or no addition of resources. This was dramatically illustrated by the Tanzania Essential Health Interventions Project (TEHIP) in two rural districts, Morogoro and Rugiji with a combined population of 700,000. Economist¹¹ reports that five years ago, the annual health spending in Tanzania was about \$ 8 per head. An additional \$2 per capita was infused through TEHIP, on condition that it was spent rationally, the amount of money spent battling a particular disease reflecting the burden of that disease imposed on the local population. Researchers found that in TEHIP area, "the amount the local health authorities spent on each disease bore no relation whatsoever to the harm which the disease inflicted on local people". Some diseases were neglected. Malaria, which accounted for 30% of the years lost, received only 5% of the 1996 health budget. A cluster of childhood problems, including pneumonia, diarrhoea, malnutrition, measles and malaria, constituted 28% of the disease burden, but received only 13% of the budget. Other conditions attracted more than deserved attention. Tuberculosis, which accounted for less than 4% of the years of the life lost, received 22% of the budget.

With the infusion of additional \$2 per head, the health authorities could redirect spending to reflect the disease burden, without trimming any successful programmes.

Figure 2



Source: *Economist*: August 15, 2002

As the Economist reports¹²:

"This tiny cash infusion smoothed the transition to a more effective approach to health care. Health workers, mostly nurses or paramedics rather than doctors, were given a simple algorithm to show how to treat common symptoms. For example, if a child arrives coughing, and with a running nose and a hot brow, the nurse is instructed to work through a checklist of other symptoms to determine whether it is merely a cold or something worse. If the child is breathing more than 50 times a minute, for example, he is assumed to have pneumonia, given an antibiotic and checked again after two days.

In most cases, the cheapest treatments are offered first. Children with diarrhoea are given oral rehydration salts, which cost a few cents. If the salts don't work, the child is referred to a clinic and put on a drip. For malnutrition, the first treatment offered is advice on breast-feeding. When this is not enough, cheap vitamin-A pills are prescribed. AIDS is

tackled through education, condoms and antibiotics to heal open sores caused by other venereal diseases, which present the virus with an open door into a new bloodstream.

Drugs are ordered according to what is needed; previously, the government sent out the same package of pills to all dispensaries, which meant that popular drugs ran out, while others gathered dust. Non-malarial mountain villages received as many malaria drugs as mosquito-infested lowland ones, and villages where no one had ever suffered from asthma received asthma pills. "We did things blindly," remembers Peter Nkulila, a doctor.

Perhaps most importantly, health centres in Morogoro encourage people to use bednets impregnated with insecticide, which bash mosquitoes in several ways. If the bug hits the mesh, it dies. If it merely flies close to the bednet, it feels dizzy, and either falls to earth, where it is eaten by ants, or buzzes off to rest and recuperate, which means that it will bite no one that night. A bednet's mosquito-repelling effect stretches for 500m in all directions, so netless villagers gain some protection from their better-equipped neighbours.

The results of all this were stunning. In Rufiji, infant mortality fell by 28% between 1999 and 2000, from 100 deaths per 1,000 live births to 72. The proportion of children dying before their fifth birthdays dropped by 14%, from 140 per 1,000 to 120. The figures for Morogoro are thought to be equally good, although TEHIP is still trying to confirm their accuracy. In nearby districts, and in Tanzania as a whole, there is no evidence of a similar improvement over the same period. And anecdotal evidence suggests that better health has made Morogoro and Rufiji less poor."

IV. Limits to Modern Medicine

Modern medicine has made a huge difference to our quality of life and life span. Most communicable diseases can now be prevented, or easily cured. In earlier centuries, even emperors and affluent people were vulnerable to many diseases, and position and wealth were no guarantee of good health. Today, even the poorest people can derive benefits of modern medicine at a low cost and with relative ease. That is how the dreaded smallpox was eradicated, and many other diseases which sent untold millions into untimely graves are under control. All these breathtaking advances however make us overlook the limitations of modern medicine. Most of the spectacular progress in medicine in terms of lives saved and prolonged, and disability prevented or minimised are attributable to a few key advances. Understanding of nutrition, immunization, antibiotics, aseptic surgery, healthy life styles and improved maternal and child care account for over 90% of improvement in health.

However, in our quest for better health and long life, there is a tendency to believe that medicine offers miracle cures. It is now well-established that the natural life span is probably close to 90 years for most people, no matter how much is invested on health care. As the average life span increases, there are many ageing-related diseases which afflict the elderly people. There is very little modern medicine can do to retard the progress of such degenerative diseases. Even many malignancies are age-related. Though life styles (smoking etc) account for higher incidence of

cancers, there is evidence that the prevalence of most cancers is linked to old age. In some ways, many such diseases should be regarded as a normal part of ageing process. Similarly, many allergic, auto-immune and connective tissue disorders have no effective cures in modern medicine. Often, either the disease runs its natural course and becomes self-limiting after a point, or the patient eventually succumbs to progressive, irreversible disorder. Sometimes, some of the allergies and degenerative diseases (arthritis) are controlled more effectively by other systems of medicine like homeopathy, ayurveda etc. Modern, western medicine can at best offer palliatives. Respiratory allergies, of course, are aggravated by air pollution; but the real remedy in such case is environmental, not medical.

While designing and managing an effective health care system, these limitations of modern medicines need to be kept in mind. Otherwise, vast expenditure is sometimes incurred with little to show for it. And worse still, where some degree of equanimity and acceptance of a condition would help lead decent lives, enormous anxiety, agony and pain are caused without any improvement of health. One consequence of these limitations is, it is easier to improve health status of a community and increase average life spans in the early stages of social development. But as health indicators improve, and most benefits that modern medicine has to offer are derived at relatively low cost, higher and higher investments and heroic interventions yield fewer and fewer results. A poor country cannot afford to squander scarce resources in the quest for the elusive perfection in health. Also, a greater appreciation of the relative merits of various systems of medicine and their limitations would be invaluable in effectively integrating indigenous and traditional systems into the health care services.

V. Health Financing System and Inequity

There is ample evidence of inequitable access and delivery of health services in India. The poor suffer greater burden of disease than the well off. Worse still, the poor end up paying more and suffering more for the same affliction in most cases, because of poor access and indifferent delivery. The lost time and productivity have often a devastating impact on the lives of the poor, leading to impoverishment and indebtedness.

NHP – 2002¹³ admits that while the public health investment in the country over the years has been comparatively low, as a percentage of GDP it has declined further from 1.3 percent in 1990 to 0.9 percent in 1999. Out of this, about 17 percent of the aggregate expenditure is public health spending, most of the balance being out-of-pocket expenditure. This declining public spending on health (less than 1 percent of GDP) places India in the bottom 20 percent of countries. As the World Bank Report "Raising the sights: Better Health Systems for India's Poor"¹⁴ states:

"Most low-income countries spend more than India, where current levels are far below what is needed to provide basic health care to the population. The bulk of public spending on primary health care has been spread too thinly to be fully effective, while the referral linkages to secondary care have also suffered. As in other countries, preventive health services take a back seat to curative care."

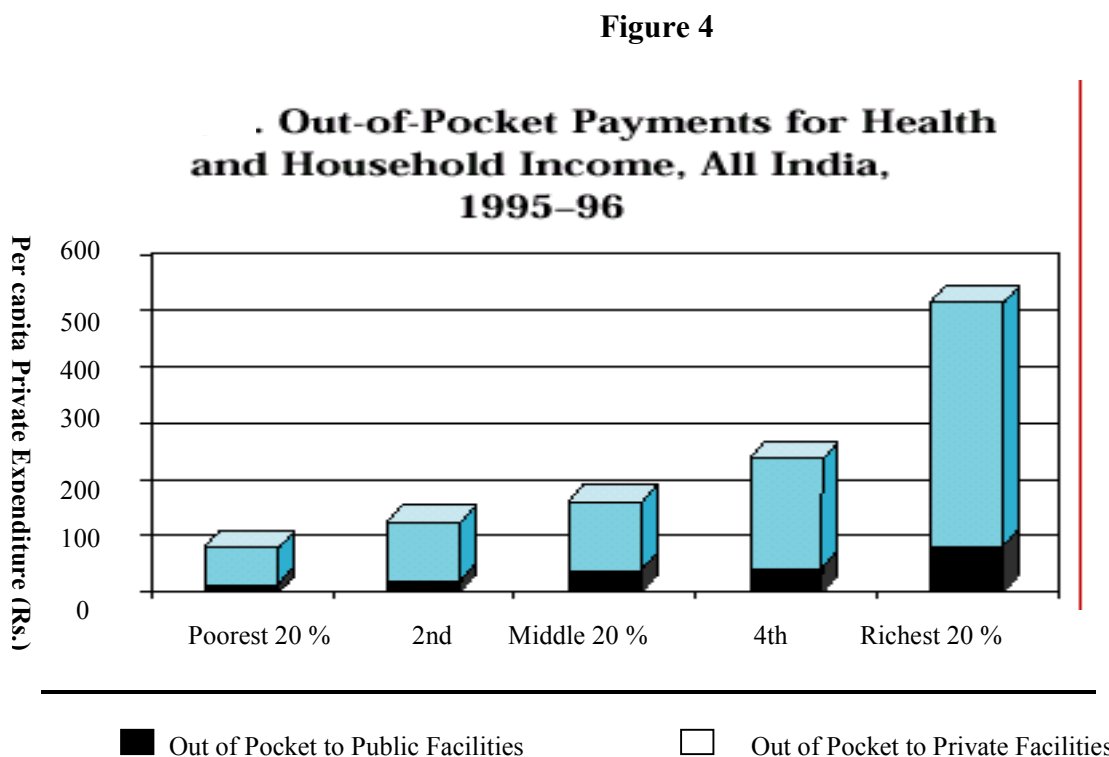
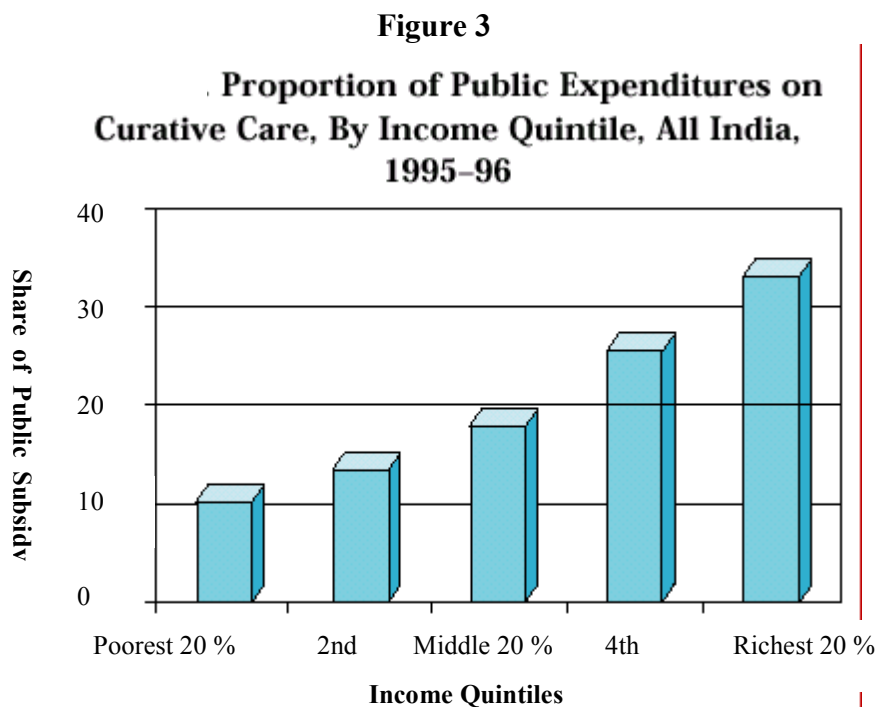
According to NHP-2002, the central budgetary allocation for health over the period 1990 – 99 has been stagnant at 1.3% of the total budget. At the same time the fiscal pressures led to a

reduction of States' public health expenditure from 7 percent to 5.5 percent. The current annual per capita public health expenditure in India is around Rs. 200. Of this, about 15 percent is contributed by the Union government.

The high reliance on private, out-of-pocket payments in health in India impose a disproportionate burden on the poor. The poorest 20 percent Indians, for example, have more than double the mortality rates, malnutrition, and fertility of the richest quintile.¹⁵ The only countries with higher proportions of private payment on health than India are countries that have undergone civil conflict and collapse of the public sector, like Georgia, Cambodia, Myanmar and Afghanistan. As a result, "India's current health financing system places people at risk of financial ruin should they become sick, and is inefficient and inequitable."¹⁶

While the States share 75 – 90 percent of public health expenditure, most of these funds are tied up in salaries, leaving few resources for essential drugs, supplies, operations and maintenance.¹⁷ 97 percent of all public expenditure is for consumption purposes, and only 3 percent for capital expenditure. 60 percent goes in wages and salaries and only 35 percent for material and supplies, drugs, and transport. Out of the limited public health budget, curative services including hospitals and dispensaries, insurance schemes, and medical education and training account for 60 percent, leaving only 26 percent for public health and family welfare, and 14 percent for administration and miscellaneous services.¹⁸

Curative public services largely favour the rich, with Rs 3 spent on the richest quintile for every Rs 1 spent on the poorest 20 percent.

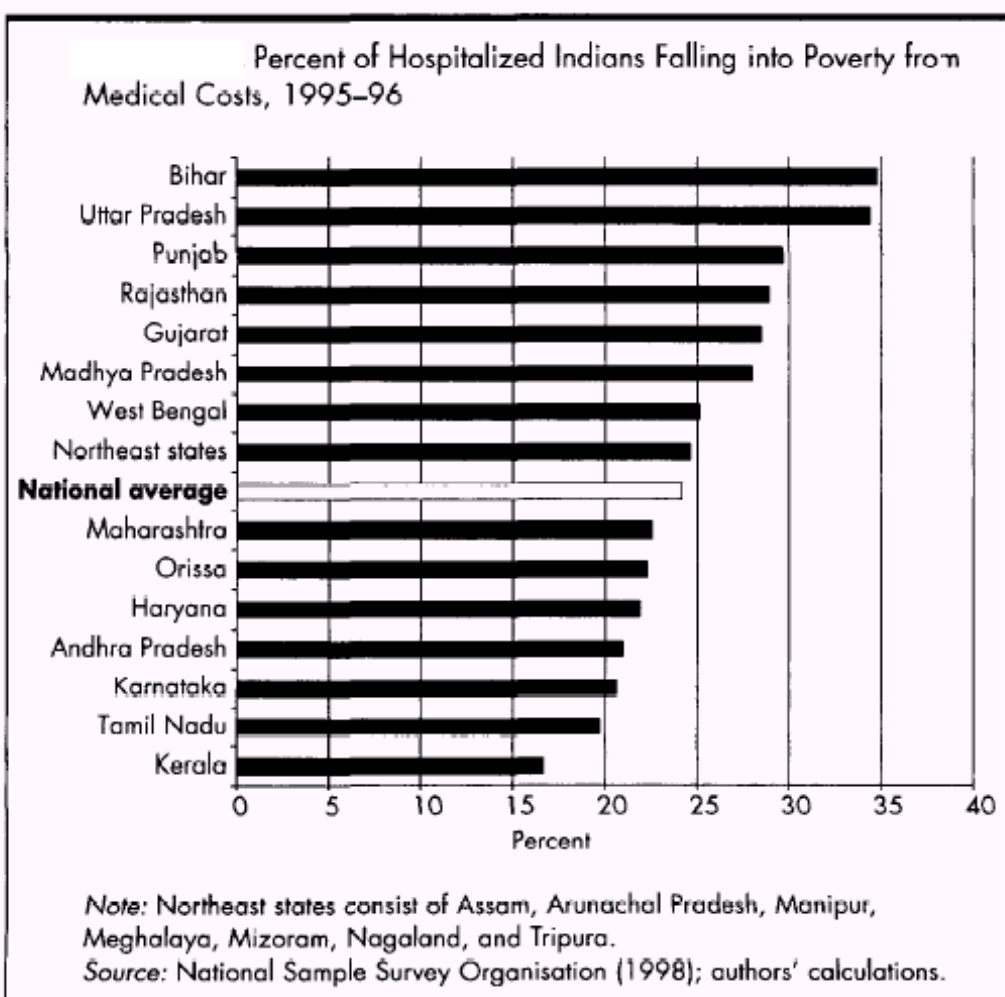


Source: *Raising the Sights: Better Health System for India's Poor*, The World Bank, November 3, 2001, Washington. p.3.

As nearly all the private spending is out-of-pocket, the poor are highly vulnerable to health risks. The poor generally avoid hospitalization because of their inability to pay and lack of risk pooling. Hospitalization frequently means financial disaster. As the World Bank document shows¹⁹:

- Only 10 percent of Indians have some form of insurance, and most of this is inadequate
- Hospitalized Indians spent more than half (58%) of their total annual expenditure on health care
- More than 40 percent of those hospitalized borrow money or sell assets to cover expenses
- At least one quarter of hospitalized Indians fall below poverty line because of hospital expenses

Figure 5



Source: David.H.Peters, Abdo.S.Yazbeck, Rashmi R. Sharma, G.N.V. Ramana, Lant H. Pritchett, Adam Wagstaff, *Better Health System For India's Poor: Findings Analysis and Options*, The World Bank, 2002, Washington. p.5.

Evidence from NSS surveys shows that the private sector accounts for most of the curative services. However, the poor still depend on the public sector for most health services, except out-patient care. 81 percent of out-patient care is provided by private sector. In the inpatient care too, the share of public sector has fallen from 60 percent in 1986 – 87 to around 45 percent in 1995-96.

**Table 4: Public- Private sector use for patient care- All India
(percentage distribution)**

	Rural		Urban	
	1986 - 87	1995 - 96	1986 - 87	1995 - 96
Out-patient care				
Public sector	25.6	19.0	27.2	19.0
Private sector	74.5	80.0	72.9	81.0
In-patient care				
Share of public sector	59.5	45.2	60.3	43.1
Share of private sector	40.3	54.7	39.7	56.9

Source: NSSO 1992 and 1998 (drawn from Sen Gita, Iyer Aditi, George Asha, "Structural Reforms and Health Equity, A Comparison of NSS Surveys, 1986-87 and 1995-96," *Economic and Political Weekly*, April 6, 2002, p. 1342-1352.)

Yet another well-known inequity in health sector is that rural areas with 73 percent of the population account for only 33 percent of government health resources. Urban population has thus received more than 5 times what the rural population received in per capita terms²⁰. Consequently, the attainment of health indices has been very uneven across the rural-urban divide.

Table 5: Differentials in Health Status Among States

Sector	Population BPL (%)	IMR/ Per 1000 Live Births (1999-SRS)	<5Mortality per 1000 (NFHS II)	Weight For Age- % of Children Under 3 years (<-2SD)	MMR/ Lakh (Annual Report 2000)	Leprosy cases per 10000 population	Malaria +ve Cases in year 2000 (in thousands)
<u>India</u>	26.1	70	94.9	47	408	3.7	2200
Rural	27.09	75	103.7	49.6	-	-	-
Urban	23.62	44	63.1	38.4	-	-	-
Better Performing States							
Kerala	12.72	14	18.8	27	87	0.9	5.1
Maharashtra	25.02	48	58.1	50	135	3.1	138
TN	21.12	52	63.3	37	79	4.1	56
Low Performing States							
Orissa	47.15	97	104.4	54	498	7.05	483
Bihar	42.60	63	105.1	54	707	11.83	132
Rajasthan	15.28	81	114.9	51	607	0.8	53
UP	31.15	84	122.5	52	707	4.3	99
MP	37.43	90	137.6	55	498	3.83	528

Source: National Health Policy, 2002

Equally glaring, the health expenditure and quality of services is highly variable across the states. While costs of family planning, maternal and child health care, and immunization are almost entirely borne by the Union government, health expenditure on hospitals, primary health care facilities and insurance are mostly financed from the States' budgets. As the per capita State Domestic Product varies significantly (Maharashtra enjoys 3.4 times that of

Bihar), the annual per capita expenditure on public health too varies widely. The central funds too are transferred not on the basis of the needs of individual states, but often uniformly on population basis, and sometimes on 50-50 cost sharing basis (eg., Malaria eradication)²¹. With the expenditure compression programmes in place, there is greater impact on public health expenditure and an even more pronounced impact in poorer states. These factors, coupled with the historical development patterns over the decades and their cumulative impact make it necessary to recognize the need for different approaches in different states. World Bank classified the states into four categories based on the stage of health transition and institutional capacity. See Table.6

Table 6

Major Indian States, by Stage of Health Transition and Institutional Capacity

STAGE OF TRANSITION, DEGREE OF CAPACITY	STATES	INDIA'S POPULATION (PERCENT)
Middle to late transition, moderate to high capacity	Kerala, Tamil Nadu	9.1
Early to middle transition, low to moderate capacity	Maharashtra, Karnataka, Punjab, West Bengal, Andhra Pradesh, Gujarat, Haryana	39.1
Very early transition, very low to low capacity	Orissa, Rajasthan, Madhya Pradesh, Uttar Pradesh	33.1
Special cases: instability, high to very high mortality, civil conflict, poor governance	Assam, Bihar	13.3

Note: Major Indian states are those with a population of at least 15 million. The estimates were made before bifurcation, so Bihar includes the recently created state of Jharkhand, Madhya Pradesh includes Chatisgarh, and Uttar Pradesh includes Uttaranchal.

Source: David.H.Peters, Abdo.S.Yazbeck, Rashmi R. Sharma, G.N.V. Ramana, Lant H. Pritchett, Adam Wagstaff, Better Health System For India's Poor: Findings Analysis and Options, The World Bank, 2002, Washington. p.8

All the evidence thus shows that higher and better-directed public expenditure, is a necessary prerequisite for significant health improvements. A comparison with OECD countries illustrates this point effectively. In absolute terms, Indian public health expenditure of about Rs 200 per capita is a pittance compared to the high expenditures in rich countries. Even in relative terms, public health expenditure of 0.9 percent of GDP is well below the OECD norm of 5 to 7 percent of GDP. However, the OECD countries' total public expenditure as a share of GDP is much higher than in poor countries. On an average, OECD countries' governments spend about 40-45

percent of GDP, as opposed to India's 29 percent (18 percent revenues, and 11 percent fiscal deficit). Therefore a more realistic comparison would be the share of public health expenditure in the total government expenditure. In OECD countries, public health expenditure is of the order of 15 to 20 percent of the total government expenditure. In India, the share of public health expenditure is 1.3 percent of the central budget and 5.5 percent of state's budgets. The weighted average is probably close to 3 percent of the total government expenditure, or less than a fifth of the OECD countries in relative terms. This gives us a measure of inequity of health services availability in India, and the distance we need to travel if a healthy future is to be ensured to our people.

VI. Our Strengths and Opportunities

Despite the low level of health of the community, India has several strengths on which we can build a healthy future.

- As pointed out earlier, we have a fairly large, highly skilled health manpower. This manpower structure is skewed - there are fewer nurses and paramedics than necessary. But the nation has the capacity to set right such imbalances and train the required skilled workers with indigenous resources.
- We have significant research capability to address our own health problems.
- There is an impressive and growing hospital infrastructure with high level of capability for sophisticated medical interventions. The cost of many diagnostic, therapeutic and surgical procedures is only a fraction of that in the advanced countries.
- The pharmaceutical industry is mature and sophisticated, and has the capacity to produce drugs to meet our requirement at a relatively affordable cost.
- Democratic system, free media and vigorous public discourse offer us priceless opportunities to influence public policy.
- With improved literacy, modest rise in incomes, and rapid spread of satellite television, there is greater awareness and increasing demand for better health services.
- The high proportion of private, out-of-pocket health expenditure (80%) indicates that the people, even the poor, are willing to pay for better health services.
- While rapid growth of population has posed a formidable challenge to our health care and development efforts, recent breakthroughs in the major states of Tamil Nadu and Andhra Pradesh, and to an extent Karnataka raise realistic hopes of combating population growth effectively in a reasonably short time span.
- India has demonstrated the capacity to launch military-style campaigns with wide reach and efficacy. Successful population control measures in A.P despite low level of literacy and other social indicators is a good illustration of the efficacy of the mass campaigns to achieve select goals. Similarly the recent national drive to administer oral polio vaccine to all vulnerable children has been very effective, and polio is on the verge of being eradicated. These successes indicate that select campaigns can be launched against dreaded diseases, and to contain population growth.
- There is a wide network of semi-qualified private medical practitioners who are often the first point of contact for most rural patients. Estimates indicate that about 500,000 such rural practitioners exist. While they are often untrained, there is a vast potential to involve them in effective health care delivery through imaginative partnerships.

VII. Challenges of The Future

Preventive Vaccination: The levels of immunization of children and pregnant mothers against preventable diseases for which effective and inexpensive vaccines are available are still unsatisfactory. (T.B: 68 %; Measles: 50 %; DPT: 70 %). Only about a third of the children are fully protected against common preventable diseases. This is clearly the first, relatively simple and easy challenge we have to confront. The campaign mode with effective primary health services would be able to expand immunization coverage to all children.

Prevention and early treatment of major infectious diseases: There are four major preventable infectious diseases which cause significant morbidity and mortality - Malaria, Tuberculosis, HIV/AIDS and Rheumatic Heart Disease.

- There is evidence to suggest that malaria is under reported. Human Development Report 2002²² reports only 193 cases of malaria per 100,000 population. In contrast, Sri Lanka, which has a much higher level of health and human development reports 1,111 cases of malaria per 100,000 population. The ubiquitous swarms of mosquitoes and anecdotal evidence from physicians suggest that malaria is far more prevalent than is reported. This under reporting is possibly because most cases are quickly treated with chloroquin even before a diagnosis is confirmed by blood examination for malarial parasite. Also the primary health care network is much less efficient compared to Sri Lanka, and most cases remain undetected. Notwithstanding this, the enormity of the problem is evident, and there are no serious public health measures for larval control, or popularizing insecticide-treated mosquito nets. Reports suggest that nearly 50% of malaria in recent times is caused by the dangerous Plasmodium falsiparum. Also in pockets of east and northeast India there are reports of chloroquin-resistant malaria. Serious public health efforts to control mosquito and malaria, and accelerated research to develop and popularize the anti-malarial vaccine are of great importance to the future of public health in India.
- Tuberculosis remains a major challenge, and India is host to the largest number of cases in the world. The recent multi-drug therapy has been quite effective, and there are signs of significant improvement. But opportunistic infections on account of immunity suppression in AIDS patients are on the rise and pose a grave challenge. Drug resistance has also been a major threat for long.
- HIV/AIDS is spreading rapidly, and nearly 0.8 percent of all adults between 15 and 49 are believed to have been infected by HIV. Given the obvious dangers, prohibitively costly treatment after infection, and social disruption on account of widespread AIDS, the current campaign needs to be stepped up. The recent successes in Tamil Nadu in AIDS education and prevention are a valuable model for replication.
- Rheumatic Heart Disease (RHD) is one of the easily preventable, but widely prevalent major health problems in India. Studies in Kanpur²³ and elsewhere indicate that about 4 to 5 cases of RHD are prevalent among 1000 school children. This is an unacceptably high incidence of a disease caused by simple, preventable or easily curable streptococcal

throat infection in children between the ages of 5 and 15. Primary prevention (prompt antibiotic treatment of sore throats in children) and secondary prevention (prolonged and sustained long acting antibiotic therapy in children with rheumatic fever) are very effective and relatively inexpensive. Untreated RHD leads to damage to heart valves, and needs expensive surgery which may not always be effective. Surveys indicate that nearly 500,000 children develop RHD annually because of lack of public awareness, and failure to prevent cases. The long term morbidity and mortality on account of RHD is very high. Surgical correction, even if effective, is prohibitively expensive, and would cost around Rs 2500 crores per annum. Primary prevention would cost only about Rs 10 crore or less! In any case, the total open heart surgeries in India are only about 42000 per annum, of which only about a sixth are valve replacements. Clearly, a massive public health campaign against RHD is necessary.

Preventable Blindness: An estimated 10 million people suffer from preventable blindness in India. Most of them are on account of deficiency of Vitamin A, which can be supplemented very cheaply (it costs only a few rupees per child). Similarly simple, easily treatable infectious like Trachoma contribute to blindness significantly. Blindness due to age-related cataracts is now being addressed reasonably well with the support of voluntary agencies and public-private partnership. Glaucoma is another silent and common cause of blindness which can be easily prevented by early detection and treatment. Special efforts including massive public education and expansion of access to eye care facilities are vital to prevent blindness.

Population Control: The states of Kerala, Goa and Tamil Nadu have achieved impressive levels of performance, and are already at stable population level. Andhra Pradesh, Karnataka, Himachal Pradesh and Punjab too achieved a satisfactory couple protection rate and will soon reach stable population level. While Total Fertility Rate has declined from 3.4 in 1993 to 2.9 children (NFHS-2)²⁴ in 1999, it is still well above the replacement level of just over two children per woman. The states of Uttar Pradesh, Rajasthan and Madhya Pradesh have fertility rates of 3.3 or more children. As they constitute about 40 percent of India's population, special efforts are required in these populous states to bring population to stable levels. About 40 percent births in these states are fourth or higher-order births compared with 7 - 9 percent in Kerala, Goa and Tamil Nadu. There are thus large variations in fertility and family planning practices. The experience of the southern states, particularly Andhra Pradesh, show that improved access to family planning services, massive campaigns, public education, and political will can reduce fertility levels significantly even with relatively low literacy levels. The Kerala and Tamil Nadu model of high literacy, better health care and improved social indicators is obviously the ideal mode of population control. However, given the demographic pressures and urgency of the problem, short-term, parallel campaigns backed by political will are both necessary and will be effective, particularly in the large Hindi-speaking northern states.

Increased Public Health Expenditure: National Health Policy - 2002 set the goal of increasing public health expenditure from 0.9 percent of GDP to 2 percent GDP by 2010. The state sector health spending is proposed to be increased from 5.5 percent (of total budget) to 7 percent by 2005, and 8 percent by 2010. This means the Union expenditure, which is at 1.3 percent of the budget should be between 7 and 8 percent in order to reach the public health expenditure target of 2 percent of GDP. This calls for enormous political will, and significant reordering of

priorities, given the present fiscal crisis and the recent trend of declining public expenditures. But such increases are vital to make public health services more accessible and effective. However, increase in expenditure must be accompanied by better utilization of resources, with emphasis on preventive and primary health so that the benefits reach the poor and needy, and we get best value for the money spent.

Sanitation: It is well recognized that drinking water and sanitation are two vital requirements to good health. Governments have been paying serious attention to drinking water problem, and 88 percent of Indians have access to improved water sources. But the condition of sanitation is appalling, and only 31 percent have access to a safe, hygienic toilet. 69 percent of Indians are forced to defecate in public, with grievous consequences to health, hygiene and human dignity. No serious efforts are made to combat this problem, which particularly causes severe inconvenience to women, children, the aged and the disabled. The cost of a modern, scientifically designed, hygienic toilet is no more than Rs 3000. Sulabh International and many other organizations demonstrated the efficacy of low-cost household toilets. The problem is one of ignorance, habit, poverty and unavailability of the material to build the toilet. Habits change with time and persuasion, and people always prefer better lifestyles. Ignorance can be overcome by a massive public education campaign. Government needs to come forward with a programme for toilet for every household. Once materials are mass-produced and available at low cost in the market with government initiative, most people can afford to build toilets at their own expense. All it requires is a short-term national campaign to promote hygiene and sanitation. About 20 – 25 percent of the population may need subsidies, and at Rs 2000 per family, such subsidy will be around Rs 100 billion. Spread over a five-year period, it will cost no more than Rs 20 billion per year, which is only less than 0.1% of GDP. With political will, it is possible to extend sanitation facilities to the whole population in five years.

Accountability: The greatest challenge in our health services is enforcement of accountability. While the health infrastructure is inadequate and there is shortage of personnel, even what is available is not put to good use. The recent Millennium Survey Report of Public Affairs Centre, Bangalore reiterates the common perceptions about public health care delivery in India. As table 7 shows, the low satisfaction levels (only 14 percent expressing satisfaction), inadequate access and poor usage indicate a high level of mistrust and generally unsatisfactory performance. In public health, the problems are corruption, neglect, lack of community participation and ownership, and ineffective monitoring. We need to evolve participative models of management, with local governments having substantial say in managing primary health care and the first tier of hospital care (Rural and Community hospitals). People value health even more than education, because the returns are immediate and the suffering is felt intensely. Therefore local political control can significantly improve the quality of services and accountability. Centralized structures will not be able to respond to people's needs. Tertiary care can be made more accountable by better oversight practices through user fees, advisory committees of prominent citizens, transparency, public awareness, user-satisfaction surveys and performance monitoring.

Table 7: Millennium Survey report on public health services

All figures are in percentages

	Access ¹	Usage ²	Usage ³	Reliability ⁴	Reliability ⁵	Satisfaction ⁶
Andhra Pradesh	36	48	55	28	59	6
Arunachal Pradesh	36	85	93	45	65	1
Assam	38	68	58	72	84	5
Bihar	21	16	10	72	90	8
Gujarat	38	58	43	95	96	30
Himachal Pradesh	53	51	51	80	95	10
Haryana	35	28	23	73	83	14
Karnataka	26	49	48	74	93	31
Kerala	57	46	60	58	89	9
Maharashtra	51	69	60	88	93	22
Mizoram	79	100	100	44	75	1
Megalaya	23	56	62	57	63	16
Madhya Pradesh	44	64	49	63	78	8
Nagaland	12	25	52	64	78	1
Orissa	28	92	83	79	89	3
Punjab	62	24	24	80	85	2
Rajasthan	48	87	74	59	73	5
Sikkim	97	98	93	72	94	21
Tamil Nadu	44	60	54	71	90	29
Tripura	55	86	80	34	47	1
Utter Pradesh	33	42	22	73	76	17
West Bengal	33	88	47	63	77	11
National	40	55	45	70	83	14

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¹Rural access to a health facility within 1 km; ² Usage of a government facility for major ailments³ Usage of a government facility for minor ailments; ⁴ Presence of doctors at the time of visit⁵ Presence of paramedics at the time of visit; ⁶ Full satisfaction with the behaviour of doctors in government hospitals

Source: Public Affairs Centre, The State of India's Public Services: Benchmarks for the New Millennium, Bangalore: Public Affairs Centre, 2002.

The challenge of accountability in private sector is even tougher in some ways. The people vote with their purse and reputation of a private physician spreads by word of mouth. But as knowledge and power are inequitable, an ordinary citizen has no way of countering the rapacity and malpractices of a physician or a hospital. Government control and regulation in the form of licensing will only lead to greater corruption and rent-seeking. Regulation by professional bodies has by and large proved very ineffective, as physicians are reluctant to discipline their own peers. Consumer courts have proved to be effective, but there is inadequate access to them. Accreditation and regular performance appraisal by a professional body is one possible approach. We need to devise effective and accessible mechanisms to enforce accountability and standards in private medical practice and hospital management.

Financing Mechanisms: As we have seen, over 80 percent of health expenditure is in private sector, and almost all of it is out-of-pocket expense. 60 percent of annual income is spent on medical care in cases of hospitalization, forcing many people into poverty. There is no risk

pooling, and for most of the poor and low or middle-income people sickness means financial catastrophe. While public expenditure, which is at a low level of 0.9 percent of GDP needs to be enhanced to 2 percent, most health expenditure will continue to be private. Therefore innovative, effective and equitable ways of health financing need to be evolved.

Collection of user fees in public hospitals will augment resources, give ownership to people, improve accountability, and enhance demand for better standards and quality of care. Once the paying patients demand better quality, the non-paying poor will also benefit from improved health care. In order to give ownership, even the poor can be charged a nominal user fee.

Health insurance so far has been ineffective in India. In general, insurance coverage is available to only organised sector employees, and a small number of high-income persons. The Central Government Health Scheme (CGHS) covers 4.5 million families (20 millions persons), and the statutory Employee State Insurance Scheme (ESIS) covers 6.6 million families (29 million persons). Both CGHS and ESIS are publicly managed, and are severely criticized for their sloth, incompetence, inadequacy and corruption. About 10 million families (50 million persons) in both public and private sector are covered by employer-managed facilities.²⁵ (Randall P Ellis, Moneer Alam, Indrani Gupta – Health Insurance in India. EPW Jan 22, 2000).

Table 8

Table 3: How Curative Health Services Are Paid for in India

	Free	Central (20 mn)	Employee (29 mn)	Mediclaime (1.8 mn)	Employer (30 mn)	Employer (20 mn)	Others* (30 mn)	Private/Out of Pocket	Employees (mn)
Government employees	xx	xxx				x		xxxx	4.6
Defence, police, social services	x				xxxxxx			xx	9.5
Plantation workers	x				xxxxxx			xxx	1.2
Mine workers	x				xxxxxx			xxx	1.1
Railways	x				xxxxxx			xx	1.8
Public enterprises (private, formal sector)	x		x	x	xxx	xx		xx	2.1
Large firms (private, formal sector)	x		x	xxx	x	xx		xx	7.0
Small firms (private, informal sector)	xx		xx	x		x		xxxx	1.0
Urban (private, informal sector)	xxx					x	x	xxxxx	128.7
Rural	xxxx							xxxxxx	193.0
Percentage of total health spending	20	1	3	1	5	4	1	65	100

Notes: Each x represents approximately 10 per cent of all expenditures. All figures in the table are approximations, not necessarily based on solid evidence. Numbers shown in parentheses below column headings are estimates of the number of eligibles. * Others include all NGOs/ Voluntary organisations.

Source: Rand P Ellis, Moneer Alam, Indrani Gupta, Health Insurance in India: Prognosis and Prospectus, Economic And Political Weekly, Economic and Political Weekly January 22, 2000 pg.209.

India has about 370 million workers, of whom only 8 percent are in the organised sector. Out of the 29 million workers in organised sector, as many as 20 million are employed by the government or in public sector, with only about 9 million employees working in private organised sector. Table 8 shows that the most of the organised sector have some form of health insurance coverage and risk pooling, though often services are of indifferent quality. Also

collusion between the insurance provider and private health provider and corruption are common. Obviously the insurance coverage for the organised sector needs to be revamped and services improved and made cost effective.

The real challenge however is in respect of the families of the workers in unorganized sector, and unemployed and indigent persons. These categories probably cover 90 percent of the population. About 10 – 15 percent of them are self-employed and can be eventually covered by health insurance schemes. At present such coverage extends to a very small number of persons, but it is reasonable to expect insurance to be expanded to cover all those who can afford to pay premiums out-of-pocket. That still leaves the unorganized and poor who are unlikely benefit from centrally organized health insurance services. And yet they are most in need of risk pooling and health coverage.

Innovative, decentralized, community managed health care programmes, local risk pooling, and effective and accessible public health services and public-private partnership are the only viable solution for the bulk of Indians for the next 25 years or so. There are many local innovations which a, substantial provisioning has to be made by the state to support these community based primary and hospital care services.

Alternative Systems: India has a large number of trained and untrained practitioners of Homeos and weaknesses of various systems of medicine brings us to the inescapable conclusion that these are not alternatives to each other, but have a complementary role to play in promoting the health of the community. For instance, in the understanding of nutrition, infection and child birth, efficacy of immunization, antibiotics and aseptic surgery there is no substitute to western allopathic medicine. It is absurd not to treat pneumococcal pneumonia or tuberculosis with antibiotics. There can be no substitute to vitamin A supplements in cases of xerophthalmia. A mature cataract has to be surgically removed and eye glasses or implanted lenses should be provided. Undoubtedly many viral and bacterial diseases can be prevented by proper immunization. There cannot be any doubt that timely treatment with a proper course of antimalarials saves thousands of lives. Poisonous snake bite has to be treated with the polyvalent serum. When there is intestinal obstruction and perforation of bowels, surgical intervention alone will save life. There are thus countless examples of the unmatched efficacy of allopathy. Even the notion of alternative medicine in these spheres is both facile and dangerous.

However, there is a broad spectrum of disease which cannot be combated by western medicine any better than other systems. Many life style diseases including migraine, backaches, diabetes and hypertension, several neurological disorders, allergies, degenerative disorders like arthritis and several psychosomatic and mental illnesses can probably be managed better by changes in diet and The notion that allopathy and other systems are mutually antagonistic should be given up, and their complementarity should be recognized and respected. Allopathic medical education should provide space for other systems where suitable. Parallel systems, sometimes both supported by the state, have not worked well. Integration of these systems requires detailed and painstaking research, analysis and expertise by open-minded practitioners, scientists and analysts.

Unqualified Private Medical Practitioners (PMPs): There are about 500,000 PMPs working mostly in rural areas, often serving as the first point of contact to patients. Many of them have some exposure to simple diagnostic tools and drugs. The attitude of the medical establishment so far has been to either ignore them, or treat them as pariahs and use the instrument of law to prevent their practice. Banning of such practice has not worked. There is need to find innovative ways of integrating the better-skilled and genuine, though formally unqualified, practitioners into our health care system. For instance, all such persons with some experience of working with a qualified medical practitioner can be given a test. Those who clear the test can be given a certificate and allowed to practice as village health workers with a clearly defined mandate. Their licenses can be renewed every three years subject to successful participation in refresher courses conducted by approved agencies. Such courses can be self-financing as the village health workers have both licensing and professional and financial incentives in acquiring knowledge and skills.

Mounting Cost of Hospital Care: As medical technology advances, costs are skyrocketing. And as more and more investments are made in expensive equipment and facilities, there is ever increasing temptation to subject every patient to a plethora of largely unnecessary and costly investigations. There have been many cases of unethical practices, in which a physician and a diagnostic laboratory are in collusion at the cost of the patient. Similarly patients are referred to tertiary care hospitals without any need for specialized treatment. Huge investments, excessive obsession with technological sophistication and unethical practices are leading to unaffordable and often unnecessary costs to most patients. At the same time we need world class hospitals to keep pace with technology, and help patients who do require sophisticated interventions. Poor image of the government, state's incapacity to regulate, and corruption of public officials make state regulation unattractive. Professional regulation through medical council has been far from effective. Absence of risk pooling and insurance means the patient is at the mercy of big hospitals. Effective community oversight, exemplary and tough punishments for wrongdoing, competition among insurance agencies, and creation of a system of managed health care with parallel auditing of cost and efficacy are critical to restore faith of people in the medical establishment. Many patients are losing life savings on account of a brief spell of hospitalization for a relatively simple ailment. Many expensive hospitals are billing huge amounts for heroic and unnecessary interventions in cases of terminal illnesses. Often the billing of the last 10 days of such patients is exorbitant and futile. Effective professional evaluation and post audit of all cases of major surgeries, expensive investigations and billing in all cases of deaths by independent regulators will be of great value. In the absence of such institutional mechanism, hospital care has become big business, and in many cases unethical practices, corruption and extortion have become common features.

Decline of Family Medicine: Sadly, in the absence of proactive state policies and sensible intervention, Indian health care is imitating the worst features of American medical practice. Often the first point of contact for many patients is now a specialist. The patient moves from specialist to specialist, and after many investigations and great expense, he is back where he started. The failure of the state in providing a viable primary health care delivery system, lack of public awareness, doctors' fascination for over specialization at the cost of basic medicine and family care, and the helplessness of individual patients in fighting the system have resulted in this vicious cycle. As has been seen, the United States spends the largest amount per capita, and

its health indicators are often no better than those of countries which spend only half the amount. Only a system of effective primary and community care supporting an edifice of ever sophisticated specialists whose intervention is need-based can deliver the benefits of modern medicine to people at an affordable cost. The state, health financing institutions and the community must bring pressure on the medical establishment to respond. While state may not always provide quality care to all people, its obligation to educate the public, create a framework for regulation, and generate public demand for more rational health care is critical.

Ideal vs Optimal Care: The society must be educated about the choice between ideal care and optimal care. Certain very expensive and sophisticated interventions may be available to improve marginally the life span or quality of life. But with the same resources, many lives can be saved through simple and effective remedies, or many more illnesses can be prevented. In such instances, there is clearly a conflict between the impossible best and possible good. In any society public health care system and insurance-based medical care must make these difficult choices to optimize health care at given costs. Purely private, out-of-pocket expenses can take care of the esoteric, ideal care. Alternatively, for those who can afford and who seek the best and the ideal, there can be separate risk pooling arrangements at high premiums. But combining ideal care with public health systems, or managed health care systems will lead to disproportional deployment of scarce resources for the uncertain benefit of a few, at the cost of the vast majority. Therefore clear definition of standards of medical care, and setting of bench marks are critical in expanding public or insurance-based managed hospital care systems.

Training of Health Manpower: India has a large number of trained physicians and nurses. These professionals can match their counterparts in most countries. Medical education has reached a level of maturity which enables it to meet the requirements of society at relatively short notice. However, there are four serious deficiencies in medical education in India. First, there has been excessive emphasis on the uncommon and complicated diseases, for which there are no effective remedies. Correspondingly, there has been great neglect of the common infections and other tropical diseases which account for the bulk of health problems in India. Second, while students are taught volumes of theory, there is inadequate exposure to medical practice and health care. That is why most graduates, despite impressive academic record, are very unsure of dealing with even common ailments. There is very little clinical training or exposure to real life conditions at the field level. Third, there has been reduced emphasis on and training in simple but critical life saving procedures and management of medical emergencies. What a fresh general practitioner could do with ease decades ago now needs a specialist. Sometimes, valuable time is lost at the cost of precious lives. Finally, very few medical graduates have deep insights into health care. The patient is seen in isolation, and living conditions, life styles, economic status, nutrition, and psychological and social factors are ignored. Integrated approach to the patient as a human being, and appreciation of public health issues are missing. These lacunae can be easily corrected by redesigning of courses and improved practices of training. We have in India some of the finest youngsters entering medical profession, and they will respond easily to curriculum and training improvements.

Regional Inequalities: As pointed out earlier, within the country there are glaring disparities in health status and fertility levels. These disparities exist between social groups (upper castes vs dalits), economic classes (rich vs poor), habitats (urban vs rural) and regions (Kerala vs Bihar).

Region-specific, and sometimes group-specific models are required to overcome these disparities and provide satisfactory health care to the whole community. While the best standards may not be accessible to all, the minimum acceptable levels of health should be regarded as the entitlements of every citizen, irrespective of birth and economic or social status. Such healthcare systems should also take into account local food habits, natural resources, cultural practices and social customs (eg: consanguinous marriages). Effective public education, counselling, replacement therapies and treatments should be standardized to suit the requirement of each region and group. Development of these protocols is primarily the responsibility of the public health system, and private health care sector will follow the standards set by the state. Public health budgets too should reflect the local needs, instead of allocations being made on per-capita basis.

VIII. Successful and Replicable Innovations

In the ultimate analysis there are four critical issues of health care confronting us:

- a) How do we involve the community in rural health care delivery and provide effective, responsive, acceptable, good quality care at low cost?
- b) How can we provide effective, responsive, good quality family care to urban populations at affordable cost?
- c) How do we promote public–private partnerships for promoting the health care goals?
- d) How can sophisticated, high quality, specialist care be made accessible to all those in need of it? Can the poor get the same standard of care without having to pay economic costs?

The future of health care delivery in India largely depends on the answers to these questions. In our present health care system, the poor are largely left out because of poor accessibility and low quality of public health services and the unaffordable cost of private health services. Clearly far-reaching reforms are needed to set right the situation, and build an equitable, efficient and responsive health care delivery system. Such reforms will need resources, but the failure to reform will impose far greater burdens on society. Happily, the experience all over the world and in India shows that if health care systems are sensibly designed, the costs can be kept at reasonable levels.

The World Health Report – 2000, based on global practices and experiences over time, has come to four broad conclusions. First, there is no clear connection between more expenditure and better health. Modest investments judiciously made may yield higher returns than extravagant expenditures. Second, risk pooling is required to make medical treatment accessible and affordable to the poor. Most individuals in any society will find out-of-pocket expenditures unaffordable, and eventually families are driven to penury and medical care will collapse. While preventive health care has to be largely through public systems, risk-pooling can be through public or private health insurance. However, risk-pooling is generally feasible only when there is compulsory membership, and sufficient flexibility in insurance packages. Third, there should be adequate consumer choice, coupled with producer competition in order to drive down health care costs and improve efficiency. Monopolies, as always breed inefficiency, sloth and corruption.

Fourth, the barriers between public health care and private health care are crumbling. Both are complementary to each other.

In addition, in India we must take into account the demographic and health transition. As population growth is slowing and average life span increasing, the burden of disease is undergoing slow changes. Similarly as more and more infections are controlled, and as prosperity increases, life-style diseases are becoming more important. Health financing and delivery systems should adapt to these shifts. While the state's role in primary health care, policy, planning, monitoring, training, setting standards and information systems is critical, the government should acquire the capacity to harness the skills and energy of private sector, while checking its excesses. The National Health Policy – 2002 shows that private health sector's role is hardly a factor in government's approach to health care. Such a skewed approach is counterproductive. As far as the people are concerned, private or public provisioning of service is not relevant; what matters is access, equity, quality, efficiency and accountability. Such a wholesome approach to health care requires adaptability and innovation.

Happily there are many successful and sustainable innovations in health sector. Indian governance system has not always exhibited the capacity for replication of such best practices. And yet many successful innovations are amenable to institutionalization and replication. Health care is a politically and socially sensitive issue; people respond positively to responsive and efficient systems, since the results are felt and appreciated almost instantly. This is the great difference between education, which has long gestation and requires high motivation, and health care, whose benefits can be reaped instantly and there is great incentive to sustain good health care systems. Four successful and sustainable innovations are presented below as brief case studies. They offer tremendous scope for replication and large-scale application, and can provide solutions to many of our dilemmas.

1. Comprehensive Rural Health Care Project, Jamkhed
2. Voluntary Health Services, Chennai
3. Tuberculosis control – Public –private partnership, Hyderabad
4. LV Prasad Eye Institute, Hyderabad

1. Comprehensive Rural Health Care Project (CRHP) – Jamkhed

The most pioneering and successful rural health care model in India has been that of Dr Arole in Jamkhed, Maharashtra. Drs. Raj and Mabelle Arole, started the CHRP in 1970 with the realization that the western style of curative and clinic based medicine doesn't serve the needs of the rural poor. Their deep insights into the health problems of the rural poor convinced them that what is needed is a community based primary health care model, with emphasis on gender equity, backed up with a first class referral hospital.

They understood that the majority of health problems in rural areas are simple, preventable and amenable to health detection and these problems can become worse and may even cause death if not identified and treated at the onset. CRHP was started to provide health care to rural communities, keeping in mind the realities described above. It developed a comprehensive,

community-based primary health care (CBPHC) approach. CRHP is located at Jamkhed, which is far away from a city and is typically rural, drought-prone and poverty stricken.

The project began with a view to develop a health care delivery programme best suited to the needs and resources of this rural area. With the active involvement of the community the following priorities for health care and integrated rural development are identified:

A. Health Care Priorities

1. Simple symptomatic primary care available in the individual village at all times.
2. Care of pregnant and lactating mothers and deliveries.
3. Care of pre-school children (Nutrition, Immunisation and Treatment of simple illnesses)
4. Family planning (Health education, Availability of all supplies at local levels and Sterilisation facilities at the base hospital)
5. Control of chronic illnesses such as Leprosy, Tuberculosis (Early identification, Regular treatment and Rehabilitation at village level)
5. Prevention of Blindness (Nutrition, Infection and eye injuries, Surgery for cataracts, glaucoma, etc.)

B. Integrated Rural Development

1. Animal health care
2. Income generation programmes, especially for women
3. Watershed development
4. Ensuring clean environment, safe drinking water and sanitation
5. Non-formal education
6. Alternate energy
7. Afforestation

In order to achieve effective health care, the project works at three different but interrelated levels:

- 1- Community -- Village Health Worker (VHW) supported by Farmers' Clubs and Women's Clubs
- 2- Mobile health and development team
- 3- Hospital and training centre

1) Community -- Village Health Worker. In every village a local woman is selected and given training as a VHW. She is trained to be the person of first contact for the community for all health related issues. The VHW is trained in all the basics of preventive and primary health care including family planning and pre natal care and is accessible to the community at all times. 80% of the health problems are taken care of by the people themselves with the help of their VHW.

2) Mobile Team. This consists of a doctor, nurse, social worker and paramedical worker, and its purpose is to support the VHW and supervise development activities in the village, and to be the liaison between village and health centre. The team visits the different villages everyday in the

morning and is in contact with the communities. Any problems needing solution beyond their level are referred to the centre.

3) Hospital and Training Centre: The hospital acts as referral for health problems that cannot be dealt with in the village. Only 20% of the patients are from the project villages, as most health problems are resolved at the community level. Low-cost secondary care is practised. The hospital is simple in appearance and has modern diagnostic equipment, surgical facilities and inpatient beds for surgery, obstetrics, child health and other areas. It has a capacity to take care of 40 in-patients and has an average of 100-150 outpatients per day. There is a referral system for cases that cannot be handled there. Low cost is achieved by having a basic facility (building, furnishings, equipment and supplies), using effective but inexpensive medicines, and keeping costs down in surgery and other areas. The patients' relatives help the nurses in the care of the patients. Patients are charged basic fees for the services, in order to support the hospital as well as to avoid the problems that often arise with giving care free of charge.

The **training centre** provides basic training in knowledge, skills and personal development to VHWs and other villagers, as well as seminars on various topics, including health, agriculture, credit and loans, income-generating programmes, government schemes, watershed management. The role of this health centre is also to network with government and other agencies and to identify resources for training and community projects.

CRHP initially covered 8 villages. By 1980 it expanded rapidly to cover 70 villages with 100,000 population. By 1985, 250 villages in Karjat and Jamkhed talukas were covered, serving a population of 250,000 people. In another area, a six-hour drive from Jamkhed, CRHP works in a tribal area in the hills known as Bhandardara, with 30 villages with 50,000 population. Table 9 below gives a snapshot of major health indicators in the project area over the past 3 decades:

Cost of care: In discussion with the community, CRHP has set patient fees within the ability of the poorer sectors to pay. About 10 % of patients cannot pay for the services and the farmers clubs/mahila vikas mandals identify such persons and work out ways of meeting the costs. Since 1989, CRHP has been gradually withdrawing, as many of the communities have become self-reliant. CRHP now remains as a networking organization, providing the secondary and tertiary support services whenever needed.

Table 9: Snapshot of Basic Health Parameters in CRHP area

Year	1971	1976	1986	1993
Infant Mortality Rate	176	52	49	19
Crude Birth Rate	40	34	28	20
Children Under Five				
Immunization DPT & Polio	0.5%	81%	91%	92
Malnutrition: Wt for age	40.0%	30%	5%	5%
Maternal Services				
Prenatal Care	0.5%	80%	82%	96%
Deliveries by trained attendants	<0.5%	74%	83%	98%
Couples practicing family planning	<0.1%	38%	60%	60%
Chronic Diseases				
Leprosy Prev.(/1000)		2	1	0.1

Source: Comprehensive Rural Health Care Project (CRHP), Jamkhed

The Jamkhed model demonstrated that ensuring community participation, involvement of women and establishment of good referral system could enhance health indicators of a society significantly at a low and affordable cost. This is a replicable model with enormous implications for rural health care delivery all over India.

2. Voluntary Health Services (VHS), Chennai

The Voluntary Health Services (VHS), Chennai, is a non-profit society providing comprehensive health care services to the residents of surrounding areas of Chennai. Primary health care is delivered through a number of Mini Health Centers (MHC), and more specialized care is available at the VHS hospital and Medical centre, which serves as a referral centre for the MHCs. The 14 MHCs of the VHS cover a population of around 100,000 serving the rural community of eastern parts of Kancheepuram District. Community participation is the nucleus of the project. Apart from enrolling families as subscriber to the plan, community participation is ensured in several ways such as

- (a) Formation of local action committee consisting of local leaders, panchayat members, officials and other residents
- (b) Making the community provide accommodation and minimum furniture free of cost for accommodating the Mini Health Centre

A Mini Health Centre is a unit catering to the health needs of 1000 families or 5000 population resident in a social area of rural or urban setting taking the family as a unit. The Programme aims at rendering comprehensive, continuous, co-operative community care. Every type of preventive and curative services that can reasonably be expected to be done with minimum facilities as under, rendered by the Mini Health Centres:

- (a) Maintenance of health records which include physical examination for each member of the family and preparation of “at risk register”, nutritional assessment for every member in the family.
- (b) Maternity services – The Multipurpose Health Worker Female and Public Health Nurse/Lady Health Visitor provide ante-natal, natal and post-natal services for pregnant women and side by side offer family planning advise to eligible couples. Each mother is visited approximately once a month during the period of pregnancy and lactation.
- (c) Child Welfare Services:
 - 2. Maintenance of record of normal growth and development of child
 - 3. Preventive services consisting of immunisation procedures like Triple Antigen, Oral Polio on a priority basis and other when indicated.
 - 4. Preventive procedures for nutritional diseases like vitamin deficiencies, Calorie protein mal-nutrition etc. is undertaken by giving nutritional supplements like Vit.A Concentrate and advice regarding the utilization of locally available food stuffs.
- (d). Family Welfare Planning advice is offered to all eligible couples as part of the package of services including the regular health care and preventive services depending upon the need and acceptability of the families.
- (e). Medical Care – regular clinics are conducted for out patients for three hours a day for three days in a week by a qualified Medical Practitioner. The para-medical staff are available all days of the week. Medical Care in this project is offered to attract the people so that then other preventive services can be pushed through more effectively.

Under the Mini Health Centre scheme there are four health posts manned by Lay First Aiders. The health posts function at the extreme periphery each post ideally serving a population of about a thousand, Health Posts are not required for the 1000 population immediately adjacent to the health centre.

The Lay first aider is envisaged to function as a first aider to the persons in the immediate neighbourhood and what is more important as a first informant of the happenings in the village to the health team. She also helps the health team on their periodic visits to the particular villages by rounding up the children in need of immunization, the pregnant women in need of antenatal

care, the eligible couples for family planning and generally the person at risk. All the above categories of workers including the doctors must under go the prescribed training and continuous in service training during their work at the VHS.

Financing Pattern of VHS: VHS believes that community members should actively participate in the provision of health care. VHS policy is the belief that health care is not a “ free commodity”; consumers should pay for it, as they do for other essentials. The level of financial contribution is, however, dependent on the consumer’s ability to pay. Poorer members of the community are expected to contribute a nominal sum towards costs; the higher the income of the consumer, the higher the contribution towards costs. The higher income groups are expected to pay more than the cost of the health care they receive, so that they subsidize the care poorer groups receive.

The actual out of pocket collections made from the patients are classified into 2 categories:

- i. Medical Aid Plan (MAP)
- ii. Service user charges

Medical Aid Plan: The MAP is a simple form of low cost health insurance. The annual premia per household is graded according to the joint monthly income. The income categorization and corresponding membership fees is as follows:

Table 10: Medical Aid Plan for VHS

Monthly income (Rs.)	Annual fee (Rs.)	Plan Group
0-500	75	C1
501-1000	120	C2
1001-2500	150	C3
2501-3500	300	C4
3501-7000	500	C5
7000-10,000	600	C6
10,000 > above	700	C7

Source: VHS, Chennai

Membership to the scheme entitles all household members to a free annual health checkup and curative and diagnostic services are offered at a concessionary rate.

User Charges : Fees are levied for all direct personal services. There is a two tier tariff schedule. First, charges are graded on the basis of membership to MAP scheme and second, according to income. There is hence, a sliding fee scale for both subscribers and non-subscribers of MAP.

In addition, VHS also operates several commercial schemes with the sole purpose of income generation for cross-subsidization purpose. VHS also receives support from the government of Tamilnadu and other multilateral funding agencies in addition to philanthropic contributions.

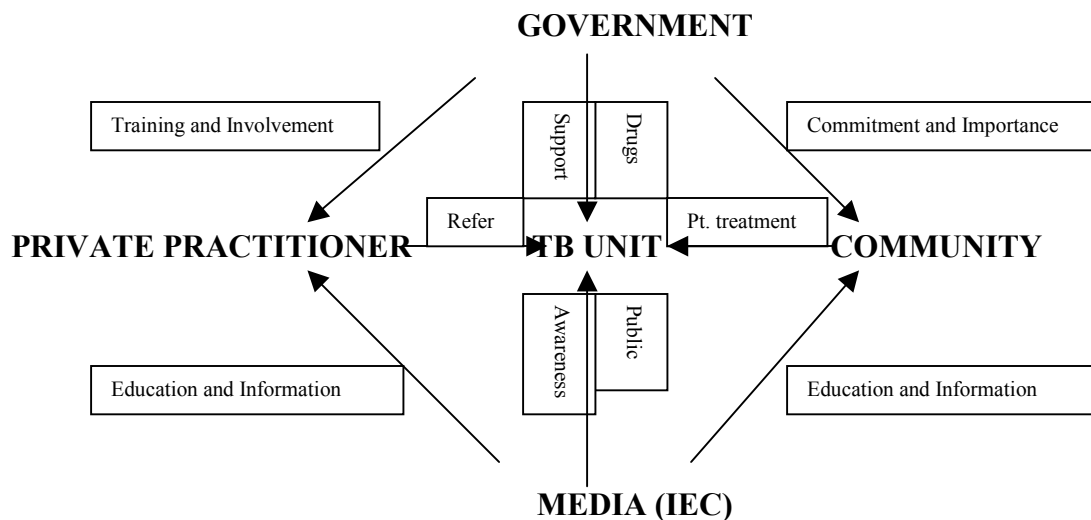
Conclusion: In VHS model there is active participation of the community in providing health services. Community is involved in determining the user fees that need to be levied for the health services provided. Cross subsidization of health care for poor takes place as the higher income groups pay more than the costs of health care they receive.

3. Mahavir Hospital – Public-Private Mix model, Hyderabad

As part of the Revised National Tuberculosis Control Programme (RNTCP), Mahavir Hospital in Hyderabad has successfully adopted and implemented a Public-Private Mix (PPM) model in conjunction with a Direct Observed Treatment Short course (DOTs) to combat TB effectively. The aims of the programme are:

- a. early detection and diagnosis of all infective patients in the community and treatment in the programme with no out of cost expenses
- b. Work with the private practitioners in the community and ensure that maximum number of TB patients are cured.
- c. Actively involve all health care providers to participate with early and high referrals of patients.

Figure 5: PPM - TB Healthcare Dispensing Model



Source: PPM-DOTS, Mahavir Hospital

With the involvement of the community, private practitioners and NGOs, Mahavir acted as a facilitator in implementing the program successfully.

Public and Private Mix DOTs (PPM-DOTs)

It is known that 60-70 % of the patients in the community first visit private doctors in the neighbourhood therefore establishing them as the first point of contact. Private practitioners are unable to diagnose TB early because the diagnostic tool employed by them (X-ray) is non-specific. Sputum Microscopy is far more reliable tool for early diagnosis. Delayed diagnosis results in the patients shopping around at the cost of indebtedness and advancement of disease.

Realizing this Mahavir felt that it is necessary to involve private health care providers fully in the program by sensitizing and obtaining their commitment and participation. There can be two approaches in involving private practitioners – one active, that involves case detection and treatment and the second, passive which means only referral by private provider to the facility and allowing their premises for neighbourhood DOTs centre. Mahavir employed the latter approach as it was found to be most acceptable to the private providers.

As the table below tables shows about almost fifty percent of referrals come from private practitioners. The data demonstrates that the approach of involving the private providers for referral and of the government for providing drugs – PPM is a workable proposition for TB control and are able to achieve estimated cure and detection rates of more than 85% and 70% respectively.

Table 10: Referrals by Private Practitioners

Year	Total Referrals			Referrals by Private Practitioners		
	Male	Female	Total	Male	Female	Total
1995	11	9	20	6	3	9
1996	43	51	94	18	39	57
1997	192	204	396	128	124	252
1998	290	260	550	150	127	277
1999	648	536	1184	279	235	514
2000	751	606	1357	270	237	507
2001	753	597	1350	298	282	580
2002 QI	187	177	364	87	75	162
2002 QII	184	155	339	73	59	132
Total	3059	2595	5654	1309	1181	2490

Source: PPM-DOTS, Mahavir Hospital, 2002.

This is an example of synergies between private practitioners and public health services. While the public health goals are achieved, practitioners gained in terms of good will and popularity in the community.

4. LV Prasad Eye Institute (LVPEI), Hyderabad

LVPEI was founded in 1987 with a mission to provide quality comprehensive eye care to all those who need, regardless of age, sex, creed, nationality, and the ability to pay for its services. The main activities of the institute can be classified into:

- Eye Hospital
- Education
- Eye Research
- Rehabilitation & Low Vision
- Community Eye Health
- Product development

Since inception, the Institute has provided out- patient service to over 1.8 million people, and surgical care to over 190,000 patients- and 54% of these have been free of charge. Currently the institute has 11 satellite affiliates spread over 8 districts of Andhra Pradesh.

Financing: The bulk of capital expenditures including start-up funds, expansion, and equipment purchases were made through donations and grants. The Institute maintains relations with philanthropic organizations and is in the process of establishing an endowment for the future financial health of its programs. This effort comprises 1% of the Institute's expenses. Today, donations comprise twenty five percent of the Institute's funds (25% national, 75% international). LVPEI secures donations of equipment from corporations eager to showcase their instruments in a training institution. Approximately 25% of equipment is donated, 50% is obtained at or below cost, and 25% is purchased at market price. LVPEI's programs of research, rehabilitation, and rural outreach compete for and receive grants including sums from the U.S. and Australia. Although grants provide 17% of the Institute's annual revenues, these divisions of the Institute are still dependent on the Institute's fee generated income.

Based on current levels of billing, fees generate the majority of the Institute's income. Paying patients are classified according to four tiers of financial ability. Non-paying patients consist of approximately 38% of outpatient services and 50% of surgical patients. Inability to pay is based on eligibility for government ration cards, and hospital staff is authorized to change a patient's status to non-pay at any time. Given the existing fee schedule, a 1:1 ratio of non-pay to pay patients sustains patient care and the bulk of research, rehabilitation and outreach expenditures. All patients – paying and non-paying - get the same quality of care.

Replicable Model: Based on its own experience, LVPEI has developed a comprehensive and replicable model to make high quality eye care services available, accessible and affordable to all through a sustainable delivery system in underserved areas. The comprehensive model is designed to serve a population of 500,000 initially. This model envisages the following:

- Close linkage with a training / tertiary care centre
- Linkage with the local community
- Good infrastructure
- High quality training of all personnel & working conditions

- Prompt and high quality service

All members of the staff, with the likely exception of the ophthalmologist, should be selected from the local community. LVPEI provides all the requisite training for the entire “eye care team” required to staff such a centre.

LVPEI is a good example of a non-profit organization developing a world renowned institution providing high quality secondary and tertiary care, access to the poor through cross-subsidization, fiscal solvency, excellent clinical research, quality training to meet the needs of the whole sector, creating models of sustainable high quality primary and secondary eye care and effective leadership in expanding community eye health. This centre of excellence proved that privately funded quality health care in India can be both sustainable and equitable.

The lessons of these four innovations are self-evident. **Jamkhed** proves that low-cost, high quality primary health care is possible through community ownership and local talent effectively harnessed. Most health interventions are simple, inexpensive and effective, and do not need highly trained physicians. The remarkable and durable improvement of health indicators proves its efficacy. Even more significantly, community ownership of good health care can have other social and economic consequences promoting equity, gender sensitivity, education, initiative and entrepreneurship. If the state does not exhibit a hostile attitude, and collaborates through provisioning, training and monitoring, this can be replicated in most of India. Citizens' initiatives, voluntary organizations, local panchayats and community co-operatives can play a seminal role in expanding and improving primary health services if the state has the will and wisdom to play a supportive and catalytic role.

Voluntary Health Services achieved three goals - accessible, reliable and affordable family health care, risk-pooling and high quality hospital care, and partial public funding coupled with voluntarism and cost-effectiveness. This model can be easily replicated in most urban settlements. The state can transfer its infrastructure of urban dispensaries and provide funds for basic maintenance.

Mahavir Public-Private model provides a viable model for public private partnership in implementing state's priority health programmes. In achieving key goals, the state and private sector can join forces to bring synergies. The goodwill and patient contact are the gains to private practitioners and better reach and coverage, identification of target patients and better achievement of declared goals are state's gains. Such programmes can be replicated all over the country once the state is ready to commit its resources and puts the infrastructure for specific services in place.

Provision of specialized, high-quality eye care services by a non-profit society combining excellence with cross-subsidization ensuring uniform quality of service to all is the model offered by **L V Prasad Eye Institute**. This is a model of tertiary care, research, training and leadership for health care in a defined geographic area which has great potential for replication. Hospital care needs to be taken out of for-profit corporate sector and brought into the fold of highly professional, non-profit sector. Generous philanthropy from individuals and groups with a concept of social capital, broad support from the state, and willingness of public health sector to

accept leadership of professional initiatives and forge partnerships will yield best health dividends in such cases well beyond hospital care.

All these are models of effective health delivery, low-cost, public-private partnership and community ownership. These are the directions in which future health care delivery should move if we are to ensure acceptable standards at affordable costs

IX. Politics, Governance and Health

In a democratic society all roads lead to politics. True politics is about promotion of human happiness. Health is a key ingredient of happiness. And governance is about reconciling conflicting demands, and allocation of limited resources to meet the unlimited needs through prior prioritization. And finally the art of governance lies in efficiently managing institutions to give the best value for the money spent, and to create systems of accountability and people's participation.

It is well recognized that India is facing a fiscal crisis, with the combined expenditure of union and states exceeding revenues by 11 percent of the GDP. Given the systemic rigidities and prior commitments without reference to returns to society, there are very few possibilities of significant increases in budgetary allocations to the social sector. Mere tinkering here and there will not release the much needed resources for health care. And people who are helpless victims of corruption, mal administration and poor quality of services are not going to meekly accept higher taxation. More borrowings are not sustainable, and will lead us into vicious debt trap. In any case, more resources without better utilization will only encourage profligacy and does not guarantee results. It is this vicious cycle that the political process has to reverse.

Government in India has accepted too many responsibilities without building the institutional capacity to deliver.

A more critical failure has been in the neglect of vital functions of state. In a modern civilized society, apart from the sovereign functions of security, public order, rule of law and justice, the most vital requirements for fulfillment of human potential and creation of opportunities for vertical mobility are health care and education. The fact that India ranks with five countries, all of which are ravaged by civil war or collapse of institutions, in its share of public health expenditure as a proportion of total health expenditure is testimony to this complete perversion of state's role. If the Indian state has to act as a facilitator to release human potential and promote prosperity, then government needs to be reinvented. We need to first focus our energies and resources on those areas which promote happiness, facilitate growth and create opportunities to break out of shackles imposed by social hierarchies and poverty. Political reform to make elections free and fair, and to facilitate changes in the rules of the game instead of mere periodic change of players are the first step. This should be followed by redefining the role of government and reassigning priorities and allocating resources in substantial measure for health and education.

Mere allocation of resources in a centralized, unaccountable, rigid governance structure will not yield results. Nor will people accept higher burdens without commensurate services of quality.

We need to empower local governments in order to establish clear links between vote and public good, taxes and services, and authority and accountability. Only then can good leadership emerge, resources be raised in adequate measure, and public servants become accountable to their masters, the citizens. In an inequitable society with a small segment of educated, skilled population engaged in organized sector in government with colonial legacy, the bulk of the people are at the mercy of the mighty state functionaries, and the roles between citizen and public servants are reversed. The true sovereign in a democracy becomes a humble subject, and the servant becomes the master. Mere formal political equality in the form of universal franchise and lofty constitutional precepts are not enough to make popular sovereignty real, and public services accountable to people. Governance must be decentralized and institutions must be built on the basis of principle of subsidiarity with the citizen as the centre, and most functions entrusted to the stakeholders and local government closest to people.

Finally all power is mere responsibility to serve. The ultimate objective of all governance is to provide quality services to citizens. The satisfaction of the citizen is the true measure of performance. In such a scheme of things, public sector and private sector become meaningless, and collaboration and convergence become inevitable. Public provisioning and monitoring will be combined with private services, and private funds can augment public services. New and innovative methods of financing and service delivery will become a reality once citizens get good value for their money, and accountability is enforced.

In mature democracies not a day passes without public attention being focused on health and education policies or the state of those services. Most elections are fought on education and health care issues. In India much of our political process is divorced from real issues of life and death, and empowerment. Health and education are relegated to the background, and politics has been reduced to a game of private power for personal aggrandizement. In the ultimate sense quality health care and citizen-centred democracy go together. The struggle for better health, the fight for accountable democracy, the quest for people's sovereignty and the urge for best value for public money spent are all inseparable. We have the strength and resilience as a society; our workers have skills and enterprise; and our people have good sense and ambition. We are privileged to live in the 21st century, when most human predicaments have practical solutions, and avoidable suffering can be prevented as never before. We have the cumulative experience in our own country and throughout the world to guide us.

If we internalise those lessons and strive to build and sustain a viable health care system, we will surely attain a state of health and happiness in keeping with our full potential.

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