

# Health Care Financing for the Poor

## Community-based Health Insurance Schemes in Gujarat

*Health indicators in India may have seen substantial improvements in recent decades but quality and affordable health care services continue to elude the poor. Government provided health services only partially meet the needs of the rural and urban poor in the informal sector and making equitable and affordable medical care accessible to this segment remains a challenge. It is here that community-based health insurance (CBHI) schemes could provide viable alternatives. Four such CBHI schemes, that form the focus of this paper, are sustained by a pooling of resources as well as the regular “prepayment” of a small amount as premium, so as to enable poorer communities to meet high out-of-pocket medical expenses. While such schemes are still in their infancy, to ensure a wider coverage and acceptance, CBHI schemes could be attached to other decentralised agencies of governance such as panchayati raj institutions.*

AKASH ACHARYA, M KENT RANSON

### **I** **Introduction**

Theoretical work as well as empirical evidence clearly show the positive linkages between good health and economic development. The health status of a population is now considered an important indicator of development, and health is increasingly being seen as a development issue, rather than just a medical one. Health has also emerged as a major area of academic interest in the social sciences. Health is a basic need along with food, shelter, and education and is a precondition for productivity and growth. Health services have a major influence on the well-being of individuals and societies, and are an important part of a nation’s politics and economy. Health interventions can lead to economic growth and reduce inequity in developing countries [WHO 2001]. Ill-health and poor access to health services are increasingly seen as major dimensions of poverty. “The association between poverty and ill-health reflects causality running in both directions” [Wagstaff 2002]. Poor people are thus caught in a vicious circle: poverty breeds ill-health; ill-health results in impoverishment and indebtedness. Therefore, efforts to combat poverty ought to consider the role of health [World Bank 2002].

This paper looks at community-based health insurance (CBHI) as a promising alternative for financing health care expenditure. In addition to reviewing a substantial mass of literature, we have benefited from extended discussions with scheme managers of different NGOs, researchers, representatives of funding agencies, executives of public and private companies and, last but not least, members of targeted communities. Section II briefly explains the burden of health care expenditure on the poor and the inability of state and market to protect them from this burden. Section III provides a working definition of CBHI and explains how it differs from standard health insurance. Section IV narrates the role of the state, market and NGOs in the health sector of Gujarat state. In Section V, we present case studies of four NGOs in Gujarat

that are running health insurance schemes. Finally in Section VI, we compare and evaluate strengths and weaknesses of these schemes.

### **I** **Health Expenditures and the Poor**

The last century saw notable improvements in human health, including longer average life expectancies and fewer infant and child deaths. India’s life expectancy has shown remarkable improvement, rising from 49 years in 1970 to 63 years in 1998. Similarly, infant mortality rate – IMR (which is considered a sensitive indicator that responds to many underlying causes, including general socio-economic conditions) dropped from 146 deaths per 1,000 births in the 1950s to 70 in 1999 [Registrar General 1999]. But at the same time, deep economic inequalities and social injustices continue to deny good health to many [Sen et al 2002]. Though health has been considered a fundamental human right since the Alma Ata Declaration (1978), expenditure on health is often unexpected and can be catastrophic in nature. This is even truer for the poor. A majority of the poor households, especially the rural ones, reside in remote regions where neither government facilities nor private medical practitioners are available. They have to depend on poor quality services provided by local, often unqualified, practitioners and faith healers.

Health care expenditure cuts poor households’ budgets in two ways. Not only do they have to spend a large amount of money and resources on medical care but they are also unable to earn during the period of illness. Moreover, rural people have a relatively higher burden of indirect costs (such as expenses on transport, food/stay, tips given to secure access to any person or facility, opportunity cost of lost wages of the sick as well as the accompanying person, etc) associated with an illness episode [Sodani 1997]. Very often, the poor have to borrow funds at a high interest rate to meet both medical expenditure and other household consumption needs, which carries them into indebtedness.

More than 40 per cent of individuals, who are hospitalised in India in one year, borrow money or sell assets to cover the cost [World Bank 2002]. The burden of treatment is particularly high on them when seeking inpatient care [Gumber and Kulkarni 2000]. Many people do not seek health care because of high costs involved. For example, the poorest quintile of Indians is 2.6 times more likely than the richest to forgo medical treatment when ill [Berman 1996]. Between NSS 42nd and 52nd round, those sick but not availing treatment for financial reasons increased from 15 per cent to 24 per cent in rural areas and doubled from 10 per cent to 21 per cent in urban areas [GoI 2000]. Those who avail of treatment, pay a large proportion of their annual income. Hospitalised Indians spend more than half (58 per cent) of their total annual expenditure on health care [World Bank 2002]. One possible consequence of this high medical expenditure could be the pushing of these families into a zone of permanent poverty [UNDP 2001]. Almost one-quarter of hospitalised Indians fall into poverty every year as a direct consequence of the medical expenses they pay, out-of-pocket, towards hospitalisation [World Bank 2002].

This enormous financial burden arises because the poor are bereft of any safety nets like health insurance. A large majority of the rural and urban slum population, mostly working in the informal sector, remain outside the health insurance system and thus have low protection from risk.

### **Role of State**

“Health care, like education, housing, old age security and other social provisions, has nowhere in the world been able to make an effective contribution without the active participation of the state. Even in the most advanced countries, the role of the state has been extremely critical in assuring that health care becomes universally and more or less equitably available” [Duggal et al 1995].

India spends about 5.1 per cent of its GDP on health [WHO 2004]. But 82 per cent of total health care expenditure is spent by the private sector and almost all of this represents private out-of-pocket expenditure. Most of private spending is on curative care: consultations, diagnostics and in-patient care. This out-of-pocket expenditure puts enormous financial burden on individuals [Ellis et al 2000]. The public health investment in the country over the years has been comparatively low, and as a percentage of GDP has declined from 1.3 per cent in 1990 to 0.9 per cent in 1999. Even from this tiny public expenditure on health, the benefits have been very uneven between the better endowed and the more vulnerable sections of society. This is particularly true for women, children and the socially disadvantaged sections of society. Moreover nearly 60 per cent of all public health expenditure is in form of salaries [MoH and FW 2002], which suggests that public health investments have been allocated inefficiently. Another important feature of health care system in India is that even visits to public facilities generally involve considerable out-of-pocket expenditures. These expenditures may take the form of payments for medicines, laboratory tests, dressing, linen and/or direct payment to providers [Ellis et al 2000]. This happens as medicines are often out of stock at public health facilities and patients have to approach the market for medicines as well as laboratory tests.

There is extensive literature that summarises the poor quality of health care that is currently available to seekers of health care in India. For instance, patients both rich and poor tend to

overwhelmingly favour the private sector when it comes to ambulatory care [ASCI 1996; World Bank 1995 as cited in Mahal 1999]. This reflects the generally poor perception of the medical care available in the public sector. This is consistent with large shortfalls in personnel, equipment, and medicines in public facilities reported in primary health centres and sub-centres [Naylor et al 1999]. Numerous studies have indicated that these facilities are mostly unstaffed and short of drugs and essential supplies and that they sometimes suffer from low staff morale and motivation. Household surveys consistently report concern about the poor quality of public facilities as one of the reasons why people seek treatment elsewhere. The central and state governments make almost all decisions regarding staffing, supply of drugs, etc, while providers of health care at the lower levels have little autonomy [Ellis et al 2000].

The government of India's social insurance schemes Central Government Health Scheme (CGHS) and Employee State Insurance Scheme (ESIS) and voluntary insurance schemes (Mediclaim policy provided through the four GIC subsidiaries and of late, health insurance policies by private companies) are geared towards workers in the organised or formal sector, who comprise not more than 10 per cent of all workers [Van Ginneken 1998]. Today in India, despite high economic growth, the proportion of people in the organised sector is falling and only 9.4 per cent of total Indian workforce belongs to the organised sector [Datt 1997]. The problem is compounded by the fact that the unorganised or informal sector is growing and people who belong to this sector are bereft of any type of formal social security protection, i.e., neither a contribution-based social insurance scheme nor tax-financed social assistance [ILO 2002]. Expansion of government schemes outside of the formal sector is unlikely due to logistical difficulties in organising premium collections, targeting subsidies and because insurers view the poor as “bad risks” and unreliable source of premium payments. Lower penetration of health insurance among the poor may be also due to lack of information that is required by actuaries to calculate premiums and accordingly design benefit package, or even due to the poor marketing of available health insurance schemes like Jan Arogya of GIC.

Moreover, with shrinking budgetary support and fiscal problems, most state governments are finding it difficult to expand their public facilities to cater to the growing health care needs of their populations. Thus, the state health sector only partially serves the needs of rural and urban poor in the informal sector. Making equitable, affordable and quality medical care accessible to the large number of people in the informal sector is thus a daunting challenge.

### **Role of Market**

The private sector in India accounts for 82 per cent of outpatient care, 56 per cent of hospitalisations, 46 per cent of institutional deliveries, and 40 per cent of pre-natal care visits. It provides only 10 per cent of immunisations. A comparison of NSS 52nd round with the corresponding estimates of the NSS 42nd round reveals a discernible rise in the share of private sector [NSSO 1998]. Private sector in India accounts for more than 80 per cent of all health spending, one of the highest proportions of private spending found anywhere in the world [World Bank 2002]. Only five countries (Cambodia, the Democratic Republic of the Congo, Georgia, Myanmar, and Sierra Leone) have a higher dependence on private financing in the health sector [WHO 2004].

But the situation is not much better with the private sector. A study in two districts of Maharashtra found a large number of doctors practising modern medicine without being qualified to do so; and several hospitals that lacked even the basic infrastructure and personnel to carry out their functions, and operating without licences and registration [Nandraj and Duggal 1996].

Private for-profit health insurance, only recently allowed in India under the Insurance Regulatory Development Authority (IRDA) Act of 1999, is largely unavailable. Few companies have introduced health insurance schemes and they are generally targeted towards well-off people in selected cities. Nonetheless, according to IRDA guidelines, it is mandatory for private companies to fulfil certain rural and social obligations.<sup>1</sup> However, these obligations are not exclusively for health insurance schemes but for all categories of non-life insurance together. Thus, there is no specific IRDA provision, which makes it mandatory for private companies to cover the poor through their health insurance policies.

A market, after all, recognises those who have the purchasing power to enter in it. The poorest of the poor in India and in Gujarat who survive on subsistence activities have a very low level of interaction with market as consumers [Iyenger 2000]. They are likely to be neglected by private insurance companies. Thus, most of the informal sector remains outside any insurance cover (provided by the state as well as the market) and hence there is a great need to somehow bring them into the net of health insurance so that their vulnerability can be reduced.

## **I**

### **Community-based Health Insurance and NGOs**

Given the rising expenditure on health care and the inability of the state and the market to protect the vulnerable sections of society, it becomes increasingly important to look at various alternatives for financing this expenditure. There have been attempts to augment the resources of health facilities through the introduction of user fees. These attempts have not produced any significant result. The all-India figures suggest that during 1992-93, the average hospital receipts amounted to about 1.4 per cent of the total hospital expenditure incurred by the hospitals [NIPFP 1994]. Moreover, evidence consistently shows that user fees are most taxing to the poor and have a negative equity impact [McPake et al 1992; Russell and Gilson 1997].

An important part of private health finance in India is the service provided by voluntary and charitable organisations. As noted by Berman (1996), “while such groups do not account for a large share in health care, they are often the only source of health services, or the only trusted one, for the population they serve.” While it is very difficult to estimate even approximately the exact coverage of these varied services, Berman speculates that they cover more than 5 per cent of the population [Ellis et al 2000]. Many NGOs in India are involved in microfinancing initiatives. Learning from their experiences from micro-credit programmes (e.g., health expenditure, a major cause of default), some have started micro-insurance programmes. There are also some other NGOs that are not into microfinance but into other developmental activities and they have also started insurance schemes for the poor. Most of these NGOs offer comprehensive assistance packages with the underlying assumption that health is only one aspect of development and should therefore be tackled along with other social problems in holistic fashion [Ellis et al 2000]. According

to one notification, government recognises NGOs and panchayats as intermediaries who can sell insurance.<sup>2</sup>

Community-based health insurance (CBHI) is a mechanism that allows for pooling of resources to cover the costs of future, unpredictable health-related events. It offers individuals and households protection against the uncertain risk of catastrophic medical expenses in exchange for regular payment of premiums. This regular small amount of prepayment helps the community in avoiding high out-of-pocket expenditure at the time of hospitalisation [Ranson 2002a].

What distinguishes these ‘community-based’ schemes from public or private-for-profit insurance is that the targeted community is involved in, defining the contribution level and collecting mechanisms, defining the content of the benefit package; and/or allocating the scheme’s financial resources [ILO Universitas Programme 2002]. This mechanism, under which the healthy can cross-subsidise the sick, may make a positive impact on equity. The World Health Report 2000 noted that prepayment schemes (i.e., CBHI) represent the most effective way to protect people from the costs of health care, and called for investigation into mechanisms to bring the poor into such schemes [WHO 2000]. CBHI programmes offer a hope for reducing the financial burden caused by sickness to a large segment of the low-income population [Ellis et al 2000].

Many multinational donor agencies advocate that CBHI schemes serve as a mechanism of enhancing access (insured individuals are more likely to seek care when they are ill) to health care services, and reducing the frequency of medical indebtedness and thus contributing positively to overall health system goals. The WHO’s Commission on Macroeconomics and Health (CMH), for example, recommends, “out-of-pocket expenditures by poor communities should increasingly be channelled into community financing schemes to help cover the costs of community-based health delivery”, [WHO 2001]. But data currently available in the literature on CBHI in India is extremely limited. Many schemes have not been studied at all. Older schemes are described in terms of their design and management, but rarely have they been evaluated in terms of their impact. For those who wish to implement a new CBHI, or existing CBHI schemes that wish to make improvements, or health policy-makers wondering whether such schemes should be supported, there is an extremely limited evidence-base on which to make decisions [Ranson 2002b].

In this paper, we have described and analysed four such CBHI schemes in Gujarat. As far as we know, this is an exhaustive list of CBHI schemes in Gujarat. We have only included schemes in which prepayment is being collected at a regular interval and in which some component of inpatient care is covered (i.e., we intend to exclude schemes that only cover outpatient cover – including community drug funds – as these involve very limited/no pooling of resources). So far no other study aimed at comparing these four schemes has been carried out. We have described the schemes in short as well as presented the community viewpoint.

## **IV**

### **Health Profile of Gujarat**

Gujarat, a state situated in north-western India, has a long and varied history and is particularly well known as the birthplace of Mahatma Gandhi, and sadly, as the site of recurrent communal violence. At the time of 2001 census, the population of Gujarat

was 50.6 million (almost 5 per cent of India's total population of 1,027 million) making it the 10th (of 28) most populous state. Gujarat has an area of almost 2,00,000 square kilometres, and a population density of 258 persons per square kilometre (the average for India is 324 persons per square kilometre). Compared to India as a whole, Gujarat is more urban; roughly 37.4 per cent of Gujaratis live in urban areas compared to only 27.8 per cent of all Indians. In general, Gujarat compares favourably to India as a whole with respect to social, economic and demographic indicators.

### Health Indicators

It can be seen from Table 1 that in terms of health care indicators, Gujarat tends to be an average performer; it pales in comparison to the best performing states (for example, Kerala which has lower per capita income and higher incidence of poverty than Gujarat) but does better than the all-India average.

### Role of State and Market

As compared to India, Gujarat has a much higher density of health facilities. The number of hospitals and dispensaries per lakh population in Gujarat is more than three times that in India (Table 2). But at the same time, health care in Gujarat is largely privately financed, individually purchased by out-of-pocket expenditure, privately produced, unregulated, and geared more towards curative instead of preventive care. Table 3 shows that Gujarat differs most markedly from India overall in the importance of private health care provision (particularly inpatient). The share of private sector in outpatient care is 65 per cent in rural areas and 80 per cent in urban areas [Mahadevia 2002]. Private sector is much more widespread in Gujarat compared to all India average and dependence of people on private facilities in rural as well as urban areas is very high.

Health expenditure as a proportion of net state domestic product (NSDP) has declined in the last decade from 2.16 per cent to 1.56 per cent. It must also be noted that Gujarat has one of fastest growing NSDP but it has not resulted in higher government spending on health. When ranked for the proportion of NSDP spent on health, Gujarat ranked fourth from the bottom out of 25 states in 1990-91. According to NSS 52nd round dataset, per capita public health expenditure (PCPHE) was Rs 54 in Gujarat, lower than Rs 70, national average [Mahadevia 2002].

### Role of NGOs

Gujarat has a long tradition of voluntary organisations. NGOs rooted in Gandhian philosophy have covered a large field of development activity including health in the state. Gujarat has a relatively large number of voluntary initiatives for providing health services in urban as well as rural areas. There are NGOs (like ARCH-Vahini, Sewa Rural, Anjali, Ideal and few more) run by professional doctors who are interested in public health and committed to serve the poor. There are other NGOs like Aga Khan, Self-Employed Women Association (SEWA) and Tribhuvandas Foundation (TF) who provide health services as a part of their other developmental activities. Most of these NGOs have been functioning in relatively inaccessible interiors in the rural districts with an emphasis on community participation. Some NGOs (like Lowcost Medicine) are also instrumental in

promoting production and distribution of low cost drugs. These NGOs have been able to promote a workable concept of primary health care in which the members of the community are trained to deal with primary illness [Iyenger 2000]. Some of them (SEWA, TF and Aga Khan) have also started health insurance schemes that cover hospitalisation. In the next section, we describe these schemes.

## V

### Case Studies of Four CBHI Schemes

This section describes the modus operandi of four schemes run by different NGOs. The narration on scheme design and management is based on discussions with scheme managers. Apart from the management point of view, we have also tried to elicit the opinion of the targeted community by holding Focus Group Discussion (FGDs) with them. Their perceptions, experiences, and aspirations have enriched our understanding of CBHI.

#### Self-Employed Women Association

The SEWA is a labour union of 6,00,000 women workers engaged in the informal economy, based in Ahmedabad, Gujarat. SEWA is engaged in a variety of development-oriented activities targeted at women. One of SEWA's first initiatives, after its inception in 1972, was addressing women's needs for financial services – savings and credit – through the women's own microfinance organisation, SEWA Bank. In 1984, SEWA established a community-based primary health care programme Aarogya SEWA (or SEWA Health), and Vimo SEWA (or SEWA Insurance) was established in 1992 to complement this primary health care work.

**Table 1: Health Status of Gujarat Compared to India and Kerala**

Health Status Indicator	Gujarat	India	Kerala
Crude birth rate-CBR (1999)	25.6	27.2	17.4
Crude death rate-CDR (1997)	7.6	8.9	6.3
Maternal mortality rate-MMR (1993)	3.89	4.58	2.34
Infant mortality rate-IMR (1997)	62	72	17
Life expectancy at birth (1996-2000) male	61.53	62.36	68.8
Life expectancy at birth (1996-2000) female	62.77	63.39	74.4
Total fertility rate-TFR (1994)	3.2	3.5	1.8

Source: Mahadevia (2002).

**Table 2: Health Facilities in Gujarat and India, 1991**

Facilities per Lakh Population	Gujarat	India
Hospital	4.34	1.32
Dispensaries	15.22	3.25
PHCs	3.24	3.55
Beds	145.76	78.70
Doctors	52.98	47.19
Nurses	59	36.88

Source: Duggal et al (1995).

**Table 3: Presence of Private Sector in Health Care, Gujarat vs India (in percentage)**

	Gujarat	India
Hospitals in private sector	85	68
Inpatient beds in private sector	58	37
Hospitalisations among rural males in private sector	67.8	38
Hospitalisations among urban males in private sector	72.8	39.9

Source: Sundar (1995).

Vimo SEWA provides a comprehensive insurance package including life, health (hospitalisation) and asset insurance. The scheme is targeted at members of the SEWA union across 11 districts in Gujarat state, their spouses and their children. Of late, the scheme has also been extended to other states of India. In order to join the scheme, adults must be between 18 and 60 years of age. Under Vimo SEWA's most popular policy, those who pay the annual premium of Rs 85 (Rs 37.5 of which is earmarked for medical insurance) are covered to a maximum of Rs 2,000 per year in case of hospitalisation. Women also have the option of becoming lifetime members of the social security scheme by making a fixed deposit of Rs 1,000; interest on this is used to pay the annual premium and the deposit is returned to the woman when she turns 60. Exempted from coverage under the medical insurance fund are certain pre-existing diseases (for example, chronic tuberculosis, certain cancers, diabetes, hypertension, piles) and disease caused by addiction. Members are eligible for reimbursement for care taken at any type of hospital (public, private, or trust). At the time of discharge, members must pay for the hospitalisation out-of-pocket, and apply for reimbursement from Vimo SEWA.

The design and management of the medical insurance fund have evolved considerably since 1992. For example, SEWA's health insurance initially was administered jointly by SEWA and the United India Insurance Company (UIIC- a subsidiary of the Government Insurance Company). At that time, coverage included only allopathic, inpatient care, not including gynaecologic illnesses, and maximum coverage was Rs 1,000 per year. The collaboration with the insurance company proved to be a mixed experience. Difficulties arose in part due to the nature of the risks covered, and also because these companies had very little experience in insuring the poor. Consequently, systems and procedures were slow and not suited to the reality of women workers. In 1994, SEWA began to fully manage the health insurance component itself. Under SEWA's management: coverage was expanded to cover more illnesses and types of care (e.g. obstetric and gynaecologic problems and care from traditional bone-setters), the premium was gradually increased as was the level of coverage; the scheme was expanded to include men; and the system for claims processing was decentralised to some districts. Since 2001, Vimo SEWA has again started purchasing medical insurance from a GIC subsidiary, this time the National Insurance Company (NIC) and the newly introduced private player ICICI Lombard. However, Vimo SEWA remains fully responsible for enrolment of members, and approving and processing claims.

Membership in Vimo SEWA has risen markedly since its inception. Membership in 1992-93 was approximately 5,000 and increased steadily to almost 30,000 members in 2000-01 before jumping to over 90,000 in 2001-02. It stands at more than 1,00,000 as of now. Rates of utilisation of the health insurance have been low relative to the expected rate of hospitalisation, at approximately 18 claims per thousand members per year. The reason for this low rate remains unknown, but may relate to difficulties faced by members in compiling claims, and lack of information among some members about how and when to submit a medical insurance claim. Among those who have submitted medical claims to SEWA, the degree of financial protection has been substantial. Among claims submitted, the average rate of rejection over the last eight years has been only 11 per cent. Among the claims that were reimbursed, the mean rate of reimbursement has varied from an average of 50 per cent (in recent

years) to 85 per cent (1995-96). In recent years, the delay between hospital discharge and reimbursement of the insured was just over three months – more than half of this delay occurs between discharge from hospital and submission of the insurance claim to Vimo SEWA. Since the health insurance's inception, the premiums paid by annual members plus the interest paid from the fixed deposits of lifetime members have always exceeded medical claim payments. Cost-recovery (excluding administrative costs) varied from 119 to 309 per cent. Nonetheless, if administrative costs including spending on social marketing efforts are taken into consideration, the amount collected through the premium may fall short of covering the entire cost of the scheme.

### **Tribhuvandas Foundation**

TF, named after one of the pioneers of the white revolution and founder chairman of AMUL dairy, the late Tribhuvandas Patel, has been actively involved in various development oriented activities, and particularly concerned with the health of women and children in the villages of Kheda and Anand districts of central Gujarat since 1980. The foundation covers 638 villages out of 900 villages of Kheda/Anand district. TF has trained one voluntary health worker (VHW) for work in every village. VHWs are paid an honorarium by the community and they have been trained at TF headquarters to treat primary illnesses and to identify at-risk cases so that they can be referred to TF. In addition to primary health care, TF is also involved in income-generating projects.

The health insurance scheme named as Sardar Patel Aarogya Mandal came into existence on January 26, 2001. TF was already providing primary health care through its infrastructure, but it felt the need of a health insurance scheme that could cover the expensive hospitalisation. So the scheme was created to provide inpatient care. Under this new scheme (TF had already been experimenting with prepayment for more than 20 years), three paise per litre of milk deposited, plus Rs 26 (Rs 25 for TF membership and Rs 1 for the scheme) per year are collected as premium from each household. Originally the purpose behind deducting three paise per litre of milk deposited was to build up a corpus and the interest on it would pay for the premium. This three paise per litre, was being collected years before the scheme was started. For those who have paid the premium, 100 per cent of hospitalisation expenses (excluding medicine, transport and other indirect cost) are covered for the entire family. Only those who are members of both, milk cooperative (doodhmandli) as well as TF can enrol in this scheme. They must deposit a minimum 300 litres of milk per year. If they cannot then they are not entitled to the benefits. Another important clause is that members must not sell any amount of milk to AMUL competitors. If they are found selling milk to competitors, they are disqualified from participating in the scheme.

Under this scheme, members when in need, have to approach TF or any of its sub-centres for referral to hospital. TF has signed a memorandum of understanding (MoU) with nine hospitals. All hospitals were selected after careful consideration of factors like geographic location, quality of health care provided, fees and support of the management. One common element among all these hospitals is that they are all trust hospitals. Patients can be admitted into the hospital by showing the membership card. This card (in fact a small booklet known as chopdi among the

community) contains the name of family members. Members do not have to incur any out-of-pocket expenditure at the time of hospitalisation. All nine hospitals send bills to the TF office on a monthly basis and they pass through the scrutiny by TF office staff. After getting a reference slip from the TF doctor, they can approach any of the nine approved/empanelled hospitals. In life threatening emergencies, patients can directly proceed to the hospital, but before being discharged from the hospital, the relatives of patient or village health worker (VHW) has to approach the TF appointed doctors for referral slip.

Initially the scheme also covered the cost of medicine but it was found that doctors were over prescribing medicines and this cover was withdrawn later on. TF also had to drop several of its partner hospitals because of concerns about supply or provider moral hazard (a tendency to inflate medical bills when provider knows that patient possesses health insurance).

As the time of data collection, 83,000 families from 645 dairy cooperatives had already become members of the scheme. This shows that the scheme has been able to provide coverage to a sizeable population. But at the same time the scheme excludes those who cannot deposit a minimum 300 litres of milk per year. This means, those who are very poor and do not own cattle, remain outside the ambit of the scheme. Members of the scheme by and large seemed quite happy during our FGD with them. But many are unaware about the exclusions and when they do not get waiver, they complain. We found that even the VHW was unaware about illnesses that are excluded from the scheme. This confusion creates dissatisfaction and frustration in the community in general and those who do not get waiver, in particular. Thus, there is a need to make the community understand the scheme design thoroughly. As far as financial sustainability of the scheme is concerned, the amount collected through premium falls short of covering the cost of hospitalisation. For example, Rs 27 lakhs were collected through premium last year and the total cost of hospitalisation exceeded Rs 1.25 crore. The deficit was filled in by AMUL. This gap aroused on account of higher rates of utilisation than what was expected by TF administration. Moreover, TF administration wanted to build up the corpus for some years before launching the scheme but for some reasons the scheme was started early which contributed to the deficit.

### Aga Khan Health Services, India

The Aga Khan Health Services, India (AKHS,I), a major functionary of the Aga Khan development network, is one of the most comprehensive, non-profit health care system in the developing world. AKHS is active in Kenya, Tanzania, India and Pakistan. Today more than two million people benefit from AKHS. The organisation derives support from the Aga Khan's secretariat in France and international headquarters in Geneva on policy issues and concerns. AKHS,I (AKHS India) provides health care to the poor in pockets throughout the country but mainly the organisation is active in Gujarat, Maharashtra and Andhra Pradesh. In Gujarat AKHS,I is working in Sidhpur taluka of Patan district in north Gujarat and Junagadh district in Saurashtra. AKHS,I believes in providing quality health care to the poor and strives for making all its services financially viable. They charge user fees for all services and have also introduced prepayment or health insurance schemes.

In the first scheme known as cooperative health care financing, AKHS,I has tied up with a dairy cooperative and the dairy

cooperative deducts three to five paise per litre of milk and in return provides Rs 30,000 to AKHS,I. Under the second scheme, known as community health fund (CHF), Rs 200 is collected as premium from each family that is not a member of dairy cooperatives. Those who are members of any of the two schemes, get waiver in registration fee (which in any case is subsidised, at a cost of only Rs 2) and medical examination fees (Rs 5). They get 10 per cent discount in delivery charges. Delivery charges are Rs 125 plus Rs 20 per day for inpatient care and for deliveries at home, Rs 150 is charged. Members receive 20 per cent discounts in all laboratory tests. Moreover all members who are above the age of 35 get free medical check up and non-communicable disease (NCD) screening once in a year. Females also get breast cancer screening free. AKHS,I does not provide any hospitalisation cover except in case of delivery. The community itself, through local health sector management committee, decides the premium amount. There is no specific timing period of paying the premium in case of CHF. Generally people pay the premium during the harvest time.

At present these prepayment schemes are running in four sectors of Sidpur taluka project. They were started in 1995 in Meloj, 1997 in Varsila, 1999 in Samoda, and in 2002 in Methan sectors. Under the cooperative health care financing scheme, it was felt by the dairy cooperative that deducting three to five paise was administratively difficult and instead dairy management decided to deduct the entire amount from its net profit at the year-end.

These AKHS schemes appear to have had little impact on the targeted population, due to low population coverage coupled with low level of service utilisation among those enrolled in the schemes.

It can be seen from Tables 4 and 5 that although AKHS is working in 26 villages of Sidhpur and covers a population of 45,000, as far as both of these prepayment schemes are concerned; only 878 households (45.3 per cent of total HH) is actually covered by them. When CHF was introduced in Varsila sector in 1997, there was 80 per cent enrolment in the first year but subsequently, 50 per cent of the members have withdrawn because they felt that they were not able to recover the premium by utilising the services. This non-utilisation was mainly due to high amount of seasonal outmigration in this region. Moreover, the lack of hospitalisation cover may be one of the important reasons for non-participation. There can be two reasons for this. According

**Table 4: Cooperative Health Care Financing Scheme**

Sector	Year of Inception	Total HH in the Area	Covered H H	Amount that Dairy Is Paying	Contributions towards Centre's Cost (Per Cent)
Meloj	1995	550	350	30,000	25
Methan	2002	720	217	15,000	15

Note: Data for the year 2002.

**Table 5: Community Health Fund Scheme**

Sector	Year of Inception	No of Total HH	Covered H H	Premium per HH (Rs)	Contribution towards Centre's Cost (Per Cent)
Meloj	1995	550	27	200	5
Varsila	1997	217	90	125	12
Samoda	1999	450	80	200	8
Methan	2002	720	114	200	19

Note: Data for the year 2002.

to AKHS team, the highest utilisation of the scheme is through availing the 20 per cent discounts in all laboratory tests. Community perceives this benefit as attractive as these tests are expensive in nature. According to the scheme manager, in the Meloj sector, the utilisation of health services has improved but no statistics are available. The schemes contribute relatively little towards the operating costs of the health centres involved (Tables 4 and 5), and reaches only a maximum of 25 per cent of operating costs at the Meloj health centre.

### **Navsarjan**

The focus of Navsarjan, which was established in 1988, is the dalit community. The main objective of the organisation is to unearth atrocities against dalits and fight against these atrocities by providing legal assistance so that dalits can lead a life of self-respect and dignity. Today Navsarjan is working in 11 districts of Gujarat and has a team of 194 workers. Of late, Navsarjan has also started working for the poor non-dalits and thus the focus is shifting from caste to class.

One enthusiastic and committed worker of Navsarjan, who belongs to the north Gujarat region, initiated an idea of health insurance. Navsarjan decided to buy the 'mediclaim' policy from New India Assurance (Sanand branch) and pay the premium. The coverage period was from March 17, 1999 to March 16, 2000. The coverage amount was up to Rs 15,000 and the premium was Rs 175 per member. New India Assurance gave a 5 per cent group discount so per capita premium came to Rs 159. The total premium paid for the scheme was Rs 91,216. This amount was partly funded by Hivos (a funding agency) and partly from Navsarjan Social Security membership fund (a larger comprehensive scheme which was also on pilot basis for two years and included accidental death, maternity benefits, etc. The membership fee was Rs 400 per annum and was paid by individuals). Thus the scheme was partially financed by the community through the social security fund. Five panel doctors (2 orthopedic surgeons, 1 gynaecologist, 1 physician and 1 general surgeon) were approached in Patan town and it was decided that the members, in case of need, would visit them in Patan. The doctors agreed to receive payment after three months, i.e., they would provide treatment on credit. Each member was given a membership card. One staff member of Navsarjan was transferred to Patan to sit in the premises of the hospital to help the members of the scheme. He looked after all documents like bills and drug prescriptions, and file the mediclaim application form. The village Navsarjan workers often accompanied members to the hospital in Patan. The policy was just for one year and was on pilot basis only.

It can be seen from Table 6 that 574 individuals (51 per cent of them were women) were covered under the scheme. According to the data provided by Navsarjan, during the period of scheme operation 57 claims were made of Rs 81,130. From these claims, 21 were totally rejected (rejection rate 36.8 per cent) and in many case full amount was not sanctioned. The total sanctioned amount was Rs 46,030. Out of the total 21 claims that were rejected, since the amount was substantial in two cases, Navsarjan bore the cost. The rest of the 19 members had to pay for the treatment. The average cost of hospitalisation works out to be Rs 1,423 whereas the average cost of reimbursement comes to Rs 808. Those members, whose claims were not sanctioned, were quite unhappy. They did not understand the reasons for 'non

sanctioning' of the amount and had a quarrel with Navsarjan workers. But most of the members were very happy with the scheme. Today they are ready to pay Rs 159 if the scheme is restarted. Many people from the community still approach Navsarjan and show their willingness to pay the premium themselves. The main positive feature of the scheme was increased access to the health care services. Earlier the community avoided a doctor unless there was an emergency mainly due to the cost. In case of women, despite the fact that there are many gynaecological problems, they did not seek health care services for financial as well as socio-cultural reasons. During the implementation phase of the scheme, many women turned up to the hospital for treatment.

While implementing the social security programme, Navsarjan realised that the scale of operation is quite large and almost a separate organisation would be required to manage the comprehensive social security scheme. Navsarjan's focus was never public health and social security. Scheme managers expressed that running the scheme was time and resource consuming and therefore they chose to focus on their primary activity – of working with dalits. Moreover, according to Navsarjan management, one of the reasons for termination of the scheme was fraud by doctors. Doctors inflated the bills, over-prescribed the medicines and encouraged unnecessary hospitalisation.

## **VI**

### **Discussion and Conclusion**

Tables 7 and 8 compare salient features of all four schemes. It is quite evident from these tables that the schemes are diverse in terms of their design and management (number of members, target population, pattern of enrolment, unit of membership, level of premium, scheme benefit package, etc). Therefore, it is somewhat difficult to make comparisons across the schemes. Each scheme is unique and has its own strengths and weakness.

Two out of four (AKHS and TF) are health NGOs. The other two (SEWA and Navsarjan) are also engaged in other developmental activities and health insurance has been introduced by them as a part of social security package. In case of Navsarjan, the NGO was working as an intermediary between the insurance company and the community. As far as size of the scheme is concerned, Aga Khan and Navsarjan are quite small whereas SEWA and TF have been able to insure a large number of people. Both TF and Aga Khan have piggybacked on dairy cooperative structures for health insurance. It is worth noting here that apart from health insurance, dairy cooperatives have done many welfare activities both for the betterment of the community as well as cattle. This structure has the leverage of political backing but then it makes membership mandatory as members of dairy cooperative automatically become members of health insurance schemes. SEWA and Navsarjan only provide in-patient care whereas AKHS only provides outpatient care

**Table 6: Details of Navsarjan Scheme**

No of members	574
Premium collected in Rs [B]	91,216
Claims (amount in Rs)	57 (81,130)
Average cost of hospitalisation in Rs	1423
Claims settled (amount) [E]	36 (46,030)
Average amount reimbursed in Rs	808
Rejection rate (per cent)	36.8
Surplus in Rs [B] - [E]	45,186

(except in case of delivery) and TF provides both inpatient and outpatient care. AKHS does provide an interesting contrast. It involves prepayment for events that are fairly common and easy to predict.

These differences notwithstanding, the common thread running all across the four schemes is prepayment mechanism. In all schemes, community has to pay something before they need health-related services. Since this concept is new and may be difficult to grasp, most NGOs had a hard time explaining the concept of insurance and convincing the community to pay for a service, which may or may not be availed of. Each NGO used social marketing tools for promotion of the scheme. For example at TF, information on new scheme was circulated through the

'patrika' (newsletter) distributed at all milk collection counters in villages and the scheme was also discussed during the routine milk cooperative meetings. At Navsarjan the mediclaim policy was translated into user-friendly Gujarati language and was circulated among members. Insurance at SEWA is marketed through an annual, intensive campaign, carried out at the grassroot level. SEWA administrators estimate that it takes three face-to-face visits, where information and education about the insurance scheme are provided, before members of the target population come to grasp the concept of insurance, and some of the intricacies of the SEWA insurance package.

If the collected premium amount exceeds the claims made plus the administrative cost, we have considered the scheme to be

**Table 7: Comparison of Salient Features of CBHI Schemes**

	Self-Employed Women Association (SEWA)	Tribhuvandas Foundation (TF)	Aga Khan Health Services, India (AKHS, I)	Navsarjan
Name of the Scheme	Integrated Insurance Scheme (IIS)	Sardar Patel Aarogya Mandal	1) Community health fund (CHF) 2) Cooperative healthcare financing	Health Insurance
Year of Inception	1992	2001	1995	1999
Location	11 districts of Gujarat	Kheda/Anand district	Sidhpur taluka of Patan district in north Gujarat	Sami and Harij taluka of Patan district in north Gujarat
Status	Ongoing	Ongoing	Ongoing	Stopped in 2000
Target Population	Women in informal sector	Members of dairy milk cooperative	Ismailies and of late other villagers	Dalits
Unit of membership	Individual	Family	Family	Individual
Members	1,00,000 individuals	83,000 families	(i) 311 families in four sectors of Sidhpur (ii) 467 families in two sectors of Sidhpur	574
Per cent of target population	Approximately 17 per cent (1 out of 6)	N A	8 to 9 per cent of target population	Negligible, less than 1 per cent
Collaboration with GIC	Yes (with NIC and ICICI Lombard)	No	No	Yes (with NIC)
Use of Management Information System (MIS)	Yes	Yes - Data are computerised and linked to some hospitals	No	No
Self-sufficient or not	Largely, although administrative cost is being paid by GTZ	No Heavily subsidised by AMUL.	No statistics available	No. The scheme was partly subsidised by Navsarjan and partly by HIVOS

**Table 8: Comparison of Premium and Scheme Benefit Package (SBP)**

	Self-Employed Women Association (SEWA)	Tribhuvandas Foundation (TF)	Aga Khan Health Services, India (AKHS, I)	Navsarjan
Premium per annum	Rs 85	3 paisa per litre of milk plus Rs 1 per family	1) Rs 125 to Rs 200 per family, decided by the community 2) 3 to 5 paisa per litre of milk deducted per family and dairy pays Rs 30,000 to AKHS, I	Rs 175 per individual but paid by Navsarjan to GIC on behalf of them
Benefit	Only inpatient care. Hospitalisation cover, plus one time payment for denture and hearing aid. Delivery benefits for fixed deposits members.	Both inpatient and outpatient care. Free hospitalisation at selected referral hospitals	Only outpatient care (except in case of delivery). Discounts in user fees for primary care and free medical check-up once in a year.	Only inpatient care. Free hospitalisation up to Rs 15,000 at a particular hospital in Patan
Cap on reimbursement	Rs 2000	Rs 7 to 10,000 on an average but TF management can reimburse up to Rs 1 lakh in exceptional cases	N A	Rs 15,000
Services excluded	Pre-existing conditions, normal delivery, conditions related to HIV/AIDS	Angiography, angioplasty, bypass surgery, all cancers, major orthopedic operations (joint replacement) kidney transplant AIDS and TB	All hospitalisation except delivery	All exclusions of standard Mediclaim policy applicable
Minimum period of hospitalisation	24 Hours	Not specified	N A	48 hours

financially self-sustainable. None of the schemes is fully financially self-sustainable by this yardstick. Although it is important, financial sustainability may not be the top priority for the organisers and administrators of any CBHI scheme. Often, these schemes are initiated with the acknowledgement that there is a trade-off between financial sustainability and equity, and that it may simply not be possible to provide insurance services to the very poor without some form of external subsidy. In the process of making schemes economically viable, premiums usually go up which adversely affects the members who are at the bottom from the income point of view. All of these four schemes that we have studied received some form of external support at some point of time, without which they probably could not have survived on their own.

From our discussions with community member, we can say that they view CBHI in a positive way. However, they feel that there is room for improvement in a variety of ways. Two schemes (SEWA and Navsarjan) were in collaboration with General Insurance Corporation. According to the scheme manager of Navsarjan, the administration at GIC was quite supportive but at the same time they were careful not to incur any losses. For example, Navsarjan scheme manager was told by the GIC official that even if all claims are genuine in nature, they could not afford to pay beyond the amount that they were receiving by collecting premium. Since the scheme is relatively new in case of TF, it would be pre-mature to draw any concrete conclusions. But looking at the enrolment conditions, it is fairly evident that scheme excludes those people who cannot deposit 300 litres of milk in a year. This means, those households who are poor and cannot afford to own a milch animal are unable to avail of benefits.

Generally, CBHI covers very small populations, so has a limited impact from a public health point of view. And the schemes that require significant out-of-pocket payment (e.g., SEWA) may not protect from indebtedness, particularly among those who experience the most expensive hospitalisations.

The presence of health insurance cover may induce individuals either to take fewer precautions or to use more health services when they fall ill. Both actions tend to increase health expenditure. This phenomena is known as moral hazard. But in case of low income population where the health services utilisation is already low, this increased spending may be socially desirable [Ellis et al 2000]. In cases like Navsarjan and TF, when doctors knew the fact that the patient was insured, they over prescribed drugs and went for unnecessary clinical investigations. Due to this problem of moral hazard, TF had to withdraw the medication/outpatient cover.


The FGDs were designed to understand the exposure to, and awareness of the community regarding CBHI, willingness to join and pay, choice of health care provider, and desire of modification in CBHI schemes. We must note that in some cases the awareness level is very low and some members of CBHI schemes, especially where there is tie-up with dairy cooperatives (TF and Aga Khan) do not even know that they are members of such a scheme. At SEWA, it is not uncommon for members to recall details of their life insurance (part of the SEWA insurance package) but to forget that they are also entitled to health insurance benefits. These limited levels of awareness highlight the need for any CBHI scheme to be accompanied by an ongoing education and information campaign to keep members informed about their insurance policy. Reminder visits between annual campaigns appear to be a necessity.

CBHI cannot be termed as a panacea for the health problems of the poor. There are a good number of indicators that point to the weakness of CBHI. Available evidence, while limited, suggests that CBHI schemes have done little to improve equity of financing and utilisation, and in some cases may have worsened the situation [Bennett 1998]. When the level of premium is not related to the income, (and in most CBHI schemes, premium is flat rate) the poorest have to pay a higher proportion of their income compared to the wealthy among the poor and thus the premium is regressive in nature. This is unfair on equity grounds. Tools like sliding scale premium (premium linked to capacity to pay) can contribute positively towards protecting the poor from cost. But the problem lies in "means testing" or identifying the true needy persons.

CBHI is still a comparatively new concept in health care financing for the poor and many research questions remain. For example what are the main factors for community to accept/refuse the membership of CBHI? What is the role of socio-economic variables such as caste, income, assets, employment, education, etc, in enrolment and utilisation? Does the distance from the health centres or hospitals (that are part of the CBHI or that are collaborating with it) play a role in signing up or not for membership? What are the strengths, weakness, opportunities and threats (SWOT) in CBHI structure? In what way can CBHI solve the problem of information asymmetry which leads to problem of adverse selection (higher proportion of sick joining the scheme) and moral hazards? What is the optimal groups size for CBHI? And to what extent can CBHI schemes be expanded to cover sufficiently large populations so as to contribute to the overall health system goals, such as access to hospitalisation and protection from medical indebtedness?

International development agencies like the World Bank now increasingly emphasise the demand-side – highlighting CBHI, user fees and private sector for strengthening the health sector [World Bank 1987, World Development Report 1993, WHR 2000]. This is a major departure from the earlier approach, which focused on the supply-side – public sector spending, costs, management, and efficiency – that has dominated the international health finance agenda for many years. This kind of concern has led to substantial debate pertaining to alternatives/options available for financing health care for the poor. One prominent option is CBHI, but in order to answer the policy questions for framing CBHI schemes, it is necessary to investigate the acceptance of the people regarding such schemes and the extent to which they are willing to pay for the schemes.

The overall assessment of the NGO-sponsored schemes is that they have so far reached only a very small segment of the poor unorganised sector. To date, the government of India, and the government of Gujarat have had very limited interaction with CBHI schemes operating in Gujarat state. In our opinion, attaching CBHI schemes with other structures like self-help groups (SHGs), panchayati raj institutions (PRIs), gram sabhas (GSs), large development-oriented NGOs, work cooperatives, etc, may improve coverage and bring better results than running CBHI in isolation. As well, CBHI schemes should increasingly draw on resources available through well-functioning public health facilities, where they exist. This will facilitate financial sustainability, and perhaps reduce the risk of supply-side moral hazard (i.e., unnecessary over-provision). The social capital leverage that other structures already have, can then be transferred to CBHI. It would be better if international donor agencies, centre

and state government, insurance companies and NGOs come together, cooperate and try to explore this promising alternative of CBHI. 

Email: akash\_acharya2002@yahoo.co.in  
kent.ranson@ishtm.ac.uk

## Notes

- 1 Part III, Section IV of Insurance Regulatory and Development Authority (Obligations of Insurers to Rural and Social Sectors) Regulations, 2000
- 2 'Banks, NGOs, Panchayats allowed to sell Insurance', *The Economic Times*, October 21, 2002, p 1.

## References

- ASCI (1996): 'Feasibility Study for Introducing Health Insurance Schemes in India', Administrative Staff College of India, (mimeo).
- Bennett, S et al (1998): 'Health Insurance Schemes for People Outside Formal Sector Employment', Division of Analysis, Research and Assessment, World Health Organisation.
- Bhat, Ramesh (1999): 'A Note on Policy Initiatives to Protect the Poor from High Medical Costs', Indian Institute of Management (IIM-A), Ahmedabad (mimeo).
- Berman, Peter (1996): 'Healthcare Expenditure in India' in Monica Dasgupta et al (eds), *Health Poverty and Development in India*, Oxford University Press, Delhi, pp 331-58.
- Datt, Ruddar (ed) (1997): *Organising the Unorganised Workers*, Vikas Publishing House, New Delhi.
- Dave, P (1991): 'Community and Self-financing in Voluntary Health Programmes in India', *Health Policy and Planning* 6(1).
- Dave, Sen (1997): 'Community Control of Health Financing in India: A Review of Local Experiences', Technical Report No:8, Abt Associates Inc.
- Duggal, Ravi, Sunil Nandraj and Asha Vadair (1995): 'Health Expenditure Across States – Part I and II, *Economic and Political Weekly*, 30 (15 and 16), pp 834-44 and 901-08.
- Ellis Randall, Alam Moner, Gupta Indrani (2000): 'Health Insurance in India: Prognosis and Prospectus, *Economic and Political Weekly*, January 22.
- Fairbank, Alan and Pamela Putney (1998): *Sustaining Community Based Healthcare Systems in Gujarat*, Abt Associates Inc, US.
- Government of India (2000): *Savrekshana*, Ministry of Health, GoI.
- Griffin, C (1989): 'Strengthening Health Services in Developing Countries through the Private Sector', World Bank.
- Gumber A, V Kulkarni (2000): 'Health Insurance for Informal Sector: Case Study of Gujarat', *Economic and Political Weekly*, September 30.
- ILO (2002): 'Social Security for the Informal Sector: Issues, Options and Tasks Ahead', Social Security Department, ILO.
- ILO-Universitas Programme (2002): 'Extending Social Protection through Community-Based Health Organisations: Evidence and Challenges', Geneva, Switzerland.
- International Institute of Population Studies and ORC Macro (2000): *National Family Health Survey (NFHS-2)*, 1998-99, IIPS, Mumbai, India.
- Iyenger, Sudarshan (2000): 'Role of Non-Governmental Organisations in Development of Gujarat', *Economic and Political Weekly*, Vol 35, Nos 35 and 36, August 26-September 2.
- Mahadevia, Darshini (2002): 'Health for All in Gujarat: Is It Achievable?' in Hirway, Kashyap and Shah (ed), *Dynamics of Development in Gujarat*, Concept Publishing, New Delhi.
- Mahal, Ajay (1999): 'Potential Implications of Private Health Insurance in India: Is IRDA Sufficient?', National Council of Applied Economic Research, New Delhi (mimeo).
- Mathiyazhagan, K (1998): 'Willingness to Pay for Rural Health Insurance through Community Participation in India', *International Journal of Health Planning and Management*, 13, p 47-67.
- McPake, B, K Hanson, A Mills (1992): 'Implementing the Bamako Initiative in Africa', London School of Hygiene and Tropical Medicine.
- MoH and FW (2002): *National Health Policy 2002*, Ministry of Health and Family Welfare, Government of India.
- Misra, R, R Chatterjee and S Rao (2003): *India Health Report*, Oxford University Press, New Delhi.
- Nandraj, Sunil and Ravi Duggal (1996): 'Physical Standards in the Private Health Sector', *Radical Journal of Health*, 2(2/3):141-84.
- National Institute of Public Finance and Policy (1994): 'Hospital Financing in India', NIPFP, New Delhi.
- National Insurance Academy (NIA) (2002): 'Women and Social Security: A Case Study of Self-Employed Women Association' (SEWA).
- NSSO (1998): 'Morbidity and Treatment of Ailments – NSS 52nd Round', Department of Statistics, National Sample Survey Organisation Government of India, New Delhi.
- Naylor, C David, Prabhat Jha, John Woods and Abusaleh Shariff (1999): 'A Fine Balance: Some Options for Private and Public Healthcare in Urban India', Human Development Network, The World Bank, Washington, DC.
- Pulikall Arvind Alternative (1993): 'Health Financing – Siddhpur Experience', Aga Khan Health Services, India (AKHS,I).
- Ranson, M K (2002a): 'The Consequences of Health Insurance for the Informal Sector: Two Non-governmental, Non-profit Schemes in Gujarat', PhD thesis submitted to London School of Hygiene and Tropical Medicine, University of London.
- (2002b): 'A Review of Community-based Health Insurance Schemes in India', *National Medical Journal of India*, 16(2), pp 79-89.
- Ranson, M K, N Devedasan, A Acharya and R Fanstone (2003): *How to Design a Community Based Health Insurance Scheme: Lessons Learnt from the Indian Experience*, World Bank, Washington, DC.
- Registrar General (1999): 'Compendium of India's Fertility and Mortality Indicators, 1971-1997: Based on Sample Registration System' (SRS), New Delhi.
- Russell S, L Gilson (1997): 'User Fee Policies to Promote Health Service Access for the Poor: A Wolf in Sheep's Clothing? *International Journal of Health Services*; 27(2):359-79.
- Sen, Gita, George Asha and Ostlin Pirooska (2002): *Engendering International Health: The Challenge of Equity*, MIT Press, London, England.
- Shariff, Abusaleh (1994): *Employees State Insurance Scheme in Gujarat: Key Results of a Survey*, Gujarat Institute of Development Research, February 3.
- Sodani, P R (1997): 'Determinants of Demand for Healthcare in Surveyed Tribal Households of Selected Three Districts of Rajasthan', *Demography India*, Vol 28, No 2.
- Subrahmanya, R K (1995): 'Employees State Insurance Scheme' paper presented at international workshop on health insurance in India.
- Sundar, Ramamani (1995): 'Household Survey of Healthcare Utilisation and Expenditure', working paper no 53, National Council of Applied Economic Research, New Delhi.
- Tribhuvandas Foundation, Annual Report 2000-2001, Gujarat.
- The Economic Times* (2002): 'Banks, NGOs, Panchayats Allowed to Sell Insurance', October 21.
- UNDP and Government of India (2001): *Proposal for Community Initiatives for Healthcare Financing*, Department of Health and FW, GoI.
- Van, Ginneken W (ed) (1998): *Social Security for All Indians*, Oxford University Press, Delhi.
- Visaria, P and A Gumber (1994): 'Utilisation and Expenditure on Healthcare in India: 1986-87', Gujarat Institute of Development Research, Ahmedabad, India.
- Wagstaff, Adam (2002): 'Poverty and Health Sector Inequalities', *Bulletin of the World Health Organisation*, 80 (2).
- Wadhawan, Sahdev (1987): 'Health Insurance in India: The Case for Reform', *International Labour Review*, 126(4):479-94.
- World Bank (1987): 'Financing Health Services in Developing Countries: An Agenda for Reform', World Bank, Washington.
- (1993): *World Development Report: Investing in Health*, Oxford University Press, New York.
- (1995): 'India: Policy and Finance Strategies for Strengthening Primary Healthcare Services', Report 13042-IN, Washington DC, South Asia Country Department II, Population and Human Resources Division.
- (1997): *World Development Report: The State in the Changing World*, Oxford University Press, New York.
- (2002): 'India: Raising the Sides-Better Health Systems for India's Poor: Findings, Analysis, and Options', Health, Nutrition, and Population Series, Washington, DC.
- World Health Organisation (2000): 'The World Health Report 2000: Health Systems: Improving Performance', Geneva, Switzerland.
- (2001): 'Macroeconomics and Health: Investing in Health for Economic Development', Geneva, Switzerland.
- (2003): 'The World Health Report 2003: Shaping the Future', Geneva, Switzerland.
- (2004): 'The World Health Report 2004: Changing History', Geneva, Switzerland.