# CHAPTER 2

# LITERATURE REVIEW

A considerable amount of literature is available on various aspects and issues related to this study. However, the over all review in this study is grouped under four broad headings as follows:

1. Informal Sector - an Over view
2. Household Health Expenditure in India
3. Ability and Willingness to Pay for Health Care
4. Health Insurance for Informal Sector-a Review

## 2.1. Informal Sector - An Over view

John Keith Hart was the first to use the formal-informal dichotomy. Focusing on migrants in urban Ghana, he highlighted the existence of the variety of new income generating activities particularly in the trade and service categories (quoted in Sethuraman,1992). By virtue of the fact that most of them were falling outside the purview of the existing statistical data collection machinery, they were labelled as informal sector.

The urban informal sector is diverse and consists of many non-traditional small scale activities that are generally absent in rural areas; and they stand in sharp contrast to the formal sector, which is typically an urban phenomenon. According to the International Labour Organisation (1986) urban informal sector is characterized by its extensive spread over a large number of family enterprises in all the three broad economic activities namely manufacturing, trade and services, which have a very small lay out and are protected by state legislation's.

The literature on urban informal sector in India is not only numerous but also quite diverse as compared to the literature in other countries. However, one of the major problems encountered has been the absence of a clear cut definition for the term informal sector. A majority of studies estimated the size of labour force in informal sector based on sample surveys of informal units covering a variety of informal activities in the urban context. It is also evident

from those studies that the perception of the authors varies considerably. The quantitative estimates of the sector are extremely sensitive to the scope and definition used in different studies.

The National Sample Survey Organization (1990), Government of India defines formal sector as "those establishments in the public sectors and non-agricultural establishments employing ten or more persons in the private sectors". All agricultural activities and establishments other than the above are termed as unorganised or informal sector.

According to the National Commission on Labour, India (1969) "the informal labour in urban area can not be identified by a definition but would be described as those who have not been able to organize in pursuit of a common objective because of constraints such as casual nature of employment, ignorance, illiteracy, small size of establishments with low capital investment per person employed, scattered nature of establishments, and superior strength of employers operating singly or in combination." On the basis of these constraints it incorporated different types of labour in the purview of informal sector which includes contract labour, construction workers, casual labour, workers of small scale industries, hand loom and power loom workers, bidi and cigar workers, sweepers, and scavengers in the shops and commercial establishments and other unprotected workers. The studies conducted by Muzumdar (1980), Sethuraman (1981), David Simon (1984), National Institute of Urban Affairs (1992) classified workers in informal sector into trade, manufacturing, and service sectors.

## 2.2. Household Health Expenditure in India

A number of studies have estimated that more than 70 percent of the health spending in India is contributed by household sector. For instance, Operations Research Group (1985) had estimated that nearly 82 percent of the total health care expenditure in India was by household sector. The World Bank (1993) estimated this figure as 78.40 percent in 1991.

Since the 80's a number of household health expenditure and utilization studies have been conducted in India. Many studies have shown that health expenditure as a percentage of household income is quite higher for the poor income group. When a typical household in developing countries spends

**Table 2.1 : Results of Selected Studies on Household Health expenditure in India**

**( In Rs.)**

| Name/ Agency , Year & State | Type of Population | Annual Per Capita Health Expenditure | Health Expenditure as % of Household Income |
|---|---|---|---|
| 1. Nitcher,1980, Karnataka | Rural & Urban | ( per family ) 270.00 | 7.00 |
| 2. Khan, et al. Uttar Pradesh | Rural | 121.00 | 5.60 |
| 3. FRCH, 1984. Bombay | Urban Middle Class | 240.00 | 6.86 |
| | Low Income | 176.00 | 12.57 |
| 4. N.S.S.O, 1986-87, India | Rural | ( per hospitalized ) 734.00 | - |
| | Urban | - do - 1206.00 | - |
| 5. R.K.Batra,1989. Delhi | General | 240.00 | 4.48 |
| | Slum | 71.00 | 5.40 |
| | Corporate | 64.00 | 2.16 |
| 6. FRCH,1989. Maharashtra | Rural & Urban | 183.00 | 5.75 |
| 7. NCAER, 1992. All India | Rural | ( per episode )151.81 | - |
| | Urban | - do - 142.60 | - |
| 8. NIHFW,1993. Gwalior | Rural & Urban | 234.00 | 8.40 |
| 9. D.K.Mishra, 1993.M. P. | Hill area | 192.00 | 10.00 |
| 10.NCAER,1996. All India | Rural & Urban | ( per family ) 1011.00 | - |

Source :

1. Nitcher M. 1980. Health expenditure report. USAID, ( mimeo), New Delhi.

2. Khan et al. 1882. Nutrition and health practices among rural women: a case study of Uttar Pradesh India. International Symposium on problems of development of underprivileged communities in the third world, New Delhi, October.

3. Foundation for Research in Community Health. 1984. A study on health expenditure of middle income and low income households in Bombay city, FRCH, Bombay.

4. National Sample Survey Organisation. 1992. Morbidity and utilization of health services in India, Survekshana, vol.xv, no.4, issue no.51.

5. Batra, R. K. 1989. Study on expenditure on health care among general, urban slum and corporate population, M.D. thesis, Delhi University.

6 Duggal and Amin.1989. Cost of health care: a household survey in an Indian district, FRCH, Bombay.

7. National Council for Applied Economic Research, 1992. All Indla survey of medical care. NCAER, New Delhi.

8. National Institute of Health and Family Welfare, 1993. District systems research : a baseline survey of Gwalior district, New Delhi.

9. Mishra, D.K. et al.1993. Use of and spending on curative health care in a tribal block of Madhya Pradesh. In : Peter Berman and Khan M.E.( eds.) Paying for India' s health care, New Delhi : Sage Publications.

10.National Council for Applied Economic Research.1996. Morbidity and health expenditure in India, NCAER, New Delhi.

between 2 - 5 percent on health care, studies in India at different point of time showed that health expenditure formed between 2 - 12.5 percent of their household income. The table.2.1 gives the share of health expenditure as percent of household income reported by few studies in India.

However, from the results of these studies a meaningful comparision can not be made because these studies were conducted in different locations and at different point of time. Moreover, the estimates of household health expenditures are extremely sensitive to the definitions used in these studies. The two major studies in India by the National Sample Survey Organisation (1986-87) and National Council for Applied Economic Research (1992) showed that households in India spend on medical care 3 to 4 times to the government total health care spending or 9 to 10 times the government hospital care expenditure.

## 2. 3. Ability and Willingness to Pay for Health Care

The issues regarding ability and willingness to pay for health care should be addressed before planning and designing a health insurance scheme. In economic theory both willingness and ability to pay are treated as synonymous. Economists defined demand for a commodity as willingness to pay backed by ability to pay. Consumers are assumed to be able to afford whatever they are willing to pay, as they know best how to allocate their scarce resources. In the case of health care this principle does not hold true. A couple of studies conducted in developing countries have shown that willingness to pay for health care was not influenced by household income. The studies of Heller (1982), Akin et al (1986) and Hancock (1993) concluded that willingness to pay for outpatient services was not influenced by household income.

Many field experiments based studies assessing utilization pattern before and after the introduction of user charges reported considerable decline in utilization after the introduction of user charges. The studies of Mwabu.G et al (1995) in Kenya, Thomason J, et al (1994) in Papua New Guinea, Waddington and Enyimayew (1990) in Ghana and Yoder R.A (1989) in Kenya showed that larger section of people were unwilling to utilize the services after the introduction of user charges. These studies also confirmed that unwillingness to use health care were not necessarily related to unaffordability.

Litvack and Bodart (1993) in their study in Cameroon tried to desegregate utilization impact by socio-economic group, and found that fees plus local drug availability caused poor to increase utilization. This finding is explained by the relative affordability of health care at local health centers compared to more distant providers whicht were previously being used. A study in Zambia by Booth (1995) found that journey to the clinic, long waiting time, the rude staff and the unpredictable drug supplies were not worth the extra price. Their decision to stop using services was on the ground of poor value for money rather than inability to pay per se.

In contrast to the above findings a few studies have shown that health care is likely to be purchased despite financial difficulties when illness is perceived to be severe. A few studies based on household surveys and qualitative research explored the families sources of health care financing founded on the affordability principle. Ettling et al (1994) showed that very poor income households, with an average annual income of $ 68, carried a disproportionate share of the economic burden of malaria, with total direct and indirect costs of malaria among these households consuming 32 percent of annual income (quoted in Njoumemi,1996). The poor families adopt different coping strategies when payment difficulties arise. They meet expenses by borrowing from kin and friends. Waddington and Enyimayew (1989) in Ghana, have shown that poor people mobilized resources for health by borrowing from kin and friends and by selling their belongings, livestock and farm products essential to current consumption.

The above studies reveal that the factors which influence a person's decision to spend or not to spend on health care are complex and it is difficult to determine whether payment or non payment is due to ability to pay or any other factors. The decision to spend or not to spend on health care is, thus determined not only by income or price of care, but by other factors such as perceived quality of care, the availability of other providers, or distances to the health facility etc.

Many studies in related field of ability and willingness to pay used contingent valuation methods or traditional economic methods. These studies however, did not arrive at any definitive conclusion on people's ability and willingness to financially support health care services. Moreover, the issue of ability to pay was not explored fully or estimated separately as these studies

assumed that people had the ability, which is misleading particularly in developing countries. Furthermore, these studies did not examine from where these households obtain resources to pay for health care, and consequences of the strategies adopted when payment difficulties arise.

Steven Russel (1996) tried to separate the ability to pay from willingness. He argues that willingness to pay is not synonymous with ability to pay because health expenditures may impose considerable costs on household consumption and investment patterns, and may start a process of asset depletion and impoverishment. The costs of health care can be considered affordable when utilization is not deterred for financial reasons, and when the opportunity costs incurred do not cause levels of consumption and investment such as education, to go below minimum needs.

Russel showed that eventhough the households has enough resources to pay for health care it needs and more than minimum levels of other commodities, it may take a decision to prioritise expenditures on goods and services externally defined as " non essential", forcing it to reduce expenditure on health care. The reasons are manifold such as firstly, the decision makers in the family are aware that the health care purchased does not meet health needs. Secondly, the households are totally unaware of the health problem, and benefits of investment in prevention or cure. Thirdly, perceived need differs from actual need. i.e., payment for externally defined "non-essential" commodities may be perceived by the households to be essential. Fourthly, intra-households resource allocation decision, for e.g. a male household head may prioritise personnel consumption of non-essentials such as alcohol. Fifthly, expenditure of accessing a distant providers. Finally, the illness may be perceived to be so severe that payment for treatment is not considered worth while. The ability to pay approach outlined in the paper implies that external value judgements about what is needed and about family expenditure priorities and patterns are required to judge ability to pay.

The above review reveals that ability to pay and willingness to pay are not synonymous and willingness to pay for health care is not necessarily depends on ability to pay. Apart from ability to pay, other socio- economic and health related factors also influence the households willingness to pay for health care.

## 2 .4. Health Insurance Schemes For Informal Sector - A Review

In this section the experiences of health insurance schemes for informal sector in few developed and developing countries have been reviewed in terms of their objectives, target population, coverage, source of finance, service provision, provider payment mechanisms and potential problems faced by the schemes.

### 2.4.1 National Health Insurance in Korea

Korea is one of few Asian countries where extension of health insurance coverage to population progressed at an exceptionally rapid rate. Apart from the major social security scheme for government employees and employees of industrial and commercial establishments, Korea introduced medical insurance programmes in 1977 for persons engaged in self employed occupation such as taxi drivers, barbers, artists and medical doctors etc. The program to cover all urban informal sector workers was introduced in July 1989.

In 1991, about 90 percent of all Koreans were covered by several health insurance schemes, and the remaining 10 percent by government initiated public assistance programmes (Yang,1991). Korea has multiple sets of insurance programmes covering various groups. The amount of each household's monthly contribution is determined by the class to which the family belongs. This classification is based on the family's total asset values and wage earnings. The premium is shared equally between the government and the insured. The administration of the scheme is by medical insurance corporation and medical insurance societies and are closely monitored by the government.

Most of the outpatient and high probability inpatient services are covered by this insurance. However, many of the low probability but high cost services are excluded. Three types of cost-sharing features are incorporated into each service utilisation. Firstly, a patient has to pay a co-insurance rates of 30 percent for clinic outpatient services, 50 percent for hospital outpatient services, and 55 percent for general hospital outpatient services. Secondly, the co-insurance for inpatient services is 20 percent across all type of providers. Thirdly, the sickness funds pay a maximum of 180 hospital days per year. Patients pay by fee for service for all services at all referral levels and clinic

services whereas physicians at public hospitals are paid salaries and physicians at private hospitals are occasionally paid bonuses based on their performance. The fee schedules are reviewed annually by the government considering the changes in consumer price index, change in profit margin, change in wage levels of medical personnel and other production costs.

**Potential Problems**

Bong-Min (1991) had observed that the rising health care costs as a growing problem in Korea. The way the system is structured provides an expanding degree of service provision and consumption of expensive services. For instance, many general practitioners who provide both inpatient and outpatient services, utilize every means to detain patients as long as possible. Bong also found that the cost per case has gone up 3 times for inpatient services and nearly twice for outpatient services with in 8 years period whereas number of physician visits by an insured person rose from 1.8 in 1980 to 3.3 in 1988. Yang (1989) identified two administrative inefficiencies in the programme. The first comes from the fact that each insurance society has its own managing director and managers who are mostly government appointees carry out very little actual management and have little incentive to do a good job. The second inefficiency is related to the size of insurance societies i.e., a large number of small insurers where each insurer covers only a small fraction of the population and thus the system could hardly realize economies of scale.

Resistance to compulsory insurance programmes by some groups, particularly urban poor and farming communities was noted as another problem. They resist paying premiums due to the fact that the scale of contribution is regressive rather than progressive and moreover they rarely sought medical services (Yang B.M, 1991). In the case of low income people low premium rate led to high co-payments and limited benefit packages (WHO,1995).

Nevertheless, developing countries which are about to introduce health insurance into their systems or to expand existing insurance coverage can learn a lot of lessons from the experiences of Korea. The clear political action and government support are the key factors in the establishment of a viable and equitable health insurance system in Korea (Young Jin 1997). Korean experience also demonstrates that contribution-sharing on the part of the

government is crucial if self-employed and other workers in informal sector are to benefit from compulsory health insurance.

### 2.4.2 Voluntary Health Insurance in Vietnam

Vietnam set up a voluntary health insurance program for workers in urban informal sector, daily wage earners, and agricultural workers on experimental basis in 1990. The programme is operated by public organisation and partly subsidized by local government. This scheme is being administered by Vietnam Health Insurance Board, a separate body under the ministry of health. At provincial level health insurance is administered by a provincial office, which also has offices at district level. The office is managed by a board consists of representatives of local government, enterprises and labour associations.

Health insurance covers an individual for treatment and consultations at a nominated outpatient facility, together with inpatient care. Under voluntary scheme members register with a communal health station which retains 20 percent of the premium. The rest is transferred to the insurance office. The premium is regulated by government and is uniform per insured person. Between 1990-1995, the premium increased from 8,000 to 15,000 dong per card (Ensor,1995). The scheme covers all treatment costs and patients need not pay any fee. Treatment for sexually transmitted diseases, nursing for convalescence, occupational diseases and transport accidents are excluded. The provincial insurance office contracts with hospitals to provide health care. Health facilities are reimbursed for treatment on the basis that compensation covers material and salary costs. The schemes varied both in scope and coverage depending on the way local administration chose to implement them.

**Potential Problems**

Some problems identified from the existing pilot projects are;

Some projects relied on fee for service, based on treatment complexity and number of days in hospital to reimburse providers but no constraint is placed upon volume of work done. This may lead to cost inflation. However, the insurance centres are attempting to develop more sophisticated ways of ensuring that treatment given is appropriate. Ensor (1995) observed

that current lack of knowledge about costs or quality of care, combined with the natural monopolies enjoyed by providers in all but larger towns, etc. are expected to rise cost further. WHO (1995) identified the problems of low accessibility, low quality of services and limited choices etc., which caused low utilisation of health insurance funds in 1995.

Further, the Programme fails to cover a significant portion of target population in each project area due to high premium rate. For instance, Quang Nguen (1996) in a study in Haiphong province found that voluntary health insurance could cover only 1.7 percent of target population in 1995. He identified high cost of premium as the major reason for low coverage of the scheme.

### 2.4.3 Community Health Insurance Schemes in Philippines

The Philippines implemented health insurance (Medicare Program) into its social security system in 1971. Though the program seek to cover the entire population, the coverage could not be extended beyond the formally employed sector because the administrative and funding needs of an expanded scheme had not been fully addressed till 1994. In July 1994, the government passed National Health Insurance Act to introduce a social health insurance with universal coverage within 15 years. Since 1990's a number of pilot projects have been implemented to test the feasibility of schemes that have been proposed for the coverage of the non-insured population so as to achieve universal coverage. The projects were mostly in the form of community based health insurance programmes or sector/ occupational group insurance plan.

Ron and Kupferman (1996) evaluated the experiences of a community health insurance scheme (ORT scheme) in La Union Province. The scheme is being financed by the family contributions paid regularly to the health fund, which is managed by multi-purpose co-operative. Contributions are calculated at 3 levels such as for single (above 18 year) P 50 per month, standard family (with 6 members) P100 per month and large family P 130 per month. The benefit package includes ambulatory and inpatient care, prescribed drugs and basic ancillary services included in specific lists. Primary health care is delivered through salaried doctors and nurses whereas outpatient and inpatient

care are provided by a private non-profit hospital. The doctors are paid on capitation basis.

**Potential Problems**

The Scheme has been extending its coverage to workers in several small businesses and women home based workers. However, some potential problems have been identified. Ron and Kupferman (1996) addressed two such problems, First is the amount of contribution is too low to cover all expenditures and the second problem is the failure of hospital to provide all physician services covered in the contract, with capitation agreement led to excess expenditure.

### 2.4.4 Health Card Scheme in Thailand

In Thailand, the community based health card scheme was initiated in 1983 to influence and structure effective demand for health services among the rural self-employed population. The target population are the near poor and middle income class in rural areas or those which can afford a premium. In the beginning MCH, FP and referral services were provided. The price of card was 300 Baht per year per family, for MCH card100 Baht and for individual card 200 Baht. Later in 1992, the benefit was extended to cover all services. At present the price of a health insurance card is 1000 Baht per year per household of not more than 5 members. The household contributes half of the price and other half is subsidized by general tax revenue. The services covered include ambulatory care for sickness and injuries, in-patient care and mother and child health services. There is no limit on utilisation of the services by the health card holders. The beneficiaries, however, have to avail treatment from any health care facility under Ministry of Public health. The first contact is either health center or community hospitals; patients are referred from first contact to higher level of care.

The health card programme was gradually implemented in all rural areas and later in 1985 started in urban areas of a few pilot provinces. In 1992, the MOPH decentralised decision making to the provincial level allowing health agencies to define their own prices for health cards and policies of disease coverage, number of episodes, number of members, the level of compensation to providers and the percentage of health card fund kept in community.

Many adjustments were introduced in the programme in 1995. Some of these were no HCF is kept in the community, maximum members per card would be 5, no limit is set on the number of episodes and no ceiling on heath care expenditure ( Supakankunti,1997).

**Potential Problems**

A number of studies have been conducted to assess the performance of the programme since its inception. According to few studies low coverage of the scheme was attributed to low income of households in rural areas, inefficient referral system and lack of information about the benefits of the scheme. Moreover, problems such as moral hazard, adverse selection, low cost recovery have also been reported by many studies. For instance, Pannarunothai et al (1997) in their study in four provinces found that low coverage provinces adversely selected only high risk group to the scheme which resulted in low cost recovery and big deficit gap whereas in the high coverage provinces, the cost recovery rates were as high as 90 percent because of good risk sharing.

In a recent study by Supakankunti (1997) has looked at health card purchase and utilisation patterns in Khon Kaen province. The study found that employment, education levels, and the presence of illness are significantly influencing the card purchase. The author found that families with symptoms of sickness are more likely to buy cards, which resulted in greater utilization of health services. Though the study showed an improvement in accessibility to health care and high level of satisfaction among card holders, a number of problems in the programme performance such as financial management, marketing, quality control, cost recovery, ineffective referral systems, and lack of limits on episodes and ceiling for expenses etc, have been highlighted.

### 2.4.5 National Health Insurance, Japan

National Health Insurance (NHI) in Japan covers those such as self employed and workers in micro enterprises and their dependants. Insurers are municipalities and NHI societies. Financial resources are insurance premiums by the insured and national treasury subsidies. Besides providing medical care benefits (sickness and injury) the scheme also provides midwifery expenses and funeral service benefits either in kind or in cash as stipulated by

rules and ordinances. Currently the partial cost sharing is 30 percent of the cost of medical care. If the amount of partial cost-sharing payable by the insured exceeds Y 6,000 is reimbursed to the insured by the insurer. The premium is set determined according to income and property of households. National subsidy forms between 32-52 percent of the medical benefit (Social Insurance agency, Japan 1995). The scheme accounted for 20.2 percent of the national health expenditure of Japan in 1993 (Tsutomu,1997).

**Potential Problems**

Tsutomu (1997) identifies two major problems in the existing schemes which could affect their sustainability. Firstly, increasing proportion of elderly will increase expenditure on health care, and will affect national subsidies badly. Secondly, the patients are not much satisfied with the existing medical services provided in hospitals. Moreover, there is no formal quality assurance programme is being implemented. A WHO study in 1995 noted a number of complaints from patients who had to hire nurse attendants from out-of pocket payments. Moreover, staffing shortages, particularly nurses were found to be widespread.

### 2.4.6 Co-operative Medical Scheme in China

China has three major health insurance schemes namely, government health insurance (1952) for government staff and students, labour insurance (1951) for workers in state and collective enterprises, and co-operative medical scheme (1949) for workers in rural informal sector. China is one of a few developing countries, implementing successfully the rural health insurance schemes covering a vast majority of its rural population. The scheme covers nearly 100 percent of rural population in China (Tang,1997). Most schemes derive funds from several sources such as household contributions, and financial support from local government. The service coverage varied a great deal, including outpatient and inpatient services and preventive care. The coverage is subject to the ability to collect the funds from various sources. Most of the schemes adopted co-payment and deductible mechanisms. There have been several methods of payment of health care providers. Reforms are currently planned in all the three insurance schemes in China to expand coverage and benefits. China is also exploring the option of medical saving account for government employees.

**Potential Problems**

The economic reform has brought a strong economic growth and expansion of health services in China. However, the rural health care system, particularly in poor areas found to deteriorated. The access to basic health care, especially for the poor people has been again an issue concerned as the cost of health care has been recorded a rapid increase (Tang 1997). The cost of medical care in health facilities has increased rapidly mainly due to predominance of fee-for service system. Hsiao (1995) had analysed health care cost in china from 1952-90 and found that increasing in medical cost in China were largely caused by inflation, ageing of population and the changing Chinese hospital financing and payment policy which caused rapid adoption of high tech medical practices and abusive usage of more expensive drugs. WHO (1995) found that health personnel were dissatisfied with salaries and other job conditions and patients often complained of poor attitude and rudeness of staff in hospitals.

### 2.4.7 Experiences in other Countries

A considerable amount of literature also available on the experiences of insurance systems and prepaid plans as a means of protecting workers in informal sector in several African countries. They are also providing as a steady source of increased revenue for the health sector in some of these countries.

Non-Governmental Organisations (NGO's) have increasingly been promoted as alternative health care providers to the State. Green (1989) identified six groups of NGO's operating in the health sector of developing countries. They include religious organisation, international NGO's, locally based NGO's, Union and trade professional associations, other non-profit-making organisations and non-profit making pre-paid health care organisations such as HMO's. NGO's have also, traditionally been important because they have served the most vulnerable populations, improving access and coverage. NGO's are playing an important role in health care provision in countries such as Zimbabwe, Tanzania, Uganda, Nepal, Mexico, Malawi and Ghana (Gilson et al, 1994).

Donald S. Shepard, et al (1996) evaluated the design, management and operational efficiency of four health insurance schemes for informal sector in

both rural and urban areas of Zaire region in sub Saharan Africa. The study found that insurance schemes have increased access to health services and mobilised resources in both rural and urban areas. The authors however, do not support the rapid implementation of a nation-wide conventional health insurance system as a feasible solution but, suggest that decentralised, locally managed plans offer good prospects for success. The study also suggested initiating varied type of insurance schemes for outpatient and inpatient care. For outpatient care a system of prepayment was suggested as a feasible scheme.

Andrew Creese and Sara Bennet (1997) reviewed the recent evidence on the organisation and performance of thirty six health insurance schemes for informal sector in developing countries. The schemes include health facility schemes generally initiated by hospitals for catastrophic hospital care costs, community schemes, co-operative schemes and the schemes run by NGO's. The authors identified myriad problems in the existing schemes. Most of the schemes reviewed were suffering from limited population coverage, low cost recovery and limited ability to protect poorest members of society. Moreover, many of the schemes had poor designs. The authors opined that with better designs and proper management some of the core problems involved in these schemes can be solved.

### 2.4.8 Role of Non - Government Sector in India

The potential role of voluntary organization and community financing in health care in India has been emphasized by many studies. Giridhar (1993) documented the possible approach for mobilizing additional resources through health insurance schemes. He highlighted the experiences of few health societies such as Sewagram, Seba, and Kasturba and concluded that people accepted the idea of contributing to insurance schemes according to their capacity to pay. The Seba co-operative society implemented a Medical Assistance Plan (MAP) as a part of its health insurance arrangements. MAP provides full cover for hospitalisation expenses up to Rs.8,000 for an annual subscription of Rs.105. Sharma, et al (1992) examined the experiences of Voluntary Health Services (VHS), Madras, a non-profit organisation in providing health services to low income people in urban areas. The study found majority of the beneficiaries under medical aid plan of the VHS belonged to very low monthly income group. The development of sliding scale of services and membership charges reflects its commitment to assuring access to low income

patients in the locality. The coverage of the scheme is, however limited and membership charges cover only a small percent of recurrent costs.

In recent years there are some examples of private sectors establishing a tie up with government insurance companies working for financing health care. The Seba co-operative health society in Calcutta, Apollo hospital group in Hyderabad, Madras and Delhi, Batra hospital in Delhi, Breach Candy hospital in Bombay, Saurashtra co-operative hospital society, Bombay, Jamkhed health project and Kasturba hospital are few examples in this regard.

A couple of studies have looked into the experiences of prepayment schemes run by few NGO's in India. Prepayment/insurance schemes are usually contributions made by individuals and households in advance of service need. Only the sick avail of services. Therefore, in such financing schemes risks are shared between the healthy and sick. Schemes will provide different levels of coverage for community and hospital care, varying from partial coverage to total coverage.

A review of health care financing experiences of four voluntary organisation in India (Ford Foundation, 1989) indicated that voluntary agency health care programmes are funded from a number of sources, including government, donor agencies, and community and self-generated sources include contributions made by the community served, as well as local efforts by the voluntary organisation to tap indigenous funding sources. Moreover, within the category of community and self-financing organisations exhibited many innovative financing mechanisms such as progressive fee scales, community based prepayment/insurance schemes and income generating schemes.

Dave (1991) studied the health financing experiences of 12 voluntary organisations in India. The author evaluated them on the basis of three criteria such as yield, equity and risks shared in prepayment/insurance schemes. The study showed that India's voluntary sector demonstrates much experimentation and innovation with community and self-financing methods, including user charges, community-based prepayment schemes, fund raising, commercial schemes, and in kind contributions. The study found all groups were concerned about the need to protect non-affording patients from charges, and they adopted different methods to address these equity concerns. The author

suggested that these financing methods can further be strengthened with better planning, management, monitoring and evaluation.

The overall summary of review of various health insurance schemes in this section is summarised under different headings below:

### 2.4.9 A Summary of Review

**1.Target population and coverage**

Most schemes reviewed above used households as the unit of membership. Many schemes that initially allowed individual enrolment were found faced problems of adverse selection, later switched to household enrolment. In some cases the failure of insurance schemes workers to insure all family members contributed to the failure of the scheme. Many of the prepaid schemes in India have allowed only household membership. Under voluntary health insurance in Vietnam at least two-thirds of the household was required to join (Ensor,1995). In Thailand at least 30 percent of households in a village must join in order for the village to participate in the health card scheme.

Except for the schemes in China, the coverage of the target population tends to be low. However, many hospital schemes and community owned schemes particularly in African countries stands out as having strikingly high coverage. A community owned scheme in Niger covered 100 percent of the target population (Creese and Bennet, 1997). However, many community owned schemes failed to cover more than 10 percent of the target population. For instance, health card scheme in Thailand covered only 9.1 percent of the target population in 1996 (Ponnarunothai et al, 1997). An urban insurance scheme in Zaire designed for 3 million population of informal sector failed to cover even one percent of the target population in1992 (Shepard et al, 1996).

**2. Contributions and cost recovery**

Most of the schemes studied had a flat-rate premium paid on an annual basis. However, most sophisticated schemes as in Japan and Korea generally set premiums as a percentage of earnings. In prepayment schemes the premium set are very low and due to this fact cost recovery in these schemes are found to be low. In Burundi, the contributions of the health card insurance

scheme is limited by the low level of premium, which had not been adjusted since the scheme was introduced in 1984 (Griffin, 1996). A few schemes have built -in exemption policies as in the case of VHS, Madras, United mission scheme in Nepal. A few countries provide coverage for poor by issuing special low-income cards as in Thailand.

Cost recovery ratio varies in different schemes. Cost recovery ratio in some hospital based schemes in Africa is high as much as 80 percent. In a study of four insurance scheme for informal sector in Africa, Shepard et al (1996) found that on one scheme cost recovery at health center exceeded 100 percent and an another scheme in urban area generated 50 percent excess revenue over expenses in 1989. However, cost recovery ratios in other schemes were found to be much lower as in the case of prepayment / insurance schemes in India. In RAHA membership fee collection covered only 10-20 percent of community costs in 1990 (Dave,1991).

3. Provider payment mechanism

The review by Creese and Bennet showed that all hospital based schemes paid the hospital on a case based or fee- for service basis. However, in most of primary care schemes all funds collected were allocated to the nearest provider on a lump-sum basis. In China different methods of provider payment has been followed. In Philippines in the ORT scheme primary health care is delivered through salaried doctor and hospital services are provided private doctors who are paid on capitation basis. The Thai scheme is an exception as the scheme provides access to all level of care if patients are referred. Initially there was a fixed formula for allocating funds between different level of the system but at present this formula slightly differs from year to year.

4. Provision of health care and quality of care

Most of the schemes tended to cover all the services available at the participating facilities. Some schemes have exclusion as STD cases in Vietnam and dental services in Philippine's ORT scheme. Hospital based schemes tended to focus exclusively on hospital level care and have limited connection with primary care. However, there are some exemptions. Several community owned and NGO's schemes used revenues to expand access to health services as in the case of several schemes in Africa. A study in a community

health insurance scheme in Guinea-Bissau in 1990 found that all respondents were fully satisfied with the quality of services provided at health facility and all of them were prepared to pay a higher premium for further improvement in quality (Eklund and Staven, 1996).

However, only a few schemes made efforts to improve other aspects of quality of care. Facility owned schemes are also not seem to have much involvement in improving quality. Creese and Bennet in their review of facility owned schemes in developing countries found that with the exception of Bwamanda hospital owned scheme in Zaire, others had very little incentive to improve the quality of care and efficiency and they tend to seek overly favourable remuneration particularly through retrospective-fee for service payment.

5. **Management of insurance fund**

When premiums are collected at one point of time and must meet financial commitments for an entire year, it is essential that the funds are invested. However, a little information is available about fund management and administration in many NGO's insurance schemes. Creese and Bennet found that in the first year of operation Ghana's Nkoranza scheme ran into difficulty because it had no investment policy and high inflation rates rapidly eroded the value of funds. These problems are least in countries with stable economic environment such as Japan, Korea, and China.

6. Equity in finance and utilization

Risk sharing schemes have been promoted as a means of encouraging more equitable financing of health care. Most of the community based and NGO's schemes for informal sector set premium on a community rated basis and thus entailed a subsidy from healthy to the sick. In VHS, Madras premiums are levied on a sliding scale according to income of the households. In 1992 Gupta et al, found that 70 percent of inpatients in the hospital were belonging to low income group. In Sewagram, members are categorised into four socio-economic groups on the basis of ownership of irrigated and un- irrigated land, possession of bullocks and employment of contractual labour, and landless labour etc. (Dave, 1991).

## 7. Efficiency

Efficiency in the broad sense refers to administrative, allocative, technical and financial efficiencies. In many schemes, prepayment system was taken because of its administrative simplicity. Community owned and NGO's schemes experienced lower administrative costs. A major justification for the promotion of NGO services is that they are administratively more efficient and higher quality than either government or for-profit providers (World Bank,1987). However, available evidence is limited due to the fact that administrative cost of the NGO's are not made available for comparison in many cases.

The payment system of hospitals will have a profound effect on efficiency. In China, Korea and Japan fee-for service system of hospitals led to excessive use of expensive diagnostic tests and drugs. In government supported schemes administrative costs tended to be high. For instance in Korea, WHO pointed out inefficient administration in some societies led to administrative costs more than 15 percent in 1995. Creese and Bennet also found most hospital based schemes experienced rapid cost escalation. In Vietnam providers preferred fee paying patients to insured patients, as the health insurance scheme paid a low rate of reimbursement. Patients were often willing to pay unofficial fee to doctors, nurses and hospitals when they have received successful treatment and good services.

## Conclusion

A review of experiences of varied group of insurance schemes for informal sector provides a number of lessons.

Firstly, most of the schemes are rural based and voluntary in nature. Secondly, government run and hospital based schemes explicitly cover both inpatient and outpatient services. Majority of community based and NGO schemes cover only outpatient and preventive care. As outpatient care is frequently consumed, people would immediately recognise the value of insurance coverage. Thirdly, schemes providing full range of care collected higher premiums. In contrast most of the prepaid schemes have set a lower premium and are providing limited services to the insurers. Fourthly, the coverage of target population is very low in most of the schemes with the exception of China, Korea and Japan. Fifthly, experiences of community based

schemes revealed that committed, decentralised management contributes to the success of the schemes. There is also a need for flexibility and accountability in the system. Sixthly, appropriate control system and enforced enrolment of all members in the family would help reduce the problem of moral hazard and adverse selection. Seventhly, appropriate investment strategies of the premium income and a financial guarantor including the government or other agencies are requisites for successful insurance schemes and finally, affordable premiums coupled with co-payment system could control the utilisation and cost of the insurance schemes.