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**PEOPLE'S PARTICIPATION IN HEALTH :
PREPAYMENT MECHANISM THROUGH
HEALTH CARE CO-OPERATIVES**

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Introduction

In many countries, governments are finding it difficult to allocate sufficient resources to health sector, due to resource constraints, technological development, emergence of new communicable and non communicable diseases, over growth of population etc. To overcome this, governments in some countries are encouraging voluntary sector, involvement of local governments, promotion of public private mix, co-operative health care or other institutional mechanisms for alternative financing in health sector. But, fears are sometimes expressed particularly in developing countries that economic reforms in the form of liberalization, privatization and globalization, primarily focus on economic objectives of efficiency of resource allocation and hence the social objectives of distributive equity and social development are likely to receive a back seat. Much is documented in the literature on the compression of the overall government

budget in general and the budget of the social sector in particular, especially in developing countries during the reform¹. This compression is more likely to affect primarily the poor and the less privileged in the society. Obviously, it is not enough if the problem is diagnosed. What is necessary is to introduce immediately measures to tackle these likely developments. Such measures to safeguard the interests of the poor are required under all occasions, whether there are economic reforms or no economic reforms, for, the problems of inequity lie very much in the nature of the components of social sector itself, particularly in the context of a stratified society like India. This will be elaborated in Section I of the present paper. Economic reforms however are likely to aggravate the problem.

Demand for health, one of the main components of social sector, is generally income elastic². Similarly, access to health

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care is also found to be income elastic. In a regional perspective, demand for and access to health seem to be elastic with respect to the level and rate of economic development of the region. Since most of the estimates of health care spending have exceeded unity, health care is considered as a deemed luxury good at least for the developed countries. It is also worth noting that health confers both private and social benefits. Opportunity costs of health are generally fairly high particularly for low-income households. Costs of maintaining health and avoidance costs of ill health are too high to be overlooked. From all these points of view, health is considered in public finance literature as a *merit good*, implying that it is so meritorious from the point of view of social welfare that issues of its provision cannot be left to the decision making of the individual or private sector alone but they need to be considered by the collectivity or public sector also. In the present paper an attempt is made to focus on issues relating to the provision of health care facilities particularly for the poor, keeping in mind the characteristic features of health calling for involvement of the collectivity or public sector in its supply. The paper suggests a mechanism of involvement of the collectivity – community and the government, which would help better access and utilization of health care services by the poor.

The paper is divided into four sections.

In Section I, unique characteristic features of health relevant in the present context are briefly outlined.

Section II examines some of the resource allocation plans to the health care sector suggested in the literature, keeping in mind the requirements of the poor in general and the poor among the socially less privileged sections of population in particular. Its main focus is on the basic issues that need to be considered while implementing the plan.

Section III presents a brief review of the experiments of health care co-operatives and health insurance as in practice in selected countries with a special focus on the experiments and proposals in India.

Section IV, which is the *concluding section*, outlines major elements of a health security plan for the poor incorporating the insurance strategy first in general terms and then particularly for one of the villages in Karnataka, for which field data were collected for the purpose. This example attempts to indicate the order of resource requirements for a small village, which could be a base for estimating a regional or state plan if such a plan needs to be implemented on a wider scale. It also examines whether there would be resource savings if such a plan with community involvement and contribution is implemented in place of the present practice of government itself taking the entire

responsibility towards health security for the poor.

I. HEALTH AND HEALTH CARE SERVICES AS AN ECONOMIC GOOD IN THE INDIAN CONTEXT

Health is an economic good, the peculiarities of which need to be explicitly recognized in any health security plan. We briefly outline below some of these peculiar features particularly in the Indian context. It can be seen that inequality in access and utilization of health care are inherent in the very nature of health and health care services as an economic good, particularly when it is left to market forces.

Is Inequality in Access and Utilization Intrinsic to Health and Health Care?

* There is no universally acceptable yardstick for measuring health level of individuals. Also, there is no acceptable definition of health. As a result, there is a greater probability of episodes of general ill health (which might, at times, lead to major ill health episodes) being overlooked or treatment of which is likely to be postponed. This happens particularly in the case of poor households and in the case of those who have low social status. On the other hand, rich households and only socially better off members of even a better off family (such as earning members or male

members or members who are accepted as heads of households, even though they are not earning members, or those who are ritually superior, such as mother in law rather than daughter in law, etc.) are likely to receive more attention regarding even small health problems. Thus, the *probability of medical care attention is a positive function of socio-economic and ritual status of the individual / household in question. In other words, in the Indian context, availability of medical care attention is not just in accordance with the demand and need for it but it is most often in accordance with factors other than these.*

* In view of the low economic status, members of poor households depend upon their physical capabilities and skills for meeting their daily subsistence needs. It would be imperative for them to maintain their physical and mental well-being at a fairly high level, which enables them to put in work and earn daily livelihood. Illness causes immiserization of the poor and hence it is necessary for the people to avoid illness or debilitating morbidity causing further impoverishment and immiserization.³ This is particularly seen in the case of those members who work in the unorganized sector and who work on a daily wage basis. Thus, what one may call, the '*subsistence need for medical care attention*' is a *negative function of economic status of the*

individual. This should not be taken to mean that better off people give less importance to health and health care. On the other hand, they pay more attention to even a small disturbance in their health, as stated earlier. What is implied here is that *for the purpose of subsistence earning, meeting the need for health care is more mandatory for the poor than for the rich.*

- * *Some of the health care facilities are, by and large in the nature of indivisible goods, while services from these facilities are characterized by a fair degree of divisibility and rivalness in consumption. These may be termed as lumpiness in supply but a fair degree of divisibility in utilization. In view of this lumpiness, large investments are needed to supply these facilities. There is a tendency of cost recovery charges being over estimated in such a situation. In view of speedy technological changes in the field of medical sciences and public health, foreign initiatives are more likely, particularly in the background of globalisation. Also there are uncertainties associated with the occurrence of morbidity episodes requiring the use of a particular facility. Further, there are uncertainties associated with the use of the created facilities by the affected persons. All these contribute to the desire for an early cost recovery. There also seems*

to be an undue haste in cost recovery by the investors making the charges for the users unduly high. Added to it, the instinct of greed and a desire for more and more and still more also contributes to this tendency for over-charging.

- * Another factor also contributes to this tendency, which is the result of some of the **recent developments under economic reform regime.** In view of the declining interest rates on borrowings and trends of privatization, such facilities are likely to be created with the help of borrowed funds⁴ by few private initiatives that can provide the necessary collateral required for loans from financial institutions. This would also give rise to a situation of *few sellers operating in the health care commodities markets. Such sellers can control price of services and also indirectly the clientele utilizing these services.* This characteristic feature would have significant implications for access of the poor to health care services.
- * *Health care services consisting of both material and manpower services are likely to get concentrated in urban areas* in view of their characteristic features outlined above. Since majority of agricultural labourers are mostly located in rural areas, they are more likely to be deprived of the necessary benefits from health care facilities. **Health facility mapping** for rural and urban areas in different states of the country would

reveal how the facilities get clustered in urban areas disproportionately to the population.⁵ It is useful to work out *regional inequality indices of health care facilities in rural and urban areas* of different states. Field studies show that the rural folk have to walk down / travel in bullock carts or tractors for miles together in search of medical assistance in the case of illness episodes. It is also worth noting that most of the health care centres located in many villages are mostly non-functional, ill equipped and inadequately manned (Chauhan et.al.1997; Gumber and Veena, 2000; CESCION, 1998; Chirumule and Gupta, 1997). This also suggests that the ***health facility mapping needs to be done keeping in mind the functional existence of the facilities rather than merely their physical existence. Intra regional facility distances are most often found to be an inverse function of the level of economic development of the region, suggesting that the poor in the less developed regions are likely to be more adversely affected than the poor in the more developed regions.***

- * Considering gender dimensions of commodity of health and health care would bring out many important aspects worth noting while developing a strategy for the health care needs of the poor. Generally, women are considered as health care providers within the family.

However, health of the health care providers in the family is generally overlooked, not only by other members of the family, but also by women themselves. Traditionally, low social status of girls and women in Indian family contributes to this. As a result, female members, right from baby girls to elderly women in the family are likely to be more deprived of health care services than male members, starting from baby boys to elderly men in the family (Gumber and Veena, 2000). This discrimination is more severe in poorer families, rural areas and poorer states. Health condition of female members in poorer environment- regions and households is likely to be much worse than that in more developed regions. ***Access to, utilization of and benefit from health care services are thus a function of gender with adverse effects in the case of female members.***

- * ***If health and health care are under-priced in the present period even though the price payable for them by the beneficiaries in the long-run works out to be much higher, then generally, there is a likelihood of the normal law of demand to operate vigorously in the short run keeping in mind the price in the present period only. Thus, in the case of demand for health care services defective telescopic faculty seems to operate. Price elasticity of demand is***

generally high for the people of all economic levels and at all price levels.

- * ***There is an asymmetric information flow for medical care providers and patients, with some information available more with providers and some other crucial information available more with patients.*** For example, scientific, medical information about diseases-causes and cure in general, is available with medical care persons-doctors, nurses, etc. But, information about how they feel while suffering from disease or while receiving treatment and after treatment etc. lies essentially with the patients. Information about preventive care and promotive care is available with medical and public health personnel whereas information about the effects of these measures of care is available with only the clientele-beneficiaries.
- * Considering the aspects under the above two paragraphs, it follows that **there is a risk of overuse of certain types of care by the people, particularly at higher income levels**, since they can afford larger expenditures on drugs. Excessive use of drugs and medical services is termed in the literature as '*moral hazard*' implying probably that people consume more of medical care than what they really require and that such over use is likely to be hazardous also. People's expenditures might be guided by what one may call, *presumptive prescriptions by medical experts*, who in turn might act under partial / wrong information or self-interest considerations. Provider-induced-over-use of drugs and medical services or even self-induced over use might ultimately exaggerate demand for drugs and services and distort long term planning in the case of the health care sector.
- * ***Price and income elasticities of demand for health and medical care are likely to be high at high income and price levels than at low income and price levels.*** Studies based on NSS data do reveal this (Sen, Gita et.al.2002; Gumber and Veena, 2000). In view of this, generally, special attention seems to be paid by providers to those drugs and services, which cater to the needs of high-income groups of population. This leaves the needs of the poor unconsidered or less considered in normal circumstances, unless special initiatives are made for the purpose. This is evident from the location of medical care services in urban areas, where, generally richer sections of population live. Also, the rate of growth of tertiary care investment is higher than that in primary care. Analysis of drug prices meant for the common care and for tertiary care should also be revealing from this point of view.⁶
- * Preventive health care services are characterized by special features, which deserve attention of analysts, while designing health security plan for the poor.

Demand for preventive care is much less clearly articulated than demand for curative care. Effort for meeting this demand is also much less in this case as compared to curative care. Articulation of the need for preventive care is obviously a function of level of awareness among the people about its importance. *Since the effect of absence of such care is felt much later after a long time lag, immediate appreciation of the importance of preventive care is generally not seen both by the individual beneficiary or the collectivity as a whole.* This is one of the reasons why the decision makers do not undertake the projects for preventive care so enthusiastically. Even at the individual level much attention is not given to measures for preventive and promotional care as in the case of curative care.

- * As indicated above, preventive care can be of two types, viz. individual-specific preventive care and collectivity specific preventive care. **Demand for both types of preventive care is a positive function of level of income of the individual and the collectivity apart from the level of awareness about the importance of such care in the functional capabilities of individuals.** Hence, preventive care becomes a predominant merit good, being so meritorious from the point of social welfare that it calls for collective

intervention for provision over and above private initiative for its provision.

From the above conceptual background relating to health and health care services as economic goods, it is clear that generally the poor cannot safeguard their own health care interests and that such interests can be safeguarded only if suitable mechanisms are evolved. Such mechanisms can be developed incorporating the involvement of the people, invoking the spirit of altruism and mutual sympathy among those who have higher ability to pay and better capacity to organize services with a longer out-reach both with respect to time and number of people. It is felt that the spirit of cooperation, which already prevails among the people in India, particularly in villages, needs to be aroused for invoking this spirit of altruism and mutual sympathy. Sympathy and mutual sympathy have been considered as one of the six springs of human conduct by Adam Smith. In his *Theory of Moral Sentiments*, Adam Smith devotes one full chapter to eulogize the 'Benefits from Mutual Sympathy'. Mutual Sympathy has received the highest importance in the codes of conduct sanctioned by many religions of the world also. Therefore it would be useful if this spirit of mutual sympathy is utilized for helping the poor in their health care needs. Since the poor cannot bear the high costs of health and medical care it would be necessary to *devise a mechanism*

invoking the spirit of mutual sympathy and cooperation, through which it is possible to provide health care services at reasonably low current costs spreading the rest of costs in suitable installments in the future. The mechanism should explicitly note the seasonality (as in the case of agricultural labourers, for example, who get earning opportunities mainly during the agricultural seasons) and at times irregularity of the income flows to the poor households and adjust the payments towards health care costs to such income flows. This mechanism should also recognize the fact that occurrence of illness and its duration are uncertain. *Any organizational mechanism that can pool the risks of illness of the poor households and that can provide for convenient cost payment arrangements should greatly help the poor.* Health insurance is considered as such a mechanism, which can greatly help the poor. Health insurance is also a mechanism for gaining access to health care that would otherwise be unaffordable.⁷ If co-operative elements are integrated with health insurance then it would have an added advantage for the poor.

II MAIN ISSUES REGARDING THE STRATEGY OF HEALTH CARE COOPERATIVES

Health insurance through health care co-operatives can be considered as a method for pooling of risks of different types

of ill health across individuals and over the period of time. This is a strategy of pre payment mechanism with people's participation in health care provision. A number of issues in this connection have received the attention of researchers. Some of the important ones are briefly outlined below.

- * When health sector budgets are getting compressed during the period of economic reforms can health insurance mechanism maintain the overall budgets for health care sector at high levels? In other words, **can insurance be considered as an alternate source for financing of health?**
- * Government provision of health care services is believed to safeguard the health care needs of the poor. In this background, to what extent can health insurance mechanism be considered as responsive to the needs of the poor?
- * Does health insurance mechanism lead to what is termed in the literature as *moral hazard*, implying more than an optimal use of medical care services? Choice of the best health insurance plan involves a trade off between the gains from risk reduction in connection with the disease/s covered under insurance and the loss of moral hazard(Manning and Marquis, 1996). How far are people in a country like India in a position to make such a best choice?
- * **Does this excessive consumption of medical care have its own implications for health of the users?**

Studies have tried to show that having insurance is associated with having better health (Hahn and Flood, 1995). The hypothesis of over use of health care and the effect of excessive consumption on health status needs to be tested with micro level data.

- * **Does this excessive use of medical care services by the rich result in less availability of services for the needy, who may not be in a position to bear the cost of health insurance itself?** Does this also result in inefficient allocation of scarce medical care and financial resources of the economy in the ultimate analysis?
- * In view of its effect in terms of excessive demand for medical care services, **does health care insurance lead to further rise in price of such services and also in insurance premium in the long run, making health care more costly for the poor**, the very problem, which the insurance mechanism wanted to tackle itself? These aspects would be very crucial in the context of developing countries where cost escalations would lead to further deprivations of the vast masses of the poor.
- * **Making health insurance mandatory is likely to result in a welfare loss for those who had not purchased it earlier.** This issue needs to be examined in the specific context about which not much research seems to have been done (Chernew et.al., 1997).
- * **Does insurance mechanism sustain itself in the long run?** This question is

relevant because the overhead costs and operating costs of such a mechanism are likely to be quite heavy and which might not be recovered from the clients through premium?

- * If the premiums are hiked up significantly in order to recover the costs then in what way would this mechanism be different from the private market based supply of health care services? **A rise in premium might discourage the less privileged people to go in for insurance cover.** One of the studies in US has estimated that a 1 percent rise in insurance cost would lead to a 1.8 percent reduction in the probability of a self employed person seeking insurance cover (Gruber and James, 1994).
- * **Should health insurance be provided by government itself or by the private sector initiatives or by both?** If both private sector and government were operating at the same time, would there be a tendency of government being *crowded out* by the normally aggressive private sector initiatives? In the context of the U.S. however, employer delivered health benefits are reported to have been replaced by the government insurance mechanism.
- * Some studies have also shown that significant health status differentials among the insurers are observed in the case of public and private health insurance systems, with lower status in the case of the former (Hahn and Flood, 1995). Would this mean that provision of publicly managed insurance for the poor and

privately managed insurance for the rich would lead to health status disparities among the poor and the rich in the society? *What is the optimum public private mix in the case of health insurance?*

- * Does insurance mechanism in general ensure high **quality of health care services**? Does government operated Health Insurance ensure better quality of services or private sector operated insurance would achieve that objective?
- * **Whose out reach is better- private sector's or government's**, so as to ensure availability of health care services to the poor, to the socially less privileged, to the people in remote areas, to children and to the elderly also (as, normally private health insurance operators are found to exclude people outside a certain age)?
- * Does health insurance mechanism provide for **articulation of the health care needs by the people who are in need of such services**? Or, does this mechanism strengthen the **dominance of the providers in the health care sector**? Would this imply the relevance of Say's Law of Markets in health care market (Supply creates its own demand) with its concomitant implications for the clientele?
- * Can health insurance mechanism be so structured as to integrate the **equity considerations**? Thus, can there be differentiated premium system, distribution of claims in cash or kind, coverage of all types of health care needs such as preventive, promotive and curative needs, etc.? Can a Health Insurance mechanism cover the **risks also of common ailments of masses**, which at times become economically costly for those who lose their work days on account of such weakening common ailments and which reduce their work output? Should premium alone be graded or service charges also be so graded or both, to ensure equity in access and utilization?
- * **Are people in a country like India aware of the advantages from health insurance** so that it would have a fairly good demand just enough to sustain it in the long run? What measures need to be taken to raise the level of their awareness about the value of health insurance? Over 92 percent of the non insured households both in rural and urban areas were not aware of the existing health insurance schemes. This is the result of a NCAER – SEWA survey (1999) as reported by Gumber(2000).
- * Can health insurance be extended to rural areas, un organized sector, all types of occupations and all income levels, all age groups, etc. for, inclusion of these under the insurance cover is feared to increase the risk of losses of insurance providers who are traditionally considered as **loss leaders** in the economy?
- * If health insurance supply is opened up to the **private sector** and also to the **international operators** then there is allegedly a risk of foul practices in health care supply. In the case of foreign companies operating in the system there

is also a risk of repatriation of profits and resources from India to the other countries. Under such circumstances, what countervailing checks and **safeguards need to be introduced to regulate their activities?**

* **How should clientele beneficiaries' involvement be ensured in the functioning of the health insurance system** so that people themselves become a watchdog for its functioning? Can co-payment, coinsurance, group insurance, etc serve this purpose?

These and many other issues deserve the attention of policy makers and analysts having an objective of improving the access to and utilization of health care services for the poor and provide a useful health insurance plan for them. Health insurance plan is assumed to be a useful health security plan for the poor if it is managed neither by the public sector nor by the private sector but by the people's sector. By people's sector we mean a co-operative of the people, which is specially created for the purpose of fulfilling the health care needs of the poor. Health insurance through health care co-operative is thus considered as a mechanism worth trying in the Indian context. Such a mechanism has been tried in some form in India and in some other countries also. It would be useful to learn from these experiments and design a *mechanism based upon the principles of mutual sympathy and pooling of risks* for the benefit of the poor particularly in the rural areas of the country.

III A BRIEF REVIEW OF EARLIER EXPERIMENTS:

Health care co-operative and health care insurance are the two organizational initiatives that can help the cause of the poor. A brief review of the experiences of selected countries which have initiated health insurance through health care co-operatives and community involvement is presented below. This review would help us in designing a health security plan for the poor, which we propose to develop in one of the villages of Karnataka for which data were specially collected.

The review is presented for eighteen countries, for which the information was readily available, starting from a developing country like India to the developed country like USA. Only the salient features are outlined without going into the details. For convenience the Indian experiences are outlined at the end.

1. China

The replacement of collective agricultural production by the household responsibility system as a result of economic reforms has led to the decline of collectively funded Co-operative Medical Scheme (CMS) in China (Hao, 1998). The study by Hao and others reports that during collective farming CMS assisted farmers to meet health care costs in more than 90% villages. Considering this the government of China is encouraging the establishment of

such CMS, which are said to have been set up in rural China with the help of local government.

Co-operative Medical Scheme (CMS) in Wuzhaun Township:

Researchers of Shanghai Medical University drew the plan for CMS. Based on household survey, the design for CMSs with varying service coverage, premium and reimbursement ratio was developed.

Features:

- * Membership in 5 villages is said to be voluntary and open to all rural households.
- * Premium of ¥ 5 per member, with ¥ 4 (0.5% of annual per capita income) from individuals and ¥ 1 from county government is to be collected. Village Collective or local government though agreed to pay premiums for extremely poor households, did not pay in actual practice. Few farmers paid in terms of produce (grains). (\$ 1=¥ 8.3, ¥1=Rs. 5.5)
- * Services: Free registration, reimbursement for treatment and injection fees at village level, free immunization for children (up to age 7), pre and postnatal maternal care and delivery service.
- * Management: Committee established with members from township government. Salary of Manager is paid by local Government.
- * *Drugs: Village doctor is allowed to buy

drugs from township health center and sell them to patients at fixed prices.

- * *Village doctor has to hand over prescriptions to CMS Committee for examination and reimbursement of drugs, treatment and injection fees. 1/3 rd of the difference between wholesale and retail price of drugs is to be paid to the Committee, which redistributes the money to village doctors at the end of the year as a performance bonus.
- * In each of the five villages one village doctor was contracted to provide health care irrespective of membership. Maternal and preventive care is organized with the help of township health center.
- * Health Bureau supplies equipments and published regulations, cards and forms.

54 per cent of the households are members (984 Households with 3355 population). Households, which had access to health care did not *become* members. There was an average of 2.2 visits per member per year. The level of reimbursement was ¥ 2.08 per member and it varied from ¥ 3.73 to ¥ 0.8. Full time doctors are more popular. Share of drugs in total fees reduced due to CMS, which is service oriented (from 90% in 1993 to 76% in 1997). Need for continued assistance from government, encouraging poor households to become members, increasing maternal care which is lacking and promotion of health education are suggested measures.

2. Philippines

Voluntary Health Insurance for residents of poor rural communities: In Philippines (Ron and Kupferman, 1996) National Health Insurance Law passed in 1995 aims at universal coverage for a range of health care benefits. In the meantime government has encouraged community health projects to develop health insurance scheme.

Organisation for Education Resources and Training (ORT) which is an International Voluntary Organisation runs a Mother and Child Care Community based Integrated Project (MCC). This project was launched in La Province of Philippines. The project provides pre-school education and basic health services. ORT Health Plus Scheme was launched in 1994.

Population : Covered the families of children attending 13 ORT centers, members of ORT co-operative and the general population of the communities where day-care centers are located. Total coverage is expected to be 2500 Households. But, only 300 families registered in the first year. Family is the membership unit.

Services : Ambulatory and in-patient care, prescription of drugs and ancillary services are provided by doctors and nurses in day care centers.

Finance: considering the income flow patterns in the population, contributions are collected monthly, quarterly, bi-annual and

annually. Differential level of contribution for members and non-members of medi-care and family size is followed.

Contributions: P 50-single person
P 100- standard family
P130-large family
(25 persos=1 \$)

These accounted for less than half the amount that the families spent on basic health care, excluding in-patient care. For those with Medicare the premium for out-patient care is P 70 per month.

For the initial period ORT project continued to pay the salaries of doctors and two nurses in day care center. Non-insured persons paid P 50 per consultation and for drugs at cost plus 50%. For insured the cost of drugs is cost plus 20% much below the market rates.

Management: CMS is administered by ORT Multi-Purpose Co-operative, which is formed by parents and staff of day care center to increase household income and sustainability of day care centers.

3. Brazil

It is reported that one of the largest provider (usually owned by doctors) owned Co-operatives was established in Brazil in 1967⁸. By 1994 its member owners were said to be 60000, with independently practicing doctors (1/3 rd of national total). Under this Unimed system an individual or 30000 enterprises, which provided health

insurance to their employees could get, agreed services from any member doctor anywhere in Brazil.

4. Tanzania

Tanzania is reported to be among the first countries in Southern Africa to introduce prepayment scheme and implemented Community Health Fund (CHF) in rural areas (Beattie et. al. ed., 1996). Strong community organizations existing in the country are the facilitators of growth of community dispensaries. The CHF aims to provide primary health care, maternal and child health care (including deliveries) preventive and promotive health care. The risks and benefits are shared among large pools of households and each pool is reported to be consisting of 50000 individuals. Each household is given a health card at a cost of \$ 2.57 per person per year and hospital charges add up to additional premium. There is political support, matching funds by donors and government to community fund and cooperation from health care providers (doctors). But, it is reported that these CHFs are said to be facing problems of operation, management and rising costs. Members over-utilize the health services and there are reports about the possibilities of misuse of drugs in the name of CHF members due to lack of internal control or monitoring.

5. Mali

A Community managed health care program was introduced in Mali (PHN,

1995) in 1990, with financial assistance from UNICEF, FAC, EU, KFW, USAID and IDA. A primary health care facility fully managed and financed by the community with support from the district health team was the major component of the scheme. The project introduced competition among the districts by setting a set of eligibility criteria for funding the districts' health development plans. It is reported that there was high level participation by beneficiaries in mapping health facilities and their areas of coverage. Increase in vaccination coverage (40% to 80%), use of contraceptives (1% to 6%), prenatal consultation by pregnant women and low average cost of prescription much below the national average were reported.

6. Nigeria

In addition to the National Health Insurance Scheme introduced in selected States by the Nigerian (Ibukum, 2000), government (wherein employers with ten or more workers have to compulsorily insure their employees under the scheme), there are informal prepayment arrangements reported in the country.

A credit linked Health Development Fund (HDF) as a part of Integrated Health & Family Planning Programme has been managed by the Country Women Association of Nigeria (COWAN) using a network of 370 community based distributors of family planning commodities. Each registered group with a membership of five to ten persons contributes monthly, a

fixed amount which entitles members to credit facilities for agricultural and commercial activities and to cover the cost of 'catastrophic' illnesses. The linkage of credit scheme with prepayment for health care is considered to be an attractive model for protecting those in the informal sector of the economy.

7. Rwanda

Rwanda, which is reported (PHR, 2000) to be one of the poorest countries in the world, has introduced in three districts in 1999, prepayment schemes in health sector as one of the alternatives to health care financing. While two districts have prepayment schemes co-managed by providers and population, the third district had prepayment scheme managed by population. By paying an annual premium of FRw 2500 per family, members are entitled to basic health package covering all services and drugs provided by their preferred health center and referred service at district hospital with limited package service. There is one month waiting period and members have to pay a co-payment of FRw 100 per episode of care at the health center. Prepayment schemes reimburse health centers by capitation payment.

During the first six months, more than 5000 Rwandans (4.6% of the population in three districts) were reported to have registered with the scheme. It was reported that there were monthly fluctuations due to subsidized premiums by employers and

religious authorities, which increased new membership, and also due to household expenditures on school fees or taxes, which lowered the rate of new membership. Though initially utilization was reported to be low, there were improvements later, which showed that co-payment did not discourage use of health centers. But there was overall decrease in consultation, which resulted in lower workload for health centers. It is reported that efforts were being made by Ministry of Health to have awareness campaigns to increase the use of health centers and pre-payment schemes.

8. West & Central African countries

In West & Central African countries (PHR, 2000), community and employment based mutual groupings known as Mutual Health Organisations (MHOs) have been operating to provide health care services. Research study undertaken by United States Agency for International Development and other agencies reports that MHOs are young and are small schemes in terms of membership but have potential to embrace more people. MHOs have contributed for the democratic governance in the health sector. MHOs are representing their communities before health authorities and articulate the views of health care consumers. But, the research team has found that resource mobilization is poor by MHOs. Current contributions are said to be constrained by factors such as low penetration of target populations and low dues collection rates.

9. Poland

In Poland, Provider Health Co-operatives were said to have been started in 1945 and are included in the workers' sector as Professional Service Provider Co-ops (Pawlowska, 1996). Their members are medical doctors with a first-degree specialization, already employed in public health system. There is no scope for development of private sector as an alternative to public health service in the country. The Medical Co-operatives are said to be operating on a fee for service basis. Though the fees are less expensive than those of a private practice there are limited number of patients due to non-existence of private health insurance. As a result doctor's fees are not reimbursed. By the end of eighties the Association of Medical Work Co-ops had 27 members out of 31 health care Co-ops and 9 multipurpose work Co-ops running medical and dentistry cabinets. Recently the co-operative system is said to be undergoing a change as many societies are dissolved or there is said to be a change in legal status. The existing tax structure is also said to be unfavourable to Co-ops, forcing doctors to quit Co-ops and start private practice. The increasing rents for the Co-operative building have also hindered the progress of co-operatives.

10. Ghana

An evaluation study undertaken by the PHR reveals that **Nkoranza community**

health insurance scheme in Ghana (Atim and Sock, 2000) has proved to be successful in terms of sustainability and making quality care affordable to a high percentage of vulnerable households in the district. The study was undertaken after eight years of operation of the scheme and was funded by DIDA and WHO.

The scheme is said to be self-funded (premium income). It is said to be first of its kind in Ghana and has brought fame to the district by its mere survival. But, the PHR study pointed out that there is a lot of scope for improvement and expansion of coverage. Presently the scheme is reported to be covering only 30% of the total district population. The reasons for low coverage have been identified as inappropriate registration period, misconceptions in the community about the scheme, lack of marketing (educational) communication, lack of accounting and computing, lack of monitoring and evaluation, negative attitude of hospital staff and massive adverse selection i.e. tendency to register only the high risk groups (aged, children...). One of the encouraging factors noteworthy to be mentioned is that, though the district is reported to be having high level of poverty, poverty is not recorded as a major factor for poor coverage. There is said to be demand for maternal and child health services including deliveries for which members were willing to pay extra amount. But, there is said to be resistance for co-payments or deductions on the existing hospitalization cover. The PHR research team has

recommended incentives for registration of all members, organizing Annual General meetings with the help of funding from district government, supervision from community volunteers, steps to improve relations between the hospital staff and the community and inclusion of maternity care to boost membership.

11. Canada

In the context of budget cuts, government withdrawal, hospital closings and the move toward ambulatory care, new methods are being identified for financing and providing health care. This has resulted in emergence of health care co-operatives in Canada⁸. The earlier co-operatives were created in the wake of the crisis brought about by implementation of the universal health care system.

The report of the International Co-operative Alliance states that in Canada, as per the study undertaken by Federal and Provincial governments, community health centers were a cost-effective alternative to private practice as they operated at lower cost per patient and offered more preventive and health promotion services and also were accessible to disadvantaged persons. In Canada health care co-operatives exist in Saskatchewan, Manitoba, Nova Scotia, British Columbia and Prince Edward Island. In 1996, 33 co-operative health centers were said to be operating in Canada.

Saskatchewan province has been using the co-operative community clinics

model since 1962. It is reported that five health co-operatives have been offering (day surgery pharmacy, Ophthalmology etc) services to 17000 members and 25000 users in Saskatchewan.

12. USA

In USA⁸, health co-operatives are significant in North-West and North-East regions.

- (i) In USA, user-controlled health co-operatives operate as HMOs. Group Health Co-operative of Puget Sound in Seattle is said to be the largest of these. In 1993, there were 478000 members to this co-operative. Medical care along with preventive care is provided for a fixed prepaid fee.
- (ii) The United Seniors Health Co-operative is reported to be providing the 9000 elderly owner-members, high quality, affordable long term health care services.
- (iii) User owned health co-operatives operating in partnership of government exist in USA. In 1994, there were 900 democratically governed and community owned, Community and Migrant Health Centres in rural areas and inner cities serving low-income communities. For 500 such centers funding was available from US Public Health Services.

- (iv) Voluntary Hospitals of America is reported to be the largest health sector purchasing co-operative in US.

13. Other countries

(Spain, Italy, Japan, Singapore, Sweden, Australia)

Spain

In Catalonia, a combination of user-owned and provider-owned co-operative known as Integral Health Care Co-operative system is developed by the Espriu Foundation. In 1992 it had over one million user-members.

Italy

Co-operatives operating at the community level exist in Italy. It is reported that local governments support community based health and social service co-operatives.

Japan

- (i) Members of the consumers movement have set up Health co-operatives supported by the Medical Co-operative Committee of the Consumer's Co-operative Union.
- (ii) Members of multi-functional agricultural co-operatives have organized health services supported by the National Welfare Federation

of Agricultural co-operatives.

Singapore

In Singapore Health Co-operatives have been established by The National Trade Union Congress in 1992 which represents 52 trade unions. It is reported that agricultural supply, marketing, community development, housing and insurance co-operatives have expanded their activities to the provision of health services to members.

Sweden

In 1990s, the Medicop Model, a model for consumer owned co-operative medical care centers is reported to have been developed in Sweden on behalf of the housing and insurance co-operatives. It is reported to be providing co-operative partners for local government authorities interested in contracting health care services and facilities. Insurance co-operative enterprises expanded into health sector are reported to have set up hospitals and rehabilitative centres.

Australia

During 1860 to 1940, friendly societies of patients, which employed large number of doctors usually on contract basis, existed in Australia. Pre-paid health care with subscriptions paid quarterly was a common feature. Members were entitled to medical treatment without further payment.

14. India

The following paragraphs present a somewhat detailed account of some of the important experiments²³ and the details about studies which reveal the willingness of people to contribute for health care. We also briefly evaluate a plan of medical care provision for the poor through insurance as presented by TN Krishnan, one of the pioneer thinkers in this field.

1. Chattarpur Health Co-operative

Chhattarpur Health Co-operative which was established during 1950's near Delhi, is rated to be the most successful co-operative during that period by Kamala Rana (Salvi Gouri, 1999). This was started with the help of Canadian Aid Agency and reported to have had nearly 4000 members from 10-15 villages registered for co-operative. Membership fees were Rs. 6 per year. For medical treatment, a user fee at the rate of Rs. 1 for injection and 50 paise for medicines was charged to the patient. Villagers had the services of a doctor who visited regularly. Village women were trained as Midwives. A vehicle was available at the health centre to transfer the patients. Kamala Rana credits the success of the co-operative to L.C. Jain who was one of the motivators of co-operatives. It is reported that later the co-operative was handed over to government soon after the establishment of a Municipal hospital in the region.

2. SEWA: The Self Employed Women's Association (SEWA) provides health care to its members through two health-co-operatives viz. Mahila Sewa Lok Swasthya Co-operative and Krishna Dayan Co-operative. The services are particularly preventive health and immunization services. Rational drugs are supplied at low prices at three centres. Childcare is provided through three Childcare centers and Crèches.

SEWA members who make contributions are only covered under Health insurance. And, for members who have linked their fixed deposit savings with the insurance scheme, there is also the coverage for maternity benefit. SEWA bank runs Integrated Social Security Insurance Scheme with the help of LIC and United India Insurance Corporation. It covers events of death, accidental death, sickness, accidental widowhood and loss of household goods and work tools. On an average insured person in SEWA households is reported to be paying Rs. 70 to Rs.80 p.a. (Gumber and Kulkarni, 2000). Gumber and Kulkarni's study in Gujarat brought out that, SEWA beneficiaries are interested in extending coverage to additional household members and that there is strong preference for SEWA type of health insurance scheme by the people. People in rural areas preferred

public sector hospital services with some contributions from community and managed by Panchayat. Their study revealed that out-of-pocket expenses of insured (ESIS) households were lower by 30% for acute and chronic diseases and by 60% for hospitalization cases as compared to SEWA and non-insured households. Gumber's study shows that low premium Jan Arogya Scheme is preferred by most of the people and there is need for health insurance among low income households due to heavy burden of out-of-pocket expenses.

3. Sugar Producers' supply, processing and marketing co-operatives in Maharashtra State are reported to have set up a chain of hospitals and dispensaries for members throughout the region of their operation. These function in the nature of co-operatives though they are not formed as health care co-operatives themselves.
4. According to a study by Sodani and Gupta (2000) in Rajasthan, people preferred to pay an annual premium of Rs. 243 per capita under health insurance, given a package of services and coverage of expenses excluding transport. For coverage of transport they preferred to pay Rs. 286 per year and Rs. 347 for coverage of transport and wage loss. Their study shows that people are willing to prepay for health care and are willing to join health insurance if proper designed plans are proposed.
5. A public school in Delhi (NIHFW, 2000), has introduced Health Insurance coverage with the help of GICI, to its students (a group) with a premium of Rs. 50 per child per year covering a risk upto Rs.100000 per year.
6. According to a study conducted by K.S.Nair (NIHFW, 2000), in Delhi's slums, households in informal sector spent 8.87 % of their per capita income on health care as against 4.47% by households in formal sector. Households in formal sector were willing to pay Rs. 145 per capita per annum and households in informal sector were ready to pay Rs. 103 per capita per year. **They preferred a combination of hospitalized, non-hospitalized and chronic illness care benefit under health insurance.**
7. Voluntary Health Services (VHS) in Tamil Nadu has been providing health care services to rural poor for nearly 30 years. Based on the joint family income, membership fees are charged. The scheme provides the members with free annual check-up and curative and diagnostic services at concessional rates. There is no waiting period between joining the scheme and the right to receive health care. Dr. N.S.Murali has (Ford Foundation, 1990), reported that most members renewed or enrolled only at the time of acute illness. He has reported that *an NGO cannot sustain Health insurance scheme from the premia received from poor members. Support by government in terms of subsidy and levying minimal user charges to*

users are important for the sustainability of the insurance scheme.

8. U.N.Jajoo and others(1985), from the Department of Medicine, Mahatma Gandhi Institute, Wardha set up a co-operative health service unit in a village in rural Maharashtra, in a school building with an initial contribution of Rs. 4 per family. Later a health insurance scheme was mobilized by collecting agricultural produce at the rate of 2.5 kgs per acre for farmers and, at a flat rate of 5 kgs for agricultural labourers. Village dispensary is linked to Sewagram hospital. Village dispensary is run by Village Health Worker(VHW). VHW is supported by a medical kit and monthly service of a mobile medical team. Only acute and emergency cases are treated free of charge and for normal deliveries and chronic illnesses, 25% of the hospital bill is charged.
9. In Mallur village in Karnataka, a Health Co-operative attached to a Milk Co-operative was set up long back in 1973. Encouraged by the success of the milk co-operative the members persuaded doctors of the St.John Medical College to start a health care center which would be self sustained, financed and managed by the community (Dave Priti, 1997). The health co-operative provides services to nearby villages. During the first two years, members contributed at the rate of one-two paise per litre of milk sold by them. Subsequently, 5% of the profits

from milk sale were given to health center. Presently there is no funding from milk co-operative. Interest earnings from the initial fund created by milk co-operative and user charges are the source of finance for health center. State government has given land, ANM service, family planning service, vaccines and nutritional supplies. The Health center is managed by Gramabhivruddi Sangh and a Committee of 9 members including doctors from health co-operative and St.John Medical college. There is said to be frequent absence of doctors in health center as the co-operative cannot pay the service charges of doctors at market rate. The involvement of St. John Medical College in the provision of health care has reduced over the years.

Those who join are young medical graduates who serve for a short period until they get a better opportunity or admission for post graduation. Moreover, the entry of politics in the co-operative set up is causing problems in the operation of health centre.

10. Medical Co-operatives in Kerala

Co-operative Medical services in Kerala were initiated with government patronage after the 1971 Indo-Pak war(Nayar, K.R., 2000).Co-operative dispensaries (as many as 92) and hospitals were established. As there was economic recession after war, co-operatives were encouraged mainly to provide

employment to medical graduates and to provide some basic medical services to the people. The focus was only on curative care. In 1973, 64 co-operatives existed in Kerala of which 6(9%) were reported to be profitable. Though their number increased to 137 in 1994 with a total membership of 59000, only 19(14%) were profitable. Twenty nine(21%) co-operatives worked on no profit and no loss basis. Average membership worked out to be 431 per co-operative. Nearly 65 percent of the co-operatives were running with loss.

It is reported that, later in 1980's, when the public health system developed with easy accessibility and better care, co-operatives declined. Nayar, quotes report of a Committee on Study of Co-operatives, which says that medical co-operatives lost their importance due to centralised power in few individuals, inadequate managerial and technical inputs, limited membership, non availability of doctors and lack of government support. The Committee has favoured the abolition of dispensaries.

11. Insurance scheme for the Poor as proposed by TN Krishnan :

T.N.Krishnan (1996)proposed a hospitalization insurance plan for persons below poverty line, which he suggests, can later be extended to other sections of the society. Health insurance for the

poor is justified on the ground that illness episodes take away a major portion of the income of the poor. The present *Jan Arogya Scheme* seems to be similar to the insurance scheme proposed by Krishnan.

He argues that as the proportion of people falling ill requiring hospitalization is small in a large population, risk pooling can be done at a small cost with an appropriate insurance scheme.

In his analysis, total cost of hospitalization is based on the NSS data (1986-87) which is adjusted to 1995. The average cost of treatment is taken to be Rs.500/- for the poor. The NSS data showed that about 4% of the bottom 40% of the population were inpatients. Taking 50% increase over the 10 year period, the proportion of inpatient for 1995 is taken to be 6%. With this rate the total cost would be Rs.900 crores (6% of 300 million poor i.e. 18 crores x Rs.500). This works out to be an average cost of (Rs.900 crores / 30 crore population) Rs.30 /- per poor person which would cover cost of medicines, room rent, tests and consultation charges upto a limit of Rs.5000/- per family per annum. He suggests that the government should provide for the total cost under anti-poverty programme or by re-allocation of expenditure.

To manage the health insurance implementation he suggests that the

subsidiaries of GIC be converted into separate Health Insurance Corporations which work as non-profit organizations.

In his scheme of thinking, Panchayats will be responsible for identifying the poor and the consolidated list at the block level should be sent to Finance Ministry. Health insurance corporations should canvass and cover other population groups to meet their administrative costs and it is felt that the expansion of coverage may help to cross subsidise the poor, which will ultimately reduce the burden on government. Hospitalisation is to be referred by the PHC doctor and Corporations are required to settle the bills directly with the provider hospital. The cost of treatment should be indicated on the card issued to families. He also proposed to set up block level Hospital Monitoring Committees to check the quality and price structure in hospitals.

He suggests that, village panchayats should levy a health cess on landholdings and businesses for universalizing the health insurance coverage. As suggested by Hsio and Sen(1995), he opines that a portion of this can be retained for strengthening PHCs. In urban areas, health insurance is proposed to be implemented through trade unions, business and factory establishments and through NGO's for the urban poor. Contributions to health insurance could be made compulsory for all persons who

have regular employment. These experiments he suggests should be taken up initially in two districts in each state and later can be expanded to all the districts based on experience.

OBSERVATIONS ON HEALTH INSURANCE SCHEMES IN INDIA.

- * People are ignorant about health insurance (Gumber,2000). Medclaim and, the Jan Arogya Bima policies designed to help the poor are not known to majority of the population.
- * Only 3 percent of the population is said to be covered by some form of health insurance.
- * Many diseases are excluded from risk coverage (treatment for cataracts, dental care, sinusitis, tonsillitis, hernia, congenital internal diseases, fistula in anus, piles etc.) in the first year of policy unless such diseases are totally excluded as pre-existing. Expenses incurred in respect of any treatment relating to pregnancy and childbirth during the first 12 weeks of pregnancy is also excluded. Jan Arogya does not cover expenses related to child birth and pregnancy. Treatment for asthma, gastro-enteritis, diabetes

- mellitus, epilepsy, hypertension, influenza, cough and cold, psychiatric disorders, arthritis and rheumatism are also excluded from insurance coverage.
- * Medclaim policy is more oriented towards higher income groups and urban people.
 - * Jan Arogya covers only patients who are hospitalized. It is not for out-patients.
 - * There is lack of marketing of insurance schemes. Villagers and the poor people have to come to district places to know about the scheme and to become members. Offices of the insurance companies have not made any efforts to popularize these schemes in rural areas and even among urban poor and middle class people.
 - * Officers of the insurance companies generally say that it is waste of time and money to go to people and market **Jan Arogya Bima Policy**. They say that it is difficult to convey common man about the policies. They agree that they have not taken up comprehensive marketing for popularizing the scheme. Only business establishments and factories with large number of employees are approached.
 - * Health insurance policies for the employees of the organized sector viz. ESI and CGHS are highly subsidized by government. These schemes operate mainly on employer's contribution. Employee's contribution accounts for a small portion of total coverage.
 - * Health insurance policies are introduced mainly by public sector.
 - * Health insurance adopted so far (except for employees) is a reimbursement policy. Individual patient has to pay to hospitals first and then claim the reimbursement and there is a long delay in getting the claim settled.

MAIN LESSONS FROM COUNTRY EXPERIENCES

The above eighteen countries' experiences seem to suggest the following conclusions that would help in designing a Health Security Plan for the poor in India.

*To formulate a health insurance scheme for a community or a region reliable data on health care costs and expenditure, utilization patterns and morbidity in the target population would be useful.

- * The Indian and other countries' experience in community financing of health care through pre-payment

suggests that co-operatives linked to economic activities have been the base for creating health co-operatives. Members have contributed a part of the sale or produce or the profits to meet the health care expenses of their families and themselves.

- * China's experience with CMS reveals that it is not possible to sustain them with voluntary contributions alone. Contributions need to be mandatory and members should confine to rules and regulations set in for CMS.
- * The study on CMS in China emphasizes that in addition to community contributions there is need for specific and effective mechanism may be the government or NGOs to support CMS in the long run.
- * In developing countries the issue of cross subsidization for the poor to meet health care needs through health insurance needs to be worked out. In the absence of any mechanism to make rich compensate for the poor, the local, State or the Central government should subsidize the provision of health insurance.
- * In rural areas people are unaware of health insurance. People are willing to provide land, building and labour for setting up health facilities. If there is a proper guidance and education, they are even willing to contribute in terms of cash for future health risk. The Indian studies by Sodani and Gupta, K. S. Nair (NIHFW, 2000) and CESCO (1998) reveal this. The currently on going study of CMDR (Economic Reforms and Health Sector in India) in Karnataka also brings out the willingness of the people to contribute to the development health care co-operative.
- * **People prefer health insurance schemes which are cheaper and with minimum administrative procedures for getting the claim.**
- * **People prefer maternal health care, hospitalisation and outpatient curative care to be covered under health insurance.**
- * People do not prefer to join health care co-operative when there are free health facilities near by.
- * **Co-ordination with government agencies and officials in implementation of certain health services like maternal health care is essential for a health co-operative.**
- * Though members of co-operative

health centers make prepayment for health care in terms of membership fees, **it is necessary to levy user charges** for two reasons. Firstly, to avoid misuse or over use of health facilities (as reported in U.N.Jajoo's Study). Secondly, it is generally opined that people do not take free services seriously.

- * To control 'moral hazard' or the excess use of medical care, we can also adopt an **incentive mechanism in the insurance plan in the form of reduced membership fees for those who have not taken treatment for two or more years**. As presented earlier in **Sewagram hospital**, to prevent excess use of health facility nominal charges were taken from hospitalized patients for treatment of certain cases.
- * **Contributions should be based on economic status of the families. But, there should be fixed minimum payment for the poor.**
- * Since community programme involves creation of awareness, erosion of interest, trial and error in the application of the project and adoption of the project by the community, **it takes a long time (nearly 5 or more years) for any programme to be deep rooted in the community.**
- * Treatment by VHW at the village level indicates that a trained health worker can attend many of the diseases suffered by villagers and there is no need for expert doctor all the time.
- * Hiring the services of a medical expert daily would be costly for the villagers. Existing health insurance structure, which relies on low and differential premium system cannot meet these expenses. Therefore, as done in some experiments, monthly or fortnightly or alternate day services of expert doctors can be provided in different villages by **mobile medical unit**.
- * It may not be possible to treat all the cases free of charge. **A financial limit needs to be fixed based on the severity of illness, number of cases/times of treatment per patient, etc.** Based on these considerations the extent of contributions by beneficiaries can be determined. All these aspects can be incorporated in the co-operative health scheme financed by health insurance, as is done in Sewagram health care services in Maharashtra.

IV HEALTH CARE OF THE POOR

THROUGH HEALTH INSURANCE AND HEALTH CARE CO-OPERATIVE :A CMDR PROPOSAL

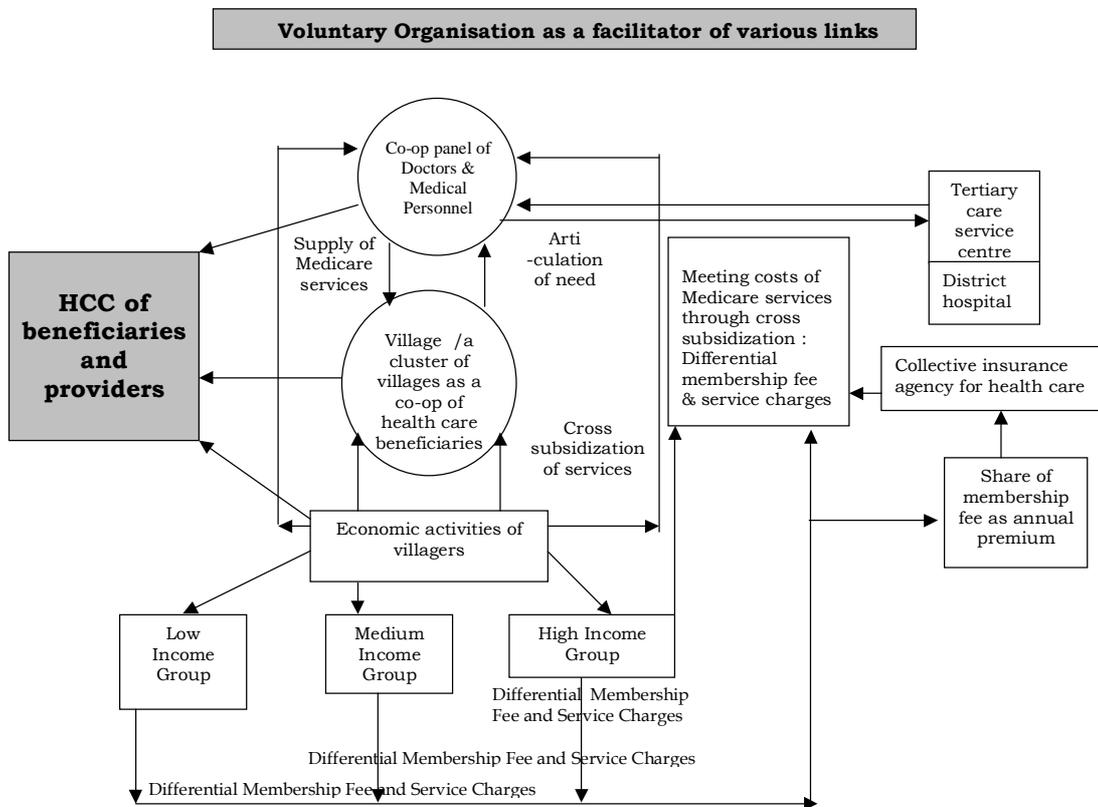
In the background of the above experiences about people’s involvement in health care plan for the poor, we have attempted to develop such a plan for a small region of Karnataka. **The main elements of the health care strategy for the poor** should be the following:

- i. **This plan should cover all the poor**, irrespective of their social status and ability to pay.
- ii. It should **provide for curative care in the case of all ailments, starting from the common cough and cold to major diseases (viz.ashtama, blood pressure, diabetes,gastro-enteritis,**

T.B, joints pain etc.)

- iii. The plan should **assign an added weightage to the medical care requirements of the poor and female members of the family** for the reasons mentioned earlier.
- iv. The plan should make efforts to provide for **cross subsidization of costs of care**. This implies that there should be a provision for community contribution according to ability to pay rather than benefit received. This **community contribution should be mandatory** and not optional.
- v. The plan should cover not simply curative care but also **promotive and preventive care services**.
- vi. Health care **needs should be articulated by the people themselves**

Community Health Insurance Scheme



and medical services set up should only aid this process of articulation.

vii Services should be supplied in accordance with the articulated needs.

Considering the above norms, it appears that a mechanism with cooperation between providers and beneficiaries for the purpose of supply of health care services and also for recovery of service costs would be helpful. As it is, in the Indian social set up, forces of mutual cooperation do exist in the institution of family, neighbourhood, village, etc., **Family is the most effective health care co-operative with elements of cross subsidization and support.** Any health security plan for the poor should consider integrating the main elements of co-operative spirit witnessed in the case of family.

The strategy for health care of the poor should also recognize that **costs of services are rising in recent years so fast that individually they cannot be met, as incomes do not rise as fast as the costs.** In such a situation cost sharing has to be visualized through a mechanism of a co-operative among beneficiaries and providers and through the principle of cross subsidization. **The following flow chart brings out the important components of the suggested Health Care Strategy keeping in mind some of the norms laid down above.**

OPERATIONAL ASPECTS OF METHODOLOGY OF PREPAYMENT SCHEME THROUGH HEALTH CARE COOPERATIVE:

The proposed health insurance through pre-payment and user charges is illustrated with reference to one village or a manageable group of villages which can later be extended to other villages, the Panchayat being the unit of administration.

I. Membership:

Each household should be a membership unit. All the households in the Village will be covered under health insurance. A card may be issued to each household with details of number of members, category of households and the details about the amount of user charges to be taken for treatment from household members etc.,. Each card should have provision to enter details of illness, treatment and cost of drugs for each member during one year.

II. Services:

HCC should provide to its members curative out patient and in-patient care, child and maternal care (excluding deliveries), preventive and promotive health care services. Out patient care may be provided at HCC clinic in the village. For in-patient care a link needs to be established between HCC and a private or district hospital which would provide referral service to members.

III. Management:

A health insurance scheme can be managed by a Health Committee consisting of HCC doctor, PHC doctor,

panchayat president, local doctor, mahila mandal / youth center member, school headmaster and five members from HCC.

1. Members (each household) must be issued cards for getting medical aid. These cards have to be kept in the HCC.
2. A maximum of Rs. 15 for medicines and injection has to be charged for the first visit.
3. Maintenance of case sheets of all the patients with details of medicine given.
4. Treatment on full payment basis to be extended to non-member families.
5. Health education to be an important component of the HCC.

IV. Membership fees:

Considering that the burden of illness would be greater on poor households, a differential rate structure for membership may be visualized for households based on income level.

During the household survey in Chandanmatti village in Dharwad district of Karnataka, for example, respondents from the surveyed households expressed their willingness to pay an average of Rs.225 per household per year. Membership fee can be fixed keeping in view the willingness to pay by the households. In view of different income levels willingness to pay by the households also would be different. Hence,

differential membership fee can be determined accordingly. Membership can be fixed for a family of two plus two.

Advantages from the Proposed Strategy for Health Provision

From the proposed health care strategy there are mainly four types of gains:

First, each individual becoming a member of the HCC and also linking his health care needs with insurance system through HCC, would find that he would get the health care facilities at his door step, without being required to meet various types of transaction costs. Transportation costs, cost of loss of wages for those attending upon the morbid person, additional food and other costs can be avoided under this scheme. These health care services would be available at lower costs now than without HCC.

Second, provider of health care services like the providers' co-operative, would find costs of provision to be lower than before in view of the likely economies of large scale of operation. Even the insurance agency linked with providers' co-operative would find ready clientele for its insurance business ensuring better business.

Third, under the present scheme there is less chance of any resident member of HCC being deprived of health care facilities when needed, for, through the operation of the force of mutual sympathy, felt needs for health care services would be articulated, the needed services would be provided through the linkages of HCC and insurance schemes. As a result, finally, the likely direct and indirect costs of morbidity would be avoided. Cost avoidance is obviously the gain for the needy, particularly the needy poor.

Fourth, since the government had to bear the entire responsibility towards health care needs of the poor in a scenario without HCC the financial burden on the government would be higher than in the scenario with HCC, for, some of the costs of provision are now borne by the community itself through the system of cross subsidization. The spring of human conduct, viz. sympathy and mutual sympathy, which is a tremendous resource for social welfare, would be used and would stand promoted by the health security plan for the poor.

A concrete Health Security Plan for the Poor as an illustrative example with data for one of the villages of Dharwad district of Karnataka is presented below.

A CONCRETE PLAN FOR HEALTH CARE CO-OPERATIVE STRATEGY IN A VILLAGE IN DHARWAD DISTRICT : AN ILLUSTRATION

About the Village

Chandanmatti is a small agricultural village situated 8 Kms. from Dharwad. The village consists of 172 households with 1018 population. Fifty two percent of the population belongs to SC/ST, backward and minority communities. Fifty six percent of the population is literate. Twenty Seven percent of the households live below poverty line (<11000). But, nearly fifty eight percent of the household earn less than Rs. 20000 annually. Villagers do not have access to health facilities in the village. There is a primary school in the village. Bore well water is the main source of drinking water in the village. Villagers get this water through tap connections to individual houses.

Baseline Scenario

Analysis of out-patient situation

1. On the basis of reporting from the village during the survey, the estimated probability of incidence of sickness (outpatient type) = 0.13
2. Therefore, annual prevalence of illness on an average per resident person is worked out to be = $0.13 \times 12 = 1.56$

3. As per the reporting during the survey, the average cost incurred per morbid case per month =Rs.221
 4. Therefore, the average annual expenditure on such sickness per resident of the village=Rs.344 (=221*1.56)
 5. With the treatment to be availed from outside of the village, as per the survey, the cost of travel plus incidentals such as food per morbidity is Rs 20(18+2). Therefore, the incidence of this cost per average resident which is included in the average cost specified above is Rs. 31(=1.56*20)
 6. As against this private cost directly incurred by the residents of the village, the average indirect costs likely to be incurred (based on the Focussed Group Discussions and survey) are also estimated:
 - * According to the survey, the time lost by the morbid person is four days on an average per incidence. With a prevalence of 1.56, the labour time lost per average resident is 6 person days. Value of this labour time is Rs. 300.
 - * On an average two person-day of time is lost by another member of the morbid family to attend on the patient. The implied opportunity wage cost is Rs. 100. Therefore, for a prevalence of 1.56 on an average per resident, the value of labour time lost is Rs. 156.
- The total indirect cost per resident = 156 +Rs. 300 =Rs.456
- Scenario with Health Care Co-operative Assumptions:**
1. Only 50% of medicines will be provided free of cost, the rest will be borne by the patient (the average medicine cost was Rs 136).
 2. Cost of pathological/radiological tests would (Rs.16+2) be borne by patients.
 3. A promoting agency would provide the subsidy for the initial years, covering costs of consultation and 50% of medicine cost. (There is avoidance of travel and special food cost due to HCC. i.e. Rs. 20)
 4. The HCC's cost on each out-patient per annum then works out to Rs. 115 (Rs.68 on medicines +Rs. 47 doctors' fees). With the prevalence of 1.56, the average cost to be borne by HCC per resident is Rs. 179 (1.56*115).
 5. In addition to the contribution to be made towards HCC, the patient himself spends Rs. 86 (68+16+2) per illness i.e. 50% of medicine costs, cost of pathological and radiological tests) per illness. Therefore, with the prevalence of 1.56, the private cost to the average resident is Rs. 134 (68+16+2*1.56); i.e. Rs.68=50% of medicinal charges, Rs. 16=pathological tests and Rs.2=radiological tests.
 6. The average based on a three tier differential rates, a membership plus user

charges of Rs. 87 [This is worked out on the basis of expected average contribution(willingness to pay) of membership fees of Rs.60 per household member per annum and Rs.15 as user charges. Based on the differential rates to be applied for different income groups the average amounts to Rs.87] to be collected per resident.

7. The promoting agency has to bear Rs. 92 (HCC's cost on each out patient minus the contribution made by each resident i.e., Rs. 179-87=92).

Differential Membership and User fees:

Based on the willingness to pay i.e., Rs. 225 per household as expressed by households, membership fees were fixed at Rs. 240 (the additional amount of Rs. 15 to be mobilized by motivation). The

range of >Rs. 20000 <=Rs. 50000 have to pay regular membership plus 50 percent of user fees.

- iii) High income households (>50000) have to pay regular membership plus 100 per cent additional user fees.

User charges have to be collected by the doctor who is providing health care. To prevent over utilization of health services, for every additional visit a patient has to pay an amount of Rs. 15. HCC doctor can exempt second time payment for exceptional cases.

The cost of running the clinic has to be worked out on the basis of the expenses incurred in the first year of implementation of HCC. Based on these estimates and also the status of health care co-operative, future contributions to be made by all the

The balance sheet of financial and direct costs and benefits of HCC :

(in Rs.)

	For HCC	For resident	For promoting agency	Travel and special food	For the village economy
Cost	179	134+87=221	92	0	221+92+0=313
Income or benefit	87+92=179	179+134=313	0	31	313+0+31=344

membership works out be Rs. 60 per person per annum in the village.

- i). Households with less than an annual income of Rs. 20000, have to pay 50 per cent of the regular membership and 50 percent of user fees.
ii). Households with annual income in the

villagers and the strategy for maintaining the clinic and also for sustaining the idea of co-operative needs to be worked out.

Comments:

1. The individuals have to spend only Rs.221 on an average, and get benefits worth

Rs. 313(excluding savings in travel and food cost).

2. For HCC, there is a break even.
3. The promoting agency would bear the initial burden at the rate of Rs.92 per resident as additional system cost.
4. Saving in travel cost and food costs: since the patient and the attendant do not have to travel to places outside of the village, the saving on account of travel cost and food costs will be $31(18+2*1.56)$ per resident (as worked out under the baseline scenario).

5. The gains (indirectly) in the reduction of transactions costs due to HCC are:

- * On an average the morbid patient loses only 3 days of his/her labour time (as against 4 days in the base scenario). This amounts to a labour time loss per average resident as 5 days ($=1.56*3$). The value of this time is Rs 250. Therefore the net gain because of HCC in labour time is Rs.50 ($= 300-250$)
- * The loss of labour time of another member of the morbid family is also reduced. Assuming that only one day of labour time is lost, the value of the lost labour time is Rs. 78 ($1.56*Rs50$). The net gain in saving in labour time is Rs. 78 (as compared to the base line scenario, Rs.156- Rs.78).
- * **The total indirect benefit therefore**

would be Rs.50+ Rs. 78=Rs.128 per resident of the village.

Total savings (per resident)

- a. Residents = $Rs.92+31+128 = 251$
- b. Village economy = $Rs.31+Rs.128 - 92 = 67$

[Village Panchayats can contribute to health care to the extent of savings by village economy to support the provision of infrastructural facilities and payments for administrative staff.]

The case of In-patient treatments

- * As per the survey, the average cost of an in-patient per year was Rs. 3084.
- * The probability of illness leading to hospitalisation, according to the survey data is 0.035
- * Therefore, the hospitalisation cost per year per average resident is Rs. 109 ($=3084*0.035$)
- * In case, a health insurance scheme is worked out for all the residents with the Jan Arogya Scheme of United India Insurance Co. (or any other), the insurance premium is Rs. 107 per year.
- * Therefore, with proper promotional efforts and implementation, the HCC can bring in the insurance scheme to cover all the residents of the village, at no extra cost either to HCC or to the government.
- * Needless to mention that the promotive

and implementation efforts will be the basic catalysts to be set in motion by the promoting agency.

How to manage the Health Care Co-operative in the long run????

In the long run, the HCC has to breakeven at the average cost of Rs. 179 per resident. There are several options that can be considered.

- * The membership fee and user charges can be gradually increased to go up to cover the cost at Rs. 179 per resident. This can be designed at a gradually increasing rate of 10% per year. Then, it will take a minimum of 7 years to be self-reliant. Till such time, the HCC will have to subsidised by one or the other agency, be it the government or a non-government.
- * Alternatively, since the HCC will reduce the pressure on the government outlets in health care (PHC, CHC and Sub-centres), the state governments can transfer some funds to manage the HCC under the ZP or other direct allocations to the health sector.
- * Village panchayats have a pivotal role in the provision of primary health care to people. The 73rd amendment to the Indian constitution substantiates this. Panchayats can take initiation to setup HCC with the help of NGOs,

Government and local community. A health cess can be charged to support the provision of health care in addition to membership and user fees collected by HCC. Initial capital investment can be sought from Government / NGO. Panchayats in Kerala are playing a major role in the provision of health care. In China the payments for administrative staff of co-operative medical scheme (CMS) are made by local government. Governments must empower Panchayats to organise for the provision of health care at the village level.

Panchayats will be the most appropriate institution to mobilize resources, link government health services with HCC and spread the idea of HCC as it is peoples' representative body and has legal entity. However, with regard to issues like, whether HCC can be fully managed by members ? whether NGO's continued intervention is necessary ? whether government help can be sought or whether HCC can be managed by panchayats need to be examined by introducing some model HCC's in few areas and , decision regarding its future development can be taken on the basis of situation analysis.

End Notes

¹ For a detailed study of this aspect see Panchamukhi P. R. (2001), "Social Sector Developments and Economic Reforms - A Study with a focus on the Educational Sector", CMDR Monograph No. 35. Also see Arbindo Mishra (2002), " Status of Economic Reforms, Government Finances and Public Spending on Social Sector : An Analysis of Health Sector in India", CMDR Monograph No.37

² According to Feldstein (1988), the income elasticity derived from survey data is biased downward mainly because of the inclusion of transitory income and non inclusion of employer contribution to health insurance due to which the relationship between family income and own expenditure may understate the true income elasticity for high income groups. But, after adjusting the survey data for transitory income and employer paid health insurance, Feldstein opines that income elasticity of medical expenditure would be approximately 1, which implies that there would be proportionate increase in expenditure corresponding to increase in income.

³ Hsio and Sen (1995), reported that in a Chinese health survey conducted in 1994, 40 percent of the entrants to poverty in that year attributed poverty to illness episodes in the family. It is opined that Indian experience would not be different from such situations.

⁴ CMDR proposes to study the changes in financing of activities of medical care providers before and during the period of economic reforms. For such a study micro level field data need to be collected from private sector providers. We have not come across any longitudinal micro level study in the literature.

⁵ One such attempt is in progress at CMDR in the case of Karnataka state. In view of information gaps only public medical care facilities are being mapped.

⁶ CMDR has initiated a study of drug prices in India, the results of which would throw light on these issues.

⁷ Nyman(1999), shows that even in the U.S. access motive is facilitated by insurance and that the poorer of the Americans are enabled to have access to costly medical care, which they could not have afforded before.

⁸ [http:// www.icageneva@gn.apc.org](http://www.icageneva@gn.apc.org) - Major part of the information for USA, Canada, Spain, Italy, Japan, Australia, Brazil, Canada and Singapore is taken from this website.

⁹ Refer to website [http:// www.icageneva@gn.apc.org](http://www.icageneva@gn.apc.org), page - 2.

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