CHAPTER I
CHAPTER - I

INTRODUCTION

I.1. Introduction to the Study

Health is an essential input for the development of human resources and the quality of life and ultimately for the social and economic development of the nation. It is of paramount importance as a national asset and basis to sustain as well as to stimulate optimum level of efficiency. Now-a-days it is widely recognized that human capital plays a dominant role in the context of economic development and health is an important component of human capital. The issue of health is of greater importance from the point of view of both individuals and the nation.

I.1.1. Health Matters

Good health is a fundamental goal of development as well as a means of accelerating it. Good health is a crucial part of well-being, but spending on health can also be justified on purely economic ground. "Improved health contributes to economic growth in four ways: It reduces production losses caused by worker illness; it permits the use of natural resources that had been totally or nearly inaccessible because of disease; it increases the enrollment of children in school and makes them better able to learn; and it frees for alternative uses resources that would otherwise have to be spent on treating illness"\(^1\)

Thus, the economic gains of health status are:

- Gains in worker productivity
- Improved utilization of natural resources
- Benefits in the next generation through education
- Reduced costs of medical care.

A positive health status is defined as a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity. The Mosby Medical Encyclopedia defines health as “a state of physical mental and social well-being and the absence of disease or other abnormal condition.” Economists take a radically different approach. They view health as a durable good, or type of capital, that provides services. The flow of services produced from the stock of health “capital” is consumed continuously over an individual’s lifetime. Each person is assumed to be endowed with a given stock of health at the beginning of a period, such as a year. Over the period, the stock of health depreciates with age and may be augmented by investments in medical services. Death occurs when an individual’s stock of health falls below a critical minimum level. Naturally, the initial stock of health, along with the rate of depreciation, varies from individual to individual and depends on a great many factors, some of which are uncontrollable. As mentioned earlier, the stock of health generates a flow of services as other durable goods do. The services yield satisfaction, or what economists call utility.

As a good, health is desired for consumption and investment purposes. From a consumption perspective, an individual desires to remain healthy because she or he receives utility from an overall improvement in the quality of life. In simple terms, a healthy person feels great and thus is in a better position to enjoy life. The investment element concerns the relation between health and time. If you are in a positive state of health, allocate less time to sickness and therefore have more healthy days available in the future to work and enhance your income or to pursue other activities, such as leisure.

Health and human development form integral components of overall socio-economic development of a nation. Amartya Sen in his keynote address to the Fifty Second World Health Assembly, Geneva (18th May 1999) made strong plea for promoting health to ensure development. To quote him, "How does health relate to development? The first point to note is that the enhancement of health is a constitutive part of the development. Those who ask the question whether better health is a good "instrument" for development may be overlooking the most basic diagnostic point that good health is an integral part of good development; the case of the health care does not have to be established instrumentally by trying to show that good health may also help to contribute to the increase in economic growth, secondly healthy people can earn an income more easily and people with higher income can seek medical care more easily, have better nutrition, and have the freedom to lead healthier lives. Even when an economy is poor, major health improvements can be achieved through using the available resources in a socially productive way. It is extremely important, in this context, to pay attention to the economic considerations involving the relative costs of medical treatment and the delivery of health care. Since health care is a very labour-intensive process, low-wage economies have a
relative advantage in putting more not less focus on health care". Provision of basic health care services to rural community is the primary objective of the government as well as non-governmental organizations in the context of rural development. Rural health services, safe drinking water, sanitation, nutrition, etc., have therefore been brought together in the form of an integral package to improve the social, economic and health conditions of the people. Therefore, the primary goal of any health care delivery system is to organize the health services in such a manner as to optimally utilize the available resources, knowledge and technology, with a view to preventing and alleviating diseases, disabilities and sufferings of the people. Realizing the need for establishing comprehensive and integrated primary health care services and family welfare services to reach the people's doorsteps even in the remote and far-flung rural areas, an integrated health care delivery system with maximum community participation has been developed and is being implemented. The administration and implementation of all these programmes are organized through an integrated structure of health and family welfare services in the country.

I.1.2. Primary Health Care in India

Primary Health Care is defined as "essential health care and universally accessible to all citizens and acceptable to them through their full participation and at a cost that the community and country can afford"

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It addresses the main health problems in the community through preventive, curative, promotive and rehabilitative medical and health services. Thus, the delivery of primary health care is the foundation of rural health care system and forms an integral part of the National Health System. The primacy accorded to primary health care system reflects the essence of a rural health care system that seeks to integrate itself meaningfully into the national health system. India is one of the very few countries that have from the very beginning, planned health services as an integral part of general socio-economic development and health is made a part of it. The first level contact of an individual with the national health system that brings primary health care to the people's home is the PHC system. A pyramid like health infrastructure has been established to cover the rural areas in the country through sub-centres, primary health centres and community health centres. The Primary Health Centre (PHC) constitutes the backbone of the present rural health care services in the country. It is peripheral, yet the most vital outpost around which rural health services are being built. It provides an integrated health services to the rural population. It is the focal point for delivery of health and medicare services in rural areas. The health package of primary health care provided such inputs which promote the well-being and good health of the people. Efficient and effective delivery of primary health care is considered the core activity of any health care system. The current state of the Indian health sector is the reflection of the nature of health investments, programmes and policy prescriptions adopted since Independence. In fact the Bhore Committee (1946) laid the foundation and direction for the development of public infrastructure in the health sector. Right from the First Five Year Plan the emphasis was on creating health infrastructure including a three-tier structure (sub-centres, primary health

care centres and community health centres) currently under operation to address the health needs of rural populations. From time to time several Expert Committees such as the Mudaliar Committee (1962), Chadha Committee (1963), Mukherjee Committee (1966), Jungalwala Committee (1967), Katar Singh Committee (1973), Srivastava Committee (1975), Bajaj Committee (1987), and Bajaj Committee (1996), were set up to review and suggest important strategies for improvement in the public health infrastructure and service delivery systems. However, the major shift in health development policies took place when India became the signatory of the Alma-Ata declaration of 1978. The National Health Policy was introduced in 1984 for achieving the goal of “Health for all by 2000 AD” set in the Alma-Ata.

1.1.3. Health in India During a Period of Structural Adjustment

The right to health care, like the right to work, is a positive right which can acquire an operational content only to the extent that the State is willing and able to ensure its realization. In the Indian Constitution, this obligation is placed on the State in a number of articles which deal with ‘Directive Principles of State Policy’. Article 47 stipulates that ‘The State shall regard the raising of the level of institution and the standard of its people and the improvement of public health as among its primary duties’ Article 39 calls on the State to protect the health and strength of workers, men and women and to prevent the abuse of the ‘tender age of children’. Articles 41 and 42 call upon the state to make effective provision for public assistance in case of old age, sickness and disability, and for maternity relief. These obligations are not, however, enforceable by legal means. Their realization depends on the degree to which, on one hand, the state actually accepts these obligations and, on the other, the extent to which public action is successful in prevailing upon it to do so.
There are good reasons why it is necessary for the state to play a primary role in the field of health. In the language of economists these are related to the fact that, in large part, health is both a public good and a merit good. Public health, sanitation, and the eradication of communicable diseases have to be provided on a collective basis, that is, as items of social consumption, since they cannot be feasibly supplied, or consumed, or paid for at an individual level. They will not be provided at all if left to the market mechanism. Secondly, health care being so basic to the well-being and productivity of society, access to it needs to be universal. It cannot be constrained by affordability and cannot, therefore, be left to the market. This is the sense in which primary health care, like primary education, qualifies as a merit good for the provision of which the state has to bear a special responsibility.

There has indeed been significant progress in India's health status since independence, whether we look at it in terms of inputs into the health system or in terms of various indicators relating to its output. Life expectancy which was barely 32 years of age at the end of colonial rule has increased to 59 at the end of the 1980s. In the same period, the crude death rate has fallen from 27 to 11 and the infant mortality rate has been brought down from about 130 per 1000, live births to a little over 90, the maternal mortality rate has come down from 2000 per 100,000 live births to 500, the total fertility rate which was close to 7 has declined to 4. There has been a great deal of progress in the control of communicable diseases. In the mid-forties, malaria accounted for 100 million cases of which one million were fatal; notified cases of cholera were 87,000 in 1951 of which nearly half died; in the same year, 2.5 lakh persons were afflicted by smallpox of whom nearly one lakh died. Smallpox was eradicated by the mid-seventies and the incidence of malaria and cholera has been drastically
reduced. Beginning from 1952, India has been able to establish a country-wide network for primary health care in the form of PHCs and sub-centers providing through them basic preventive and curative services, maternal and child health services, family planning, and immunization.

Over the last three decades, the government has demonstrated a strong commitment to population control and has devoted large and steadily increasing manpower and financial inputs for the purpose. The Integrated Child Development Services (ICDS) is a major programme for nutrition and for maternal and child health services. In absolute amounts, budgetary allocations for health and for the allied sector of water supply and sanitation have shown significant increase. In the matter of curative services, the proportions of population to doctors and nurses have been brought down to 2500 and 1700 by the mid-eighties from levels of 6000 and 4300 that prevailed at the time of Independence.

These facts sufficiently indicate the striking progress that has been registered in India’s health status compared to the very poor levels that the country inherited at the end of British rule. Maternal and child health are closely related. The proportion of low birth weight babies in India (180-8) is 30 per cent in all developing countries, and about 40 to 50 per cent of children are severely or moderately malnourished. Added to this, discrimination against girls in access to food and medical care which starts from infancy. Girls fail to reach their full growth potential, get married early, run considerable risk of obstetric complications, and give births to low-weight babies, perpetuating the vicious circle.7

I.1.4. Planning for Women’s Health: The Indian Experience

In the long history of health provision in India, women’s health has been perceived by the planners primarily in the context of motherhood. During the Independence, there were two important documents, which later influenced the five-year plan documents on health planning. The first report was the recommendations of the National Health and Development Committee (1946), more commonly known as the Bhore Committee. The other was the recommendations of the National Planning Committee, also known as the Sokhey Committee, which was set up in 1938 and whose recommendations were published in 1948.

Both committees thus gave due attention to mother and child health. The Bhore Committees, concerned about the high incidence of morbidity and mortality among mothers and children, recommended measures directed towards a reduction of these ills by setting a high priority on preventive, promotive and curative care in health development.

Health planning in India has been shaped by the strategies of overall development. Though initially ‘maternal health’ received an emphasis in the context of national development, its evolution has been influenced by the felt urgency of the planners for family planning and control of communicable diseases. This is reflected in the trends of allocation of funds for and within the health sector. The place given to MCH in the list of priorities has been influenced by the shifts in the strategies of planning. The health strategies chosen for development in the country have echoed the development in the international arena. In health, protection of the health of the mother and her children was of utmost importance at the initial stage, in order to build a sound and healthy nation through socio-economic development.
In the 1980s, quite a few interesting shifts took place in the area of health strategies. Considering the difficulties of cost and personnel in attaining the goals of ‘Health for All by AD 2000’, a shift from ‘primary health care’ to ‘selective’ primary health care was accepted. This gave small attention to maternal health. The ‘child survival’ strategies introduced by UNICEF, also, had little to contribute to the health of the mothers.

When ‘maternal health’ was receiving less and less attention in planning, the Working Group on Population Policy of 1980 had already proposed something different. It considered, ‘Women as the best votaries of family welfare programme’ and replaced the view of ‘motherhood’ with ‘womanhood’. Women in India, and especially those in rural areas, given their general living conditions and the double burden on their shoulders, have never publicly voiced their concern over their reproductive, sexual and gynaecological health needs. Even something as obvious as menstruation is grossly neglected and this has serious consequences because many diseases in our country are related to blood loss-tuberculosis, malaria, dysentery, kala azar, hookworm—and hence makes anaemia an extremely important concern of women’s health which currently receives little attention.

I.1.5. Evolution of Maternal Health Services

In the first plan, health was considered fundamental to national progress. MCH was in the forefront then along with the malaria control programme. Family planning had a much lower priority. Maternal and child

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welfare was shifted from missionary and charitable institutions and was integrated with the basic health services. 

The high priority of MCH continued through the Second Plan period, which aimed at reaching out to people. Special attention was given to improving the institutional facilities, especially the proposed primary health units and training of manpower. In the Second Plan, 2,100 maternal and child welfare centres became an integral part of the general health services in the rural areas, with missionary and charitable institutions continuing to supplement the extension projects of these centres. At the end of the Plan, each of such centres was serving a population of 10,000 to 25,000. Simultaneously, integration of the staff of the national programmes of communicable diseases at the 'maintenance' phase was proposed.

The Third Plan period was marked by a very high priority to the family planning programme, and control of communicable diseases (including Tuberculosis Control Programme of 1962) received greater attention from the planners. The aim was expansion of services to bring about improvement in people's health. The emphasis was on preventive and curative aspects, and referral services for MCH were extended at the primary health units.

At the end of the Fourth Plan, targets for MCH were also set as recommended by the MCH Advisory Committee. In maternal health services

targets were set for immunization of pregnant mother against tetanus, and also for the prophylaxis programme against nutritional anemia. Provision of preventive and curative health services in rural areas through establishment of PHC in each block, augmentation of the training of medical and para-medical personnel and control of communicable diseases occupied the attention of the planners.

The Fifth Plan paid considerable attention to MCH, and also sought to remove the rural-urban disparity in health care services. A Minimum Needs Programme was launched with the aim of meeting the needs of the poorest. The package provided elements of health, family planning, nutrition, environmental improvement and water supply apart from elementary adult education, roads, electrification in rural areas and housing for the landless labourers. During this Plan period, the number of doctors serving PHC increased considerably, as also the number of PHCs and sub-centres. In keeping with the people-oriented strategies of 'Health for All by AD 2000', the community health volunteers (CHV) joined the PHC network to make services more meaningful for the community and the day training programme was initiated and was supposed to help the MCH work.

The Sixth Plan had proposed health to be viewed in totality as a part of the strategy of human development. Horizontal and vertical linkages were to be established among all the integrated programmes such as water

supply, environmental sanitation, hygiene, nutrition, education, family planning and maternal and child welfare\textsuperscript{16}.

To attain this, the plan emphasized infrastructural development and integration of services at the PHC level. To bring down the high morbidity and mortality rates among infants and mothers, the plan emphasized improved health and nutritional status through various extension programmes for immunization, prophylaxis or supplementary nutrition. Nevertheless, the performance of the MCH programme during this Plan period, particularly in the field of immunization and antenatal care, was ‘far from satisfactory’\textsuperscript{17}. Measures for strengthening the programme and increasing the child survival rates were considered essential for the success of the MCH programme.

The Seventh Plan perspective was based on similar considerations. Thus, within MCH, child survival, intersectoral coordination and strengthening of infrastructure were emphasized to attain the goals of ‘Health for All by AD 2000’. Special emphasis was given to ‘women’s health care’ in the hope that raising health consciousness along with economic activities would enable women to actively participate in the entire process of socio-economic development, including health.

Health and Family Welfare Programmes were restructured and reoriented for achieving the objectives of the policy during the Seventh and Eighth Plans with moderate success. Emphasis was given mainly on consolidation of the existing health infrastructure rather than expansion.

\textsuperscript{16} Government of India, 1979, Draft, \textit{Sixth Five-Year Plan} (Revised), Loc.Cit.

during the Eighth Plan. The Mid-Term Appraisal of the Eighth Plan revealed that there have been shortfalls in the achievements of setting up of primary health care infrastructure. Specific efforts have been made to ensure that the on-going economic restructuring does not lead to any adverse effects on provision of essential care to meet the health needs of the most needy segments of rural population.

The objectives during the Ninth plan period for health and family welfare include: (i) rebuilding and strengthening of existing health infrastructure at primary health care level and extending outreach of SCs; (ii) devolution of powers, functions, responsibilities and resources to PRIs to have participatory approach at the grassroot level in order to improve the efficiency and sustainability of health services; (iii) implementation of schemes for the benefit of SCs and STs and to reduce population growth through intensified family welfare programme and improvement in the quality and access of Reproductive and Child Health (RCH) components through participative planning at the grassroot level.

It is expected that during the Tenth Five Year Plan the following core set of reforms would be institutionalized in all the states. (i) reorganization and restructuring of the three tier healthcare infrastructure with appropriate referral services. (ii) improving logistic of supplies, (iii) supply of good quality drugs at affordable cost, (iv) improving quality of services of establishing a system of quality assurance for institutions/procedures. (v) cost of care for management of ailments at various levels, (vi) introduction of user charges, ensuring that funds so generated are used locally for improving quality of services, and (vii) building up of a health

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management information system that provides access to information on all programmes on a real time basis.

1.1.6. Implications of Planning for Women’s Health

Given the high priority to MCH in health planning during the 1950s, followed by its integration with the general health services, good potential for catering to maternal health was created. But the task of providing health services to mothers and children became complicated when MCH got intermingled with other programmes at the PHC level. In the name of integration, the constant shuttling between unipurpose and multipurpose workers at the primary level has led to confusion and seriously undermined efficiency.

In the 1940s, the Sokhey Committee had expressed concern for women’s health by considering their economic role too. The five-year health plans, however, did not reflect such concern till the mid-1980s. In the Seventh and Eighth Plan documents ‘women’s health’ has been given a separate identity, ‘to enable them to participate in the process of socio-economic development including health’. The reality is something else. Although MMR has dropped from 12.4 per 1,000 live births in 1936 to 1.9 at the end of the 1980s, cause of maternal mortality such as anaemia and puerperal sepsis have got little attention.19 During 1985-90, for example, puerperal sepsis contributed to 10.37 per cent of the total maternal deaths as against 31.95 per cent in 1936; the figure for anaemia remains at 19.10 per cent as against 23.3 per cent in 1936. There may be differences in the quality of data collected after a gap of nearly five decades, but such bias, if any, would be equally present for both causes of maternal mortality discussed

here. In other words, though aseptic conditions of delivery have improved, anaemia continues to be an important factor for maternal deaths. The decline in the proportion of puerperal sepsis may have been a result of an improvement in people's living conditions. A rise in the level of consciousness may also have increased their access to health care services. The relatively unchanged ratio of home delivery to 'institutional delivery' presumably indicates a better functioning of the trained dais who are closer to the communities. Moreover, this phenomenon may also be due to the possible decline in the virulence of the causative agents in the environment. Nevertheless, the figures reveal that women's general ill-health leading to maternal death remained nearly stagnant over the decades of health interventions. The declining sex ratio also reflects on the poor social and health status women have.\textsuperscript{20}

A time trend analysis of the causes of maternal mortality since the 1970s reveals that within the largely unchanged pattern of maternal deaths in rural India, avoidable causes like anaemia continue to account for a large proportion for such deaths\textsuperscript{21}. In an evaluation of the Anaemia Prophylaxis programme in the country, the Indian Council of Medical Research noted: 'The existing nutritional anaemia prophylaxis programme has not made any noticeable impact on reducing the incidence of anaemia, despite being in operation for fifteen years'. To ameliorate the situation the Council emphasized the use of functionaries at PHC level. Ironically, the ICMR expected the ANMs to answer the queries of mothers in addition to other functions, such as monitoring and reporting in close interaction with the


\textsuperscript{21} Soman, Krishana, Loc. Cit.
trained birth attendants, village health guides, anganwadi workers of Integrated Child Development Services and also with the local NGOs. This was in regard to the Anaemia prophylaxis programme per se, when the ANM's duties outside the programme are multifarious. This is an instance of the mismatch between recommendations and reality that continues in health planning.

The latest plan document also admits the continuing inadequacies of the rural infrastructure. It states: 'As much as approximately two-third of the total expenditure on health services is spent on personnel. Yet health manpower planning, production and management which constitute key elements for effective implementation of health programmes have not received enough attention.'

The document accepts that there is a mismatch between the requirement and availability of health personnel of different categories. The sum and substance of the convolutions in planning inevitably leads to the conclusion that there is a need for understanding women's health in its totality, embracing 'maternal health' as well as the general 'ill-health' of women together. Since the mid-1980s,'maternal health' has been supplemented by 'women's health care' in health planning. The current discussion on bringing reproductive health services (covering more problems such as reproductive tract infection, problems of sterility and abortion) to the community through the primary health care network, \(^{23}\) therefore, also needs careful reflection. Given the importance of infrastructural facilities as a prerequisite to any attempt at rendering reproductive health services to

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women, there is an urgent need to improve the existing health infrastructure, especially in rural areas.

1.6 Background of the Study

India has nearly 17 per cent of the world’s population and a large proportion of the world’s poor with poor health indicators. John Robinson said that “whatever you can rightly say about India the opposite is also true” (Sen 2006). On the other hand, India has seen impressive economic performance, on the other hand it still has a large proportion of the population below the international poverty line of a dollar a day. The goals of health and development have often conflicted. While the government has undertaken initiative for poverty amelioration and development they have also diversely affected health outcomes.

The Indian health system is administered by the health and family welfare ministry which supervises a state funded, subsidized, universal health care system (World Bank 2001) Starting from the primary level up, it provides curative and preventive care through a referral based system. Although in sheer number the presence of the public sector is huge, yet it falls below the world standards of ratios of manpower and hospitals beds. Huge payments make healthcare inaccessible and expensive to the poor.

Recent research has witnessed considerable engagement with the task of comprehending the crucial determinants of health outcomes. It is observed that the burden of ill health is borne disproportionately by different population subgroups and that people of lower socio-economic status consistently experience poor health outcomes (Macinko et al 2003). Several empirical studies have also acknowledged such income related
inequalities in health, propounded as the absolute income hypothesis (Kakwani et al 1997; Van Doorslaer et al 1997; Humphries and Van Doorslaer 2000). In view of such findings, health promotion of the poor has emerged worldwide as a vital area for policy research and action. Policy initiatives and programmes strongly perceive that inequalities in the health outcomes of different population subgroups are characterized by certain systematic deprivations (such as poverty).

Apparently, some of the Indian health policies and programmes also attempt to eliminate deprivation in the provisioning of healthcare and achieve the objective of health equity. In order to achieve this objective, it is important to steer policymaking through timely and systematic assessment of prevailing health inequality, a task that so far does not seem to have received serious attention. Although a few studies have presented region specific or population – sub group – related health profiles for India, they are at best able only to reflect on disparities and not inequalities. While disparities are evaluated based on the positioning around aggregate outcome, inequalities have to be adjudged according to specific ethical or economic ideals. Moreover, for ensuring equitable and efficient allocation of public health resources, it is imperative to unravel the depth and the varied dimensions of health outcomes, especially through measures sensitised for equity concerns. Apart from these considerations, it is also of analytical interest to examine whether income inequality itself poses as a public health hazard. This question has gained much academic attention but most of the findings of studies on the topic have remained inconclusive. The literature on health economics, which identifies this question as the relative income hypothesis states that the distribution of income in a society has a larger impact on population’s health than absolute income. Since most of the studies on relative income hypothesis are undertaken in the context of
developed countries, it would be worthwhile to gather some insights from the Indian experience to further out understanding of the income-health nexus.

Health of children assumes significance for human and economic development of any country; but what is more important is to regard it as their right to survival, protection, participation and development as ratified by the government of India in 1989 through the Convention on the Rights of the Child (CRC) drafted by the United Nations Commission on Human Rights. Unfortunately, most of the deaths rampant among children in India are preventable and are caused by a combination of under-nourishment and onslaught of infectious diseases. Although, child health and welfare has been a prime item in the agenda of the central and the state governments, their intent cannot proceed very far in the absence of a prior assessment of the magnitude and varied dimensions of the problem.

For the indicator of anaemia the all-India c1 value of (-0.0518) is observably lower and could be due to the widespread prevalence of anaemia across the population but still the poorer sections are found to remain at a higher disadvantage. The inequities in child-anemia do not vary significantly across the major states. However, the states to Mizoram (-0.1, 363), Goa (-0.1126), West Bengal (-0.0919) and Orissa (-0.0851) are found to be more inequitable. In addition to these health outcome indicators, we have also tried to examine whether income-related inequalities are present in the attainment of basic vaccinations, which is provided through the public health machinery. Apart from the problem of lower rates of complete immunization, there are evidently higher income-related inequities inherent in the distribution of non-immunized children across different states. Even in states with better coverage of primary healthcare (like Kerala), children belonging to poorer sections of the population are at a greater disadvantages as the concentration of these incomplete immunizations is higher among
them. Undoubtedly, apart from income, inequality in such outcomes is arising due to the interplay of several factors including education and health awareness and it would be an important and challenging task to probe into inequalities obtained due to reasons other than the elementary issue of income deprivation.

It is disconcerting to witness, especially from an ethical perspective, that poorer populations in India are bearing the brunt of health disadvantages. Although certain policy interventions are in place to deal with such adversities, greater attention needs to be directed towards the assessment of health deprivation and inequities in India. Also, we would like to stress upon the recognition of differential constraints in accessing medical care across regions. For instance, for some, availability may be an issue while for others it may not actually be the major worry. Similarly, availability alone may not be sufficient; unless it is supported by a policy of greater subsidisation of health facilities through special schemes for maternal and child healthcare. The problem may as well be one of poor levels of awareness for some others. Given such possibilities, the social planner has to acquire more complete information with regard to the sources of inequality and identification of the vulnerable groups.

Although health indicators have continued to improve over time, villages are far behind the towns and cities in case of health care facilities and their outcomes. This difference can be observed both qualitatively and qualitatively. The major part of the health care facilities in rural areas are provided by the unqualified and untrained medical professionals. Most of the public hospitals and dispensaries are located in urban areas and almost all private clinics and nursing homes are in the urban areas. If we look at the rural-urban differences in the level of health care infrastructure, we find that a villages are far behind the cities. For
instance, in 2001 there were 0.54 hospitals, 1.49 dispensaries and 15.05 hospital beds per lakh population in rural India while the corresponding figures in urban India were 0.80, 102.90, and 3.60 respectively. These figures clearly indicate that there exists wide inequality in the distribution of health care infrastructure among rural and urban locations. Due to the deficiency of proper medical aid, the death rate, infant mortality rate and fertility rate all are higher in the villages than the cities. Although these rates have been declining over the years, these are still high, especially in the rural India. Provision of public health services such as access to basic and preventive health care, sanitation, clean water and raising awareness about the causes of illness and their treatment are necessary for improving human development in rural India.

Table I.1. Rural-Urban Disparity In Health Indicators

<table>
<thead>
<tr>
<th>Indicators</th>
<th>NFHS-II (98-99)</th>
<th>NFHS-III (05-06)</th>
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<tbody>
<tr>
<td></td>
<td>Rural</td>
<td>Urban</td>
</tr>
<tr>
<td>Total fertility rate</td>
<td>3.07</td>
<td>2.85</td>
</tr>
<tr>
<td>Birth assisted by health professionals (%)</td>
<td>33.05</td>
<td>73.33</td>
</tr>
<tr>
<td>Birth delivered in medical institutions</td>
<td>24.60</td>
<td>65.10</td>
</tr>
<tr>
<td>Two doses or of TT vaccination during pregnancy (%)</td>
<td>62.05</td>
<td>81.90</td>
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<tr>
<td>Mother who had at least 3 antenatal care visits for their last birth (%)</td>
<td>22.04</td>
<td>54.70</td>
</tr>
<tr>
<td>Total unmet need for family planning (%)</td>
<td>16.70</td>
<td>13.40</td>
</tr>
<tr>
<td>Women whose body Mass Index is below normal (%)</td>
<td>40.60</td>
<td>22.60</td>
</tr>
<tr>
<td>Ever-married age 15-49 who are anemic (%)</td>
<td>53.09</td>
<td>45.07</td>
</tr>
<tr>
<td>Children 12-23 months fully immunized (BCG, measles, and 3 doses each of polio/ DPT) (%)</td>
<td>29.30</td>
<td>51.09</td>
</tr>
<tr>
<td>Children 12-23 months who have received BCG (%)</td>
<td>67.01</td>
<td>86.08</td>
</tr>
<tr>
<td>Children 12-23 months who have received 3 doses of polio vaccine (%)</td>
<td>58.30</td>
<td>78.20</td>
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*Table 1.1. contd.....*
Table 1.1. contd....

<table>
<thead>
<tr>
<th>Health Indicator</th>
<th>NFHS -I</th>
<th>NFHS -II</th>
<th>NFHS -III</th>
</tr>
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<tbody>
<tr>
<td>Children 12-23 months who have received 3 doses of DPT vaccine (%)</td>
<td>49.08</td>
<td>73.40</td>
<td>50.40</td>
</tr>
<tr>
<td>Children with diarrhea in the last 2 weeks who received ORS (%)</td>
<td>25.00</td>
<td>32.70</td>
<td>24.00</td>
</tr>
<tr>
<td>Children with diarrhea in the last 2 weeks taken to a family facility (%)</td>
<td>59.90</td>
<td>75.20</td>
<td>55.60</td>
</tr>
<tr>
<td>Children with acute respiratory infection or fever in the last 2 weeks taken to a health facility (%)</td>
<td>61.80</td>
<td>75.10</td>
<td>59.90</td>
</tr>
<tr>
<td>Children age 6 –35 months who are anemic (%)</td>
<td>75.30</td>
<td>70.80</td>
<td>81.20</td>
</tr>
<tr>
<td>Underweight children below 3 year age (%)</td>
<td>49.60</td>
<td>38.40</td>
<td>49.00</td>
</tr>
<tr>
<td>Infant death (per 1000 of life children)</td>
<td>73.00</td>
<td>68.00</td>
<td>62.00</td>
</tr>
<tr>
<td>Under-five mortality (per 1000)</td>
<td>103.50</td>
<td>63.10</td>
<td></td>
</tr>
<tr>
<td>CDR (per 1000)</td>
<td>10.40</td>
<td>7.40</td>
<td></td>
</tr>
</tbody>
</table>

Source: Compile from National Family Health Survey reports.

National Family Health Survey (NFHS) provides vital information on the health status of rural and urban people of the country. So far three surveys (NFHS –I, NFHS –II and NFHS –III) have been conducted. The table 1.1 provides information on some of the health indicators for the last two surveys. A perusal of the table reveals that urban India has better outcomes in case of almost all health indicators. Fertility rate, infant death rate, under-5-mortality rate and CDR are much higher in rural areas than in urban areas. In case of birth delivered in medical institutions, we observe that in 2005-6, as against 69.40 per cent deliveries made in medical institutions in urban areas, such deliveries in rural areas were only 31.10 per cent. Similarly, percentage of birth assisted by medical professionals in rural areas was just half that of urban areas. Percentage of total unmet need for family planning was also higher in the rural area when compared to the urban areas.
It is relevant to note that overall health status of women and children in rural India is much poorer than their urban counterparts. For example, the result of NFHS –III (2005-06) reveal that percentage of rural women with body mass index (BMI) below normal was 38.80 while the corresponding percentage in urban women was only 19.8. There were more anemic women and children in rural areas than in urban areas, as is evident from the data given in the table. Percentage of fully immunized children age 12-23 months were only 38.6 per cent in rural areas, while the corresponding percentage in urban areas was 57.50. Percentage of children with acute respiratory infection (ARI) in the last two weeks, who were taken to health facility, were 59.90 in rural areas and 78.10 per cent in urban areas. If we compare the results of the two surveys, we find that there has been some improvement in the health status of both rural and urban people in 2005-06 over 1998-99. However, in case of a few indicators, the condition has deteriorated. For instance, percentages of anemic women have increased in rural and urban areas both in the NFHS-III, compared to the previous survey. Similarly, percentages of anemic children age 6-35 months have also increased in 2005-06.

In nutshell, elementary essential health inputs tend to be out of reach of the rural poor. Most of the facilities remain confined to the urban areas and can be availed only by those who are rich and conscious. In the vast rural areas, the scene is full of endemic or epidemic diseases, stunned child health occurring in infancy and child-hood, no help in emergency, maternal deaths associated with pregnancy and child bearing still taking a very heavy toll of life. The distant drugs and silent cries of the rural poor still
remain unheard. In fact provisions for immediate health facilities constitute a matter of urgent necessity in adopting strategy for rural development. In this background, the present study is essential to assess the functioning of the PHCs in the study area and come out with recommendations for their better and efficient functioning.

1.7. Origin Of The Research Problem

The concept of the PHC as an institution to provide both curative and preventive services can be traced to the report of the Consultative Council on Medical and Allied Services, held in 1920, in England, under the Chairmanship of Lord Dawson. In Southeast Asia the PHC was first established at Kalutura, Ceylon, in 1926 with the assistance of Rockefeller Foundation. The services offered at the centre were mainly preventive: health examinations of mothers and babies, immunizations, environmental sanitation, health education, and midwifery. Little attention was paid to curative medical care, on the ground that such care was the function of outpatient departments at hospitals. In addition, it was felt that the provision of curative services would so overwhelm the staff that preventive care would be neglected. The underlying idea of such thinking was to give priority to preventive health care as 75 per cent of diseases are preventable and the cost of prevention is much less than the cost for curative care.

Before the Russian Revolution of 1917, Soviet Kazakhstan was one of the most backward and neglected provinces of Tsarist Russia. Not more than two per cent of the total population could read and write. In the field of health, there was not a single medical institution and the number of medical personnel was negligible. Today, this region enjoys all the health facilities. Five medical schools and 26 junior medical colleges have helped to train some 40,000 doctors and more than 130,000 intermediate level medical
workers. The bed-population ratio is 12:4. After the revolution, primary health care formed the basis of the health system.

Primary Health Care in Kazakhstan as in all the erstwhile Republics of the Soviet Union is closely integrated with socio-economic plans of the rural districts and also with the overall medical care system. Soviet Kazakhstan had 60 years experience in the organisation and successful development of a national public health system and of primary health care. The conditions under which the people of the Republic were able, virtually from scratch, to build up a public health service closely resemble conditions in developing countries that are still experiencing the aftermath of colonial oppression. The Kazakhstan public health experience is useful for all public health administrators particularly for representatives of the developing countries.

The problems of health in Colombia is typical of the situation in most developing countries. In fact, mortality rate is very high. Thirty-six per cent of the population in rural and urban slums never or rarely use doctors or hospitals. They are organising a new mode, called M.A.C. system (Modulo de Amkplication de Cobertura. The key to the new system is Colombias own brand of the barefoot doctor selected from the area to be served. These workers are trained for four months and receive an allowance of US $ 850 a month. They serve 3,000 people in the fringe urban areas or 1,000 in the more scattered rural areas. Each group of 6 workers is backed by a MAC health centre to which they can refer difficult cases.

More than half of Thailand’s approximately 7500 graduate physicians live and practice in Bangkok. The doctor population ratio was
1:22,070 for the provinces and 1:84,000 for the countryside. The people in the countryside do not have any access to medical care. WHO (UNICEF assisted) provincial health care project was formulated whereby it is planned to train 22,400 village health volunteers, about 200,000 village health communicators, 2800 tambon doctors and 8400 granny midwives during the next five years. Although Thailand still has a long way to go before health care reaches all its citizens, the adoption of Primary Health Care programmes is doing much to alleviate the feeling of hopelessness that many villagers had through was their inevitable fate.

There were no organised health services available in Costa Rica and Mexico. The shortage of health workers hampered the development of health services. In 1972 WHO and other agencies began collaborating in a local development effort (PRODESCH) to identify and stimulate the type of activities that could be meaningfully undertaken by the community itself. The progress is going on. They are both examples of how communities with outside support can resolve their own problems and thus can generate enough confidence in them to go ahead with other socio-economic efforts.

Similarly most of the countries in Asia, Africa and Latin America have either introduced or are planning to introduce Primary Health Care system to provide health care to the unprivileged section of their countries. This is a challenging task which requires constant, continuous and persistent efforts of their governments and especially the health departments. All these countries may learn from each other's experiences and improve the mechanism of primary health care programmes. If such programmes are successful, it is sure that the good
health care would be available to all the people in the world by 2100 A.D. without exception.

The health planners in India have visualized the primary health centre and its sub-centres as the proper infrastructure to provide health services to the rural population. These centres were functioning as peripheral health service institutions with little to no community involvement. Increasingly, these centres came under criticism as they were not able to provide adequate health coverage, partly because they had to cover a large population of one lakh or more. The Bhore Committee (1946) recommended that a Primary Health Centre should be set-up to serve as the focal point for providing comprehensive, curative and preventive health services in the rural areas. The Mudaliar Committee in 1962 had recommended that the existing primary health centres should be strengthened and the population to be served by them to be scaled down to 40,000. The Declaration of Alma-Ata Conference in 1978 setting the goal of Health for all by 2000 AD has ushered in a new philosophy of equity, and a new approach, the primary health care approach. The National Health Plan (1983) proposed reorganization of primary health centre on the basis of one PHC for every 30,000 rural population in the plains, and one PHC for every 20,000 population in hilly, tribal and backward areas for more effective coverage.

1.8. Statement of the Research Problem

The establishment of the first Primary Health Centre in October 1952 was a major landmark in the development of health care services in the country. Since independence, the aim of the health policy in India has been to secure a change in the health status of its population
so that the cycle can be checked and all round socio-economic upliftment of the people can be achieved. The objective of rural health services is to provide health care to the rural people. The government of India planned several approaches for health care delivery in rural areas. India has been able to develop a scientific health planning system as part of its total socio-economic development. A basic health infrastructure has been successfully built up. A number of excellent research institutions in the medical field have been established. In spite of that the processes of development of health services have also brought in its wake the tenacious aberrations. The situation is one of the differential department in as much as the development efforts have created new cleavages in the society or has accentuated the older ones. It is maintained that the health facilities are biased in favour of the privileged few. Health facilities are not being uniformly availed of by different sections of the society.

Generally Women and Children in Rural Areas do not much worry about their health. The fate of women, young children and girls are inextricably linked together in a complex interacting cycle. This becomes poignantly evident in case of rural poor. Women’s health has always been viewed in terms of maternal and child health services. The women’s movement and the health movement in India have brought to the realization that the ill health of women hinges on a wide concept arising from existing political, economic and social norms in which women are second class citizens.

India along with the World Community observed the World Health Day on the theme of “Safe Motherhood” on 7th April and the slogan of campaign being “Pregnancy is Precious; Let us make it Safe”. The most recent UN inter-agency estimates suggest that in 2005 (latest
available data from the UN) 5,36,000 women died from causes related to pregnancy and childbirth. What is shocking is that India – an aspiring economic power house – accounts for 22 per cent of this global total. What is even more disturbing is that the boom years of growth did not appreciably reduce a women’s chances of dying while giving birth or a newborn’s chances of survival in many parts of the country. According to the UNICEF report, in Uttarpradesh a women has a 1 in 42 life time risk of maternal death, compared with a probability of just 1 in 500 for women in Kerala. Some more dark facts: the states with the top five neonatal mortality rates (measuring deaths with in the first 28 days of life) are Orissa (52 deaths per 1000 live births) Madhyapradesh (51) Uttarpradesh (46) Rajasthan (45) Chhatisgarh (43). The statistics are startling – every 10,000 neonatal deaths are reported in the country, with 40,000 newborns dying with in a month of their birth in Tamil Nadu alone. The rate of neonatal death is on the rise due to low birth weight and anaemia among mothers, according to experts. Most newborns contract infection as a result of the lack of neonatal care. The patterns of neonatal death are closely linked to those for maternal deaths.

Children are the budding resources and the future citizen of the nation. The UNICEF consider children as one of the most important human resources of a nation and emphasised that “any long-term policy on human investment or human capital formation must start with today’s children”. With the efforts of the government, non governmental organizations, the health status of children in India is improving but not sufficiently. The 1991 UNICEF report records that the per centage of malnourished children in South Asia is as high as that of in Africa. It found that 30 per cent of those who are not immunised and 70 per cent of
those who are malnourished are to be found coming from India, Bangladesh and Pakistan. In India 50 per cent of children are suffering from anaemia. The National Family Health Survey carried out recently in India has revealed that 30 percent of young children (age 12-23 months) have not been vaccinated against any of six serious but preventable child diseases i.e: Tuberculosis, Diphtheria, Pertussis, Tetanus, Polio and Measles and further the Immunisation status of children in rural areas are quite low. The percentage of child population in the zero to 14 age – group in 1991 was 37.2 per cent. Moreover, the WHO’s estimation depicted that by 2001 child population would be about 33 per cent of the total population of India. For generation to come they will be the most important product of any society and their well-being is one of the largest problems of the world today.

Reproductive health would mean that people have ability to reproduce the ability to regulate their fertility and the ability to practice and enjoy sexual relationships. Higher fertility is due to unmet needs of contraception (estimated contribution 20 per cent) India has 168 million eligible couples, of which just 44 per cent are currently effectively protected.

Urgent steps are currently required to make contraceptives more widely available, accessible and affordable. Around 74 per cent of population lives in rural areas in about 5.5 lakh villages, many with poor communication and transport. Reproductive health and basic health infrastructure and services often do not reach villages and accordingly, vast number of people cannot avail of these services. Women are prone to a number of health hazardous due to lack of access to health care, lack of education, illiteracy, poverty and social and cultural taboos. Government
regulations and effective prenatal, antenatal care can reduce problems before they become life threatening. Targets have been set for a variety of reproductive health components ranging from mortality rates to such health related measures as levels of antenatal care, trained attendants at delivery, immunization and taking birth weights. Short term benefits to reproduce health can be acquired through well implemented interventions, which reduce not only mortality but also mobility. The programmes planned in practice fail to educate the people strongly on maternal and child health care, birth spacing and safe abortion. That is, these programmes lack in the quality of services and therefore government should encourage proper service utilisation and dispel the cynicism with which these services are currently viewed.

India represents a paradoxical situation so far as the provision of health facilities are concerned. Health technology remain elusive for majority of the masses in the country side. While significance progress has been recorded in reduction of infant mortality, maternal mortality, birth rates and control of communicable diseases in the last five decades, the general health scenario is, however, less than encouraging. Though 70 per cent of rural population is aware of existence of PHC's and SC's only a third of them utilise the same and are dissatisfied with the quality of inputs and services. The problems of health care are enormous. Access to primary health care is inadequate to the majority of the people because of low availability of basic preventive and promotive health care packages, clinics, doctors, drugs and para-medical personnel in rural area.

In this backdrop, for the poor, the safe delivery of a healthy child and the survival of both mother and child cannot be taken for granted. Primary Health Centres in rural areas are more helpful to the
maternal and child care services and for extending health improvement and immunization programmes. Even then the demographic and health picture of the country still constitutes a cause for serious and urgent concern. It is in this context, “A Study On Women and Children Health Care Services by Primary Health Centres at Nagapattianam District” is justified.

I.9. Objectives Of The Study

The overall objective of the present study is to examine Women and Children Health Care Services by Primary Health Center at Nagapattinam District, on the basis of the above broad objective the following specific objectives are framed to conduct the present study.

1. To analyse infant and maternal mortality registered in the PHCs,
2. To Study the extent of family planning measures implemented at the PHCs selected,
3. To examine the impact of working of PHCs from beneficiaries point of view, and
4. To bring out the major findings of the study undertaken and suggest policy recommendations, wherever needed and required.

I.10. HYPOTHESES OF THE STUDY

In consonance with the objectives of the study framed, the researcher has formulated the following hypotheses which need verification and test. The hypotheses are:
1. Preventive health care services of PHCs have reduced infant mortality in the study Blocks, and

2. There exists an inverse linkage between family welfare programmes meant for women and number of child births registered in the Blocks cited.

I.11. Scope Of The Study

"Health for All" with the motto in mind, Primary Health Centres have been launched even today in rural packets of India with the specific intention of carrying for the health of the rural poor and vulnerable sections of the community at large. In terms of the functions carried out by the PHCs, the scope enjoyed by them in any context namely yesterday, today and tomorrow should be vast and wide. The present study has admitted in its purview only a partial coverage of the activities of the PHCs with special reference to women and children for a stipulated period of ten years. Though partial in terms of coverage of the activities of PHCs, the present study concerned has shed ample light on the selected activities of the PHCs by making an in-depth study of the same in length and breath manner. Hence in terms of the study of chosen activities of PHCs extended to women and children among the Blocks chosen, the scope of the study has been vast in its jurisdiction.

I.12. Significance Of The Study

Health economics is the application of economics in the field of health. As economics studies, the allocation of scarce resources among alternative uses to meet ends, issues such as priorities, choice between alternatives and allocation of resources figure prominently in the
literature of health economics. Health and health care service unlike tangible goods possess certain distinctive characteristics, the inherent characteristics of health and medical services which distinguish from the other goods and services are: uneven and unpredictable illness; external effects, as in the case of infectious diseases: health and medical care being a need, the consumers inability to evaluate the effects of choices before him due to lack of knowledge: the mixture of consumption and investment elements.

Medical care services are extremely difficult to quantify. In most instances, researcher measure medical care in terms of either availability or use. If medical care is measured in terms of use, the analyst employs data indicating how often a medical care is actually delivered. Health economists take the view that the creation and maintenance of health involves a production process, just as a firm uses various inputs to manufacture a product. The government uses its resources in the form of medical inputs and outputs (quality services) that can be captured in what economists call a production function. A production function is simply a mathematical expression that shows how the level of output (in this case, health) depends on the quantities of various in puts (resources) such as medical care\(^{24}\). Over the years, the budgets of PHCs are increasing beyond proportions, and it is beyond the capacity of poor country like India to meet these funding requirements. In this context, it is high time for the researcher to assess the functioning of PHCs at the Sembanarkoil and Kuttalam Blocks and revamp them to

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make them to fit for the delivery of health services, otherwise, the resources invested in them would go waste.

I.13. Limitation Of The Study

No research at any level in any subject is free from limitations, due to the existence of certain formidable constraints in regard to availability of data, time, money, energy etc. The present study has been subject to similar constraints and hence:

1. a comparative study of health care services rendered at inter-state or inter-districts or inter-taluk level could not be undertaken,

2. aspects related to PHC's working like organisation, administration, funding etc., have not been covered,

3. just like opinion survey made with health care beneficiaries, a similar survey could have been attempted from the personnel handling health care services at Sub-Centres or Primary Health Centres or Hospital level, which could not also be done, and

4. in respect of primary data collected to go into the effectiveness of PHCs working, from beneficiaries point of view, no comparative study has been attempted in respect of the to Blocks chosen.
I.14. Chapter Scheme

The method of chapterisation followed in the present study consists of the following chapters, namely,

The first chapter “INTRODUCTION”- introduces the subject matter covering the background of the study, statement of the problem, objectives, hypotheses, scope, and significance of the study, limitations and chapter arrangement.

The second chapter “CONCEPTS AND REVIEW OF LITERATURE” – explain various concepts and presents a brief review of literature on the subject.

The third chapter “METHODOLOGY OF THE STUDY” – describes an over view of the profile of the study area, and the research design of the study.

The fourth chapter “DATA ANALYSES AND INTERPRETATIONS” - is devoted to the analyses and interpretations of data on the working of Primary Health Centres in Nagapattinam District.

The fifth and final chapter “MAJOR FINDINGS AND POLICY SUGGESTIONS” – provides summary of the findings as well the conclusion.