CHAPTER-II

REVIEW OF RELATED LITERATURE

In order to have a better understanding of the present problem entitled, “Health and Nutrition, and Economic Development in India – An Inter-state Analysis” as also to frame methodology thereof, we have reviewed in brief, a number of related studies, out of which some general studies are given in this chapter. It may, however, be mentioned that theme-wise related studies have been subsequently reviewed in the corresponding chapters, so as to ensure some sort of continuity and clarity of the discussion. Most of the literature reviewed here is since the decade of 1970s.

Banerji (1976) observed that compared to the previous national policy having a package of health, nutrition and family planning services as a part of the minimum needs programme, the new policy was a different one. For its successful implementation, some selective coercive elements were required to be put into operation. As per his observations, something new and refreshing was done for making health services more meaningful, especially for the people residing in rural areas. So, for controlling the population growth in India, special attention was to be made towards the framing of population policies, particularly for weaker sections of the society.

Doyal and Pannell (1976) made an attempt about the inclusion of some basic questions relating to the material condition of third world populations, their physical reproduction, in estimating the real nature of contemporary underdevelopment. As per the authors, the nature of world health problems and obstacles to their solutions were to be included primarily in the structure of economic relations historically created between the capitalist’s powers and satellites.

Maru (1976) compared the health manpower strategies pursued in India and China, and brought out certain implications of the strategies for birth control programmes. He addressed three areas, namely: (i) Training medical manpower; (ii) Redistribution of health manpower from urban to rural areas; and (iii) Utilization of practitioners of indigenous medicine. He concluded from the Chinese experience
that both general commitment to socialism and concentration of power in the hands of a small political administrative elite could not become an adequate mechanism for major social changes. The author suggested for (a) de-bureaucratisation; and (b) second decentralization of power to the people.

Sivakumar (1976) made an attempt to understand the relationship between family size, consumption expenditure, income and land holdings, among peasantry in some villages in Tamil Nadu. He evaluated the correctness of populist formulation in the empirical context provided by the villages studied. As per findings from the study in respect of each of the sampled villages, there existed no correlation (a) between consumption expenditure of households and their family size; (ii) between occupational holdings and family sizes of household; and (iii) between the level of income and family sizes of households. It was further observed that as a peasant family moved up the income hierarchy, its diet pattern and, hence, its per adult consumption level underwent a change.

Banerji (1978) studied political dimensions of health and health services in third world countries. He viewed that in shaping of health services of a community, a dominant role was played by political forces. Health services had also been used as a device and to increase dependence for exploitation of one class by another and to promote certain vested market interests. The results of his study showed that initiation of action on political, economic and social plans could be contributed by the efforts to alleviation caused by health problems. He concluded that health services could generate self-confidence among exploited masses.

Nichter (1980) expressed the views that the Community Health Worker (CHW) Scheme launched by the then government of India, was poorly implemented. Failure of the scheme, according to the author, was due to some serious drawbacks in the founding principles of the scheme itself. He suggested that there should be a flexible CHW implementation scheme to meet the needs of the people concerned. He further stressed for desire for CHWs to be trained in medicine according to the preferences of the people, when feasible. He felt that a qualitative dimension must be added to regional health planning and evaluation of programme outcomes; and
the community diagnosis and CHW could provide this dimension, if some autonomy exists.

Using the experiences of African and Latin American countries, Jeffery (1982) focused on new pattern in health sector aid in India since 1947. The author brought together the material on the scale and form of this assistance and came to conclusion that it focused towards the primary health care sector. He further observed that in some spheres, it has played a major role in controlling the communicable diseases. The author was of the view that need for a political economy of health care, either in India or amongst donor agencies should not be denied. He suggested that such an account should be sensitive to conflicting and competing interests among the social forces which set the limits to state action, and to the relative autonomy that remained to the state and to its officials.

In his article, Padhmanabha (1982) enquired for major causes of high rates of infant mortality in India. The study covered the period of 1970-78, and used the data based on the results of the sample registration system. As per his findings, reduction in death rate was heavily dependent upon reduction of infant mortality and child mortality, with corresponding improvement in medical care in the rural areas. He remarked that control of ailments which contributed to high proportion of deaths in rural areas was more difficult than controlling of epidemic diseases. His suggestions were to invest mainly in specific factors of economy like nutrition of mothers, rural water supply, housing and elementary medical care. The author also emphasized upon the minimum needs programme and the programme related to health and nutrition for reduction of the death rate.

Feifer (1990) gathered information on Jamaican health needs services, social problems, and maternal health. According to him, the distrust between men and women had an impact on health outcomes. Further, understanding the motivations and relationships of couples could provide insights on maternal health programmes. As per the findings of Bracken and Kasl (1973), in Jamaican society, marriage was normally entered into later life and was associated with considerable improvements in a woman’s social status. In another study, Segree (1985) claimed that the main health issues in Jamaica were: nutrition, fertility, infection, chronic diseases, stress
and social problems. Several programmes designed for pregnant and parenting teens have been implemented in Jamaica. Among them, Vadiees and Clark (1988) focused on prevention of pregnancy and the development of self-esteem and self-sufficiency. Feifer (1990) concluded that distrust between men and women could undermine the community spirit that was necessary to enact social reforms which safeguard health. As in another study, Pitt et al. (1990) linked intrahousehold distribution of food with energy requirements of different work activities. The latter found that the household members undertaking more energy consuming activities were allocated more nutrients.

In his article, Kethineni (1991) measured the nature of state intervention in the production and distribution of health care services in India. For this, he referred to the Keynesian’s and Marxian’s views about nature of state intervention in a capitalist’s economy, especially in health care. He had also analyzed the relevance of the views about these economists in understanding the role of state in provision of health care. His results showed that the state in India had been providing health care, mainly to a small section of the rich and the middle class who constitute the most vocal section of population and monopolize the benefits from the public services. He concluded that the state in India had played a very prominent role in creating and widening opportunities for private capital accumulation in health sector.

George and Nandraj (1993) studied health development in Maharashtra with respect to other socio-economic indicators. In their article, they tried to examine the relationship between health sector development and capitalist’s growth. Their results showed that Maharashtra and Punjab have attained high growth with respect to health indicators having high per capita income (PCI) and good economic development. About Kerala, they noticed a good development in the health sector; inspite of low PCI, and low level of industrialization, the state was associated with good infrastructural indicators. According to the authors, the development pattern in Maharashtra could be due to trickle down effects of capitalist’s modernization of the industrial-cum-agrarian variety. They further viewed that socio-political, geographic and demographic peculiarities of Kerala were the root causes for the pattern followed in this particular state.
Nandraj (1994) studied the quality of private health care in India. He was of the view that private health sector is a large and important constituent in the country’s health care delivery system. The data collected by the author suggested that the size of private hospitals was much larger than official data brought out by the government. He also observed that indoor care provided by private hospitals was much larger than the public hospitals, and this growth had taken place mainly in urban areas. The results of his study indicated that private hospitals were less accountable to the people than the government hospitals. If they had not as much bad publicity as public hospitals, it was primarily because of the inaccessibility of reliable information. The implications of the study were that: Firstly, there should be adequate representation of the people and consumer organizations on various regulating and monitoring bodies functioning at various levels. Secondly, the state should ban and take an action against the private-practice of doctors employed in government institutions.

For the period 1960-1965, Ghosh et al. (1998), analyzed the divergences in India with respect to real per capita net state domestic product (PCNSDP), obtained by deflating the nominal figures with consumer price index number for agricultural labourers. Effects on the Indian states by the allocation of planned expenditure had also been suggested. Their results showed that real PCNSDP did not show any sign of convergence. However, there was strong statistical evidence in favour of ‘divergence’ across Indian states over the study period. Second, rising regional disparity could be the outcome of lower efficiency with which public capital has been utilized and also of infrastructural disparity across the states. Regional imbalances in physical infrastructure has been strongly responsible for rising income disparity across the states (Ghosh and De, 1998; Ghosh and Chattopadhyay, 1997). As per the authors, there is a need to (i) build up some sort of a private capital formation indicators at the state-level, (ii) study state-wise productivity differentials for the organized manufacturing industries as a proxy for the industrial capital formation, and (iii) evaluate the process of development of some of the outlier states like West-Bengal, for which the issue of flight of industrial capital has generated renewed interest.
According to Gupta et al. (1998), public spending on health could boost economic growth because of its positive effects on the formation of human capital. As per the information complied by the authors, the real per capita expenditure for health, on an average, had been increasing in developing countries, but declining in transition economies. The authors noticed that increase in public spending in curative health had been comparable in IMF supported countries than the others. However, there should be increase in spending on preventive health, so that benefits of social spending could be distributed more equitably while accelerating human development.

Au et al. (2001) examined regional variations in the physical and mental health of patients receiving primary care in the largest inter-grated health care system in the United States. They performed a mailed cross sectional survey of 54,844 patients who were enrolled in seven VA general internal medicines clinics. They concluded that the substantial differences in the health of patients enrolled in different VA primary clinics have important implications for the evaluation of clinical performance and health outcomes. Most of these differences could be attributed to socio-demographic and co-morbid factors.

Robalino et al. (2001) explored the linkage between fiscal decentralization and infant mortality rates. The study was based on a panel of developed and developing countries covering the period of 1970-1995. For each country, they observed over time the infant mortality rate, gross domestic product per capita and the share of public expenditures managed by local governments. For the studies, the authors considered six models that differed in having the vector X of structural variables. Five major findings having emerged from the study were: (i) Higher fiscal decentralization was consistently associated with lower mortality rates; (ii) Benefits from fiscal decentralization were particularly important for poor countries; (iii) positive effects of fiscal decentralization on infant mortality rates were enhanced in institutional environment with strong political rights; (iv) Fiscal decentralization appeared as a mechanism to improve health outcomes in environment with high levels of corruption; and (v) Environments with high levels of ethno-linguistic fractionlization tended to reduce the benefits from fiscal decentralization. Their
results suggested that the central government should be able to influence local policy and implementation without compromising the autonomy of local decision making.

Sundaram and Tendulkar (2001) addressed the question of using the National Accounts Statistics (NAS) estimates of private final consumption expenditure (PFCE) in place of National Sample Survey (NSS) based estimates for calculating the proportion of the population below the poverty line or head count ratio. The authors undertook a comparison for the year 1993-94 between NAS estimate of PFCE and household consumer expenditure estimated from NSS disaggregated across item-groups of consumption and across selected fractile groups of rural and urban population. They compared two alternative estimates from NAS – old series in NAS 1998 and the latest revision in NAS 1999 with each other. The authors also compared two NSS estimates i.e. one directly available using a uniform 30-day reference recall period and second a synthetic constructed by them to reflect the effect of using non-uniform reference period. Two major conclusions from the analysis were: Accepting NAS estimate of PFCE as correct and reliable than NSS estimate was far from settled. Second, the item groups which had smaller budget share in the consumption basket accounted for a very large proportion of the aggregate discrepancy between NAS and NSS estimates, and vice-versa.

Wagstaff and Doorslaer (2001) in his paper on measuring equity in health care financing showed that the World Health Organization’s index could not discriminate (i) between health systems that are regressive and progressive; and (ii) between horizontal inequity and progressiveness or regressiveness. With the World Health Organization’s index, he concluded that progressiveness and regressiveness were both treated as unfair. So, according to him, the policy makers who might be strongly averse to regressive payments might in the name of fairness be quite receptive to progressive payments.

In his study, Muller (2002) made an attempt to give an overview of methods to find groups in large data sets, such as household expenditure survey data. These methods were grouped in three categories: Cluster analysis, Dimension reduction and Basic explorative methods. He suggested that the first approach, i.e., cluster analysis was designed just for the task to find groups, urges the researcher to take several
decisions with respect to the variables to be included and their importance, the
distance measure, the number of clusters and the concrete method to be applied. As
per his remark, the cluster analysis should be used with great care and there should
be a critical attitude to its results. In case of the second approach, viz., the dimension
reduction techniques, some methods were offered to find interesting projections of
the data, which helped to find a subset of variables, for which the data may reveal
some structure. Through either of the two approaches, structure cannot be revealed.
So, the author suggested to take a step back and look at basic statistics, such as
means of some interesting variables only.

Sheriff et al. (2002) in their article entitled “State-adjusted public expenditure on
social sector and poverty alleviation programmes” presented trends in public
expenditure on social sector and poverty alleviation programmes from 1990-91. The
paper analysed trends in state expenditure, expenditure by the central government
and central and state combined expenditures. They observed that overall expenditure
on social schemes was increasing in real terms but mainly through increased
expenditure of central governments. They also remarked that the major development
has been that large funds that were allocated to employment generation have now
been diverted to the rural road construction programmes. This implied that
employment generation could have serious implications because of this reallocation.

Through a number of methods, Bhalla (2003) estimated poverty in India in 1999-00,
but focused on a particular method that used information about increase in NSS
household survey-measured wages between 1983 and 1999. He observed that in
both the household surveys data, it was almost inconvertible, that poverty in India
was 15% in 1999-00, which was about 35 to 40 percent estimated by world bank for
the same year. NSS data for the two survey years indicated that there was no
increase in inequality. Indeed, the Gini declined over this time-period, and the share
in consumption of the poor increased. An estimate of per capita consumption
growth, therefore, could provide an upper-bounded estimate of poverty in India in
1999-00 and a very lower-bound conservative estimate of their wage growth
(supplied by the NSS data) suggested that poverty in India in 1999 was less than 12
percent. This was in sharp contrast to official estimates of poverty of 26 percent for
the same year.
Chaudhury (2003) analyzed the impact of a fee-waiver programme for basic medical services on health care utilization in Armania. The authors’ noticed after two survey rounds that the families with four or more children have decreased their use of health care services i.e. twenty one percent reduction in use between the two survey rounds. Their results suggested that the programme was inadequate in stemming the decline in the use of health services. On analysis, the author’s found that free of charge eligibility programme acted more like an income transfer mechanism, particularly to disabled individuals.

Leite et al. (2003) described the food consumption patterns of Italian elderly subjects and the factors associated with different dietary habits. They collected primary data on 847 men and 1465 women aged 65 years or older, living in rural areas in the province of Paria (Northern Italy) and near Cosenza (Southern Italy) in 1992-93. The data were collected by means of a quantitative food-frequency questionnaire. The cluster analysis was used to segregate the subjects on the basis of similarities in their food consumption. A generalized logistic regression model was fitted to assess the factors associated with different food consumption habits. The results of their study concluded that six dietary clusters were selected for men and seven for women. The largest cluster for both gender was ‘small eaters’, the other clusters identified for both the genders were ‘big eaters’, light diet’ and ‘alcohol’. The men were also grouped into ‘balanced diet’ and ‘cheese’ clusters, and the women into ‘sweet’, ‘greens’ and ‘butter’ clusters. The other important conclusions were that in Northern Italy, greater amounts of animal fats, sugar and alcoholic beverages were consumed by residents, and those living in Southern Italy had a greater intake of fruit, vegetables, fish and olive oil.

Singh et al. (2003) examined growth mechanisms within India at the district level for having more refined understanding of India’s regional disparities. Findings from the study provided evidence that access to credit, literacy and access to roads, etc., do matter to some degree towards growth. However, the empirical analysis did not provide lessons on detailed policy design or implementation strategies. The authors emphasized that the success of India’s push for inclusive growth would depend on the factors that will make broad-based growth more likely.
Durvasula *et al.* (2004) researched on policies, strategies and investments in the health sector to reduce childhood malnutrition in India. According to the authors, non-food issues like age at marriage, age at birth of first child, school attendance of girl children, per capita expenditure on health, *etc.*, had a strong policy bearing on levels of malnutrition. Cost analysis carried out in the study provided strong evidence towards economic productivity lost due to malnutrition. The authors suggested to carry out case studies from success stories across the country so as to appreciate the dimensions of the problem.

Mehra (2004) dealt with an issue to the choice of variables that could stand as fair measures of prevalence of poverty. The author observed that the differences between the official estimates given by the planning commission and calorie based poverty was such high, which reflected that the consumption pattern has changed significantly and there was need to revise the base year.

With an objective to identify and assess the impact of critical factors that they have a bearing on executive’s health like life-styles and habits, stress-levels, *etc.*, Rao (2004) carried out a survey for senior and middle level executives from industry and government as well as non-government organizations from all over the country at the administrative staff college of India in 2001-02. As per his findings, over 75% of the respondents admitted that they had one or more health problems which have been bothering them for more than three months. Further, those at the senior and junior level in the organizational hierarchy appeared to be more hypertensive, but obesity was dominant at the middle management level. As per the study, only half of the respondents were observed to have been exercising daily. On the whole, the results suggested that employees’ health was a critical determinant in the organizational competitiveness and success. Greater insights could be possible only when executive health was correlated with other organizational factors.

Gupta (2005) reviewed the fundamental obstacles to effective disease control in India, and indicated new policy thrust that could help to overcome those obstacles. She was of the view that public health services could be an essential part of a country’s economic development infrastructure as these would raise labour productivity and life expectancies. But she noticed that the public funds for health
services have been neglected. She opined that there was a strong capacity for dealing with outbreaks but not to prevent them occurring. On the whole, she suggested to build an institution modeled on the US centers for disease control, which could transform the way that the central government shape and support public health services in India.

By analytically over-viewing of health systems of Japan, Korea, Hongkong, Taiwan, and Asian Tigers, Wagstaff (2005), provided some lessons for the countries. The first lesson from the study seemed to be that all types of financing systems could be adapted to keep health spending in check. The second lesson was the limited role of financing towards medical savings accounts. The author found that Japan and some Asian tigers opted for the public sector to deliver hospital care, while others favoured the private sector in this regard.

Ahmad and Bhakta (2006) analyzed the problems and prospects of social sector development in India, and emphasized that there should be adequate allocation of funds for social sector like health and education urgently. They also suggested for altering the fundamental strategically assumptions about development, if outcomes of allocations have to be realized.

Due to non-availability of data for all the states, Akhtar (2006) analyzed human development profile of 15 major states of India. Results from the analysis indicated that, at the national level, HDI, has improved in 2001 from 1981 & 1991. The author further classified the Indian states into four categories: C1, constituted by Kerala and Tamil Nadu (because these states were able to achieve high levels of human development despite modest levels of income); C2, comprising of Punjab and Haryana (which, despite high levels of per capita income, were far behind in human development); C3, including the states like Bihar, Madhya Pradesh, Orissa, Rajasthan and Uttar Pradesh (where neither economic nor social opportunities have been realized); and C4, constituted by the rest of the states (where economic and social opportunities differences were not too large) Akhatar’s (2006) findings were in fair agreement with those of Prabhu (2005).

Angel-urdinola et al. (2006) analyzed the extent to which subsidizing health care in Armenia increased utilization among the poor. For this, they used the data from the
2004 Armenia Integrated Living Standard Survey (ILSS). A scheme named as Basic Benefit Package (BBP) was introduced in 1998. The purpose of BBP was to provide free of charge health services. The authors suggested that if the goal of BBP was to promote utilization more aggressively, the program could subsidize health cost beyond doctor’s fees. Furthermore, the government should make sure that the payments for medical treatment that were transferred from the state treasury to doctors and hospitals upon the provision of services to BBP beneficiaries were more aligned with market prices. Finally, the program could consider the possibility to provide subsidies for prescription drugs, which constitute a large component of the overall expenditures on health among those households having health users.

Chopra (2006) analyzed the health and healthcare in India. As per the findings from the study, India has, of course, achieved some progress in socio-demographic parameters; yet, the situation has not been much satisfactory. Moreover, within the country, urban areas have fared better than rural areas in terms of various health indicators. The author remarked that the health care system in India has been inadequate, inefficient and expensive. The system consisted of under-funded and inefficient public sector along with expensive and unregulated private sector. For making health system in India more effective, the author has made some general suggestions, like (i) to raise health sector spending, both by central and state governments, (ii) to focus on health of children and women, (iii) to reform the public sector health care system, and (iv) to regulate private sector health care system, so as to make it less expensive; and (iv) to encourage universal access to infrastructure facilities.

By framing Human Development Index, Dasgupta and Dasgupta (2006) studied Human development in India. They suggested that the relatively backward states should endeavor to remove the non-economic bottlenecks along with the economic impediments, to raise the human development index.

Eggleston et al. (2006) made an investigation regarding the health service delivery in China. As per their findings, there was a need for improvement in the performance of Chinese health care providers. It could be in terms of quality, responsiveness to patients, efficiency, cost escalation and equity. According to
authors, the major problems noticed in the Chinese health sector was due to excessive or inappropriate government intervention. Their results suggested that active purchasing by organized purchasers could be an effective way to affect system incentives. In conclusion, the authors remarked that social insurers and other purchasers could improve services delivery though selective contracting, mixed-payment methods with quality bonuses, drug use monitoring and effective gatekeeping.

Gao and Yao (2006) observed that, in comparative terms, female members were in an inferior position. They explained that contrary to the market value hypothesis, adult women were not discriminated against but got preferable treatment between the ages of twenty and thirty four. They also found that generally, women were more mindful that men regarding saving family income, and men were more mindful than women regarding time spent on seeing a doctor. On the whole, the author concluded that the traditional family-based welfare systems functioned relatively well in rural China.

Gaur (2006) attempted to examine the growth of inter-state expenditure on education, medical and public health for the period 1980-81 to 2001-02. He observed that the shift in expenditure pattern has occurred due to introduction of structural adjustment programme in 1991 by government of India. The results of the study showed that in the category of rich states, excepting Punjab, the states like Haryana, Gujarat and Maharashtra have shown poor performance in terms of expenditure on education during the post-economic reforms period. Similarly, poor states like Bihar, Madhya Pradesh, Rajasthan and Orissa have also shown poor performance with respect to expenditure on education. They concluded that the level and structure of human development among Indian states has been adversely affected by the declining expenditure of states on medicine & public health and education.

According to Goel et al. (2006), traditional concept of the factors of production in economics has undergone a change in the present era, particularly with the establishment of the WTO in 1995. They concluded that the objective of trade liberalization with non-economic factors, such as consumer protection, equity,
human rights, accessibility of health services, quality and standards, cultural, ethical and national security considerations should be reconciled urgently. This need was particularly urgent with reference to GATT's negotiations aiming to liberalize trade in health services. Some of the suggestions put forth by the authors were: (i) international regulations and institutions should promote global public goods and services towards universal access to health care; (ii) there should be equitable and sustainable growth and development in this sector; (iii) national health policies, institutions, regulatory framework and programs are needed to be strengthened; (iv) there should be full integration of access and affordability of health care services, in negotiations and trade in services under WTO; (v) for sustainable and informed approach to health services negotiations, a comprehensive multitask-holder approach should be adopted; (vi) liberalization should be based on a through impact assessment of potential costs and benefits for the health systems and policies; (vii) special attention should be given towards the transfer of financial and technical resources and capacity-building measures (training and development) to ensure the development of developing countries; and (viii) strong mechanisms should be there to discourage brain drain.

Ghosh (2006) observed that in India, the malnutrition was usually between the child’s sixth month and second birthday. Further, the high prevalence of low birth weight was mainly due to young age and poor nutrition of the mother. Another likely reason of child’s malnutrition was inappropriate use of young feeding practices. For preventing malnutrition seriously, the author emphasized to look at the total functioning of Integrated Child Development Services (ICDS), and not just at the money sanctioned supplements.

Using data at 3 points in time for 15 major Indian states, Gopal and Kumari (2006) studied the influence of HDI and growth of per capita income on reduction of poverty. They found that per capita income and human development have profound influence on reduction of poverty. Further, they observed that over time, interlinkage among the three variables got strengthened. They concluded with the suggestion that greater attention should be paid to human development, particularly by increasing budgetary and plan expenditure on social sector and generation of adequate employment opportunities.
Gragnolati et al. (2006) examined the effectiveness of the Integrated Child Development Services (ICDS) programme in addressing the challenge of child under-nutrition in India. They found that there were several mismatches between ICDS programme’s design and its actual implementation that prevented it from reaching its potential. They concluded that bridging the gap between the policy intentions of ICDS and its actual implementation would have been long-term impact on human development and economic growth in India.

Joshi (2006) attempted to analyze the expenditures incurred by the central and state governments on social sector during the pre- and post-reforms period. He observed that social sector expenditures of the centre as a percentage of aggregate expenditures and gross domestic product have increased during the reforms period. However, a fact which could not be neglected was that higher expenditures incurred by the central government on social sector was at the cost of lower allocations made from central plan outlay to the states. The author observed and remarked that inspite of noticeable improvements in key social indicators, a vast majority of the indian population continued to remain poor.

Kumari and Yadav (2006) realized that the education systems have became better structured and have extended their reach to areas previously unserved in Bihar. The authors suggested that while economic status does play a part, there were other factors like gender gaps, social groups, etc., which played important roles in restructuring education, particularly in Bihar. The findings from the study showed that some progress has been made towards lowering fertility and mortality rates. The authors concluded that the challenge of development in Bihar is enormous due to persistent poverty, complex social stratification, unsatisfactory infrastructure, and weak governance problems that were well known but not well understood.

Mukhopadhayay (2006) analyzed the efficiency of both public and private health sectors in India. As per his observations, private health sector has the tendency to concentrate more on developed state and especially in urban areas. However, the results of the study revealed that private health sector has been dominated by public health sector in Karnataka and Tamil Nadu state with respect to each of the number of hospitals and the number of beds. Further, from geographical distribution of
private health care facilities, it was remarked that the private hospitals were relatively less urban-biased than public hospitals.

Naidu et al. (2006) examined the linkage between education, health and human development. The two-way linkage between economic growth (measured in terms of increase in per capita income) and human development has been supported by studies at the country level by Ranirez (1998), and Rani and Stewart (2000, 2001). They supported that both economic growth and human development should be promoted simultaneously, but at the same time they suggested that human development should be given priority when the choice is necessary due to resource or any other constraint. In India, the two-way link has also been studied by Ghosh (2006), focusing on the performance of Indian states. The rank of states were arrived at on the basis of their achievements in HDI, literacy rate and expansion of life at birth. In this chosen indicators of human development, Kerala was found to be high-performing state and Bihar, on the other extreme, the low performing state during 1981-2001. The authors concluded that development is possible through higher education and higher health which ensures happiness to people. The goal of government should be towards attainment of healthier than wealthier people as well as the nation. If such a strategy is adopted, people will definitely enjoy growth with justice and a higher quality of life with adequate welfare.

Rawat et al. (2006) made an attempt to analyse the current status of health services in India and the public sector achievements in health sector. They also analysed the impact of privatisation of health care system. As per the findings, a vast health care infrastructure in the government, voluntary and private sector has been created in India since independence. However, there existed huge gaps in critical health manpower in government institutions that provide health care to the poorer segments of population. The authors suggested that expenditure on public health services by government should be increased as well as it should be properly utilised, such that it benefits the entire population, especially the underprivileged. They also suggested to establish a system of national health accounting reflecting total government expenditure, which will enable periodic review and approopriate policy decisions regarding modalities for ensuring optimal utilization of the current government
investment in the health sector and also further investments to meet public health needs.

Using primary data for Jaipur district of Orissa, Rout (2006) examined the effect of income and education of the household on its health expenditure. Results of the study pointed towards a direct association between disposable income of the households and expenditure incurred on healthcare. Some suggestions made by the author to improve the health status of the people were: (i) the health planners and administrators should be involved in planning process of the government to reduce poverty and adopt policies for more equitable distribution of income; (ii) the government may recommend a specific health tax (an earmarked and so-called hypothecated tax) devoted to health care; and (iii) the principle of equality for opportunity for access to services on the basis of need and equal risk, irrespective of ability to pay should be followed. Therefore, in order to raise the health status and quality of life, a focused approach integrating the development of social, cultural, economical and educational needs to emerge so as to bring about overall transformation of the society.

In his article, Santhyamala (2006) observed that India with its strong IT base could take a serious lead in research areas which required strong software inputs. He opined that with providence of special incentives and improving compensation to attract professionals, there should also be capacity building to undertake clinical trials for new molecules likely to be introduced for various diseases. The author concluded that there would be more and more new threats, both real and generated, that would receive medical policing, thereby calling for the need for an ‘army’ that would ‘educate’ the ‘masses’ about their good.

Ahuja (2007) examined the viability and necessity of introducing Health Impact Assessment (HIA) in policy making, as also to see whether HIA was a feasible option for India and what needed to be done to put it in place. She suggested that given the expertise of environment sector and the special, individual based need of health sector, an agency that combined both Environmental Impact Assessment (EIA) and Health Impact Assessment (HIA) would be most appropriate ones.
According to her, such an agency would resolve conflicting concerns so as to bring about efficiencies in cost, effort and operations.

Amrith (2007) provided a historical perspective on political culture of public health in India. He examined the state’s commitment to provide for the health of the people and found state’ relative ineffectiveness in this field. He noticed that this commitment arose from a combination of motives like: Firstly, a concern with ‘democracy’ and ‘equity’, and Secondly, concerns about ‘quality’ and ‘quantity’ of the population. The author remarked that as the infrastructure and resources were not sufficient, so state relied heavily on narrowly targeted and tech-centric programmes assisted by foreign aid. Amrith also examined the malaria eradication programme and concluded that the ultimate failure of malaria eradication left a huge dent in the state’s commitment to public health.

Barnes (2007) studied on the child birth related practices among rural women in Jharkhand and the obstacles faced by them in seeking appropriate care. His paper documented women’s experience of child birth from their own perspectives, and the perceptions of providers regarding birthing practices. The author indicated about the paucity of trained providers and appropriate facilities in the area. The author suggested to review the quality of care in existing institutions. According to him, there should be more respectful and client-centered interaction with women, their families and relatives. His suggestions were intended to bridge the gap between the policy and programme makers, on one hand, and poor, rural women (for whom the services were provided), on the other.

Bhalotra (2007) deliberated upon the issue of severe inequalities in health in India. She came to the conclusion that for India, state health spending saves no lives. She remarked that if the sample is of rural households, then health expenditure has a significant effect on Infant Mortality. She further added that if data were sliced by gender, birth order, religion, maternal and paternal education and maternal age at birth, then the effects were the weakest in the most vulnerable groups.

By analyzing the quality of public sector expenditures through cross-country data, Estache et al. (2007) contributed towards (i) providing sectoral public expenditures and outcomes; (ii) providing current levels of expenditures for different income
group of countries; and (iii) identifying the areas, where government could improve its monitoring. As per their results, health expenditures had the largest share of gross domestic product in high income countries. The authors concluded that the supranational changes were particularly important for the poorest small countries, because many of their investment programs were financed by donor loans and grants. The main outcome was that in the poorest countries, there was more scope for improvements in performance.

Hammer et al. (2007) recognized the fact that the system of public delivery of health services in India was in crisis. They developed an analytical framework to understand the status of public sector accountability, and noticed that a weak voice and low accountability were the key binding constraints to effective delivery. With a view to induce significant improvement in healthcare system in India, the authors suggested to intact the both legs of accountability. First, the policymakers need to hear and respect the wishes of people, particularly in rural areas, where a large majority of the poor live. And, second, the policymakers need to transmit those wishes, through the provision of proper incentives, to the providers.

Kumar (2007) observed that the level of child malnutrition in India were exceptionally higher than the average for all sub-Saharan Africa. By reviewing National Family Health Survey (NFHS)-3 (2005-06), the authors have made certain observations: (i) Levels of malnourishment among children below three years remained unacceptably high; (ii) At the All-India level, high levels of child malnourishment were mainly due to limited access to and reach of health services; (iii) Levels of child malnourishment varied widely across Indian states; (iv) Progress in reducing undernourishment among children during the period 1998-99 and 2005-06 had been poor; (v) The fall in the proportion of fully immunized children was worrisome, as it reflected the slackening of the routine immunization system; and (vi) The important way to tackle malnourishment would be to establish public health system throughout the country. On the whole, the results confirmed the continuing neglect of health, inadequate reach and inefficacy of health and childcare services. According to the author, these deficiencies need be addressed urgently for establishing the foundation of a prosperous and healthy society.
Nair (2007) analyzed inter-state differentials in malnourishment among children in India on the basis of National Family Health Survey, 1992-93, 1998-99 and 2005-06. The study brought out the prevalence of widespread disparities, and indicated that differentials were increasing over time. The study clearly revealed that such differentials did not always vary with the extent of poverty prevalent among the states. The author suggested additional measures to ensure the reduction of prevalence of malnourishment among children in India. These were: (i) The age of women having first child should be higher; (ii) Breast feeding of new born children should be started earlier; and (iii) The women should be made aware about factors affecting health. In addition, the author advocated for Integrated Child Development Services, so as to prevent or, at least, lessen the problem of child malnourishment from the face of India.

Ramanna (2007) reviewed the efforts made to tackle maternal health in early twentieth century. He examined the opinions of men and women doctors, civic leaders who were involved in campaigning for better health care for expectant mothers. The study revealed significant facts, first at that time it was asserted by the health department of Bombay that the high death rates could be brought down. Further, they focused that it was the duty of the state to prevent diseases and improve physical conditions of people. Second, different opinions were apparent within the better maternal care (BMC), as to who had to be given priority agenda for the state. It was combined efforts of men and women reformers, donors, activists doctors who tried to reach a wider section of the population. In conclusion, Ramanna (2007) remarked that even after so many years of independence, India still accounted for a high percentage of women dying in child birth.

Rani et al. (2007) carried out a cross-sectional survey on the extent of maternal health care seeking among adolescent tribal girls in Jharkhand. Their findings clearly revealed that maternal health care seeking was very limited. According to authors, a substantial proportion of girls did not receive any anti-natal services. Most of them delivered at home and a very small proportion received post-partum checkup. Through multivariate analysis, the authors observed that the different dimensions of a young women’s autonomy influenced her maternal health care.
seeking. Their findings further indicated that social support played a significant role in adolescent girls’ maternal health care seeking.

Gaiha et al. (2010) focused on the Indian experience with dietary changes for the period of 1993-2004, and received the evidence on nutrient intake and dietary changes, particularly the downward shift in Calorie, Protein and other nutrient intakes. They, for this downward shifts, offered a demand-based explanation in which higher food prices and near stagnant expenditure/income in rural India played significant roles, while allowing for lower calorie ‘requirements’ due to less strenuous activity patterns, life-style changes and improvements in the epidemiological environment. A new measure of child under-nutrition, more comprehensive than conventional ones, points to much higher levels of under-nutrition (6 out of 10 were under nourished) and higher risks of infectious diseases. The double burden of under nutrition and obesity exacerbates the gravity of under nutrition. As diets shift from traditional foods towards low-cost energy-dense foods, and physical activity patterns become less strenuous and sedentary, the excess energy from these foods affects children and adults differently within the same households. Children use up the energy and still remain underweight, while adults gain weight and become obese, thus running the risk of chronic non-communicable diseases.

The above mentioned general studies have, of course, dealt with different aspects of Health and Nutrition in India and elsewhere. However, not many recent studies for the Indian states and Union Territories are available which dealt intensively and extensively with various dynamic aspects of Health and Nutrition. Therefore, the present study was undertaken, the findings from which would expectedly make a useful addition in the existing knowledge as per the available literature on the subject cited above.