In the present chapter an attempt has been made to discuss the conceptual framework and review of available literature. This chapter is divided into two sections. In the first section, concept of education, health and their determinants are discussed. In the second section, an attempt is made to bring into limelight the various contemporary perspectives relevant to the present study by extensively reviewing the existing literature related to the study.

CONCEPTUAL FRAMEWORK

EDUCATION

Education is a human right. Education is essential for human emancipation and social development. It contributes to better health, higher productivity, greater income, human freedom, capability and esteemed living. Education has such a wide canvas that no sphere of life is untouched by it. Its importance hardly needs any elaboration. It continuously plays an important role in the development of a child into a responsible human being (Sharma, 2003).

Education develops the full personality of an individual in all fields and aspects making him intelligent, learned, bold and courageous and possessing strong good character. It contributes to the growth and development of society. It is only through education that the moral ideals and spiritual values, the aspiration of the nation and its cultural heritage is transferred from one generation to another for the preservation, purification and sublimation into higher and higher achievements. Thus education is greatly essential for the growth and development of individuals as well as society (Saxen, 1998a).

Education is a comprehensive term. Its implications are rich and varied. It deals with ever growing man in the ever growing society. Different philosophers, politicians, statesmen and educationist have defined education differently, according to their own point of view and circumstance (Sodhi and Arun, 1998a).
Etymologically the term education has been explained in a number of ways. It is derived from the Latin roots as under:

1. Education - To train, act of teaching or training.
2. Educere - To lead out, to draw out
3. Educare - To bring up, to raise, to educate

The Latin word ‘Education’ means to train ‘E’ means from inside and ‘Duco’ means to draw out, to lead out or to bring up. To combine the two we come to mean as to draw from within. Developing this concept further, we come to mean that education is a process which draws from within (Saxena, 1998a). Thus education is the development of an individual’s talent. It is to draw out inner knowledge, virtues and power of the child.

In India education has been defined and its aims expounded from the days of Rigvedas, Upnishads expounded that education it that whose end product is salvation. Thinkers and philosophers Yagavalkya, Kannad, Kautilya, Panini Adi Shankaracharya and other defined it differently at different times. Education is self-realization and a service of the mankind was said by Guru Nanak.

In modern times Swami Vivekanand laid stress on education being the manifestation of divine perfection already existing in man. Tagore held the view “Education means enabling the mind to find out that ultimate through which emancipates us from the bondage of dust and give the wealth, not of things, but of inner light, not a power but a love, making their thoughts its own and giving expression to it”.

Mahatma Gandhi has said “By education, mean all round drawing out of the best in child and man’s body, mind and spirit”. Dr. Zakir Hussain is of the opinion “Education is the process of the individual’s mind getting to its possible development. It is a long school which last a life time”. The Indian concept of education is well summarized by the secondary education commission.

Education according to Indian tradition is not merely a means to earning a thing, nor is it only a nursery to thought citizenship. It is initiation into the life of spirit, a
training of human souls in the pursuit of truth and proactive of virtue. It is a second birth, i.e., educating for liberation.

Western educational thinkers have defined education in different ways. According to Plato, “Education is the capacity to feel pleasure and pain at the right moment. It develops in the body and the soul of the pupil all the beauty and all the perfection which he is capable of”.

Aristotle said, Education is the creation of a sound mind in sound body. Pestetlozzi has said “Education is a natural harmonious and progressive development of mans innate power”. Feobel was of the view, “Education is an unfoldment of what is already unfolded in the germ. It is the process through which child makes his external”. T.P. Nunn has laid down, “Education is the complete development of the individuality of the child so that he can make an original contribution to human life according to the best of the capacity”.

Ross has said that the aim of education is the development of valuable personality and spiritual individuality of a person. Education is the process of living through a common reconstruction of experience. It is the development of all those capacities in the individual which will enable him to control his environment and fulfill his possibilities.

According to Brown, “Education means the culture which every generation purposely gives to its successors in order to qualify, to keep and to improve the level attained”.

In his wider sense education is a process. It is a process of development from cradle to grave. Education is essentially a process of growth and development which goes on throughout the whole life (Sodhi and Aruna, 1998b).

From the above discussion, it is now clear that since the time of Plato to the modern times of the John Dewy and Gandhiji, various educationists have defined education in various ways. Speaking frankly, the field of education is so vast and varied that to give a specific definition of education about which all educationists agree is very difficult. We see that some educationists have defined only one aspect of education
whereas the other emphasizes its other phases. The reason of difference of opinion is the different educationists, most of whom are philosophers, have different views about the aim of life according to idealist the aim of life is spiritual development. As such, they regard education as a spiritual process which aims at bringing together the soul and the creator leading to self realization.

Much in the same way, pragmatists think about education as a process of social progress because of the difference in the philosophy of life, different educationists define education is not related solely to any of the above mentioned views. It is more than either of them. In a real sense education is a sort of synthesis of all the above view points. In this sense, education includes the individual, the society, the environment, the social fabric and the prevailing tradition. Hence the definition of education ought to be very comprehensive and all inclusive one.

**Role of Education**

![Role of Education Diagram](image)

**Source:** Prepared by the Researcher

**Fig. 1.1**
Education is a lifelong process which takes place from the womb to the tomb. One should not confuse literacy and knowledge as being identical to education. Literacy and numeracy are means through which individuals are able to express themselves. It is a vehicle which helps in conveying ideas, thoughts and events over time and space.

Literacy as per the definition of the Indian census operations of 1991 can notes the number of literates per hundred of total pop’ and a person who can both read and write with understanding in any languages taken as literate. All children below the age of 7 years have been treated as literate in 1991 census. In 1971 and 1981 children below the age of 5 years were recommended as illiterate similarly, the meaning of knowledge is given as assured belief that is known, information, instruction, equipment learning practical skills and acquaintance”. Thus, knowledge is the sum and substances that are acquired by human beings through written or unwritten media.

On the other hand, education deals with the, all round development of human personality, bringing out the best in man. Education literally means bringing up or training a child it is a process through which power of body, mind and culture are strengthened, i.e. bringing of head, heart and hand together. Thus education is the process of getting informed, acquiring knowledge, skills and ability. In this process, literacy acts as one of the means or instruments of knowledge acquired our time and space. In facts, literacy and education are aids to achieve “Knowledge” and thus are process for ultimate universal knowledge.

The purpose of education is to make human beings capable and develop their skills and competence to meet the challenges of life and it has to be in full consonance with our entire life with its economics, intellectual, aesthetic, social and spiritual components, It should emerge from the core of our basic values and ethics and should live with varied forms of co-operation prevalent therein (Saxena, 1998b).

**Educational level**

Educational attainment ranks high in importance among the various qualities of a population. Seemingly the number of years of formal schooling would be one of the best indexes of a population’s educational attainment of comparative educational
accomplishment for the duration of the school years and the standard of work is highly variable between countries. The most basic minimum measurement of educational status is the degree of literacy. But even that is difficult to determine to what is needed is a rough indicator of ability to use written material. As a matter of convenience literacy is usually defined as the ability to read and write one’s name in the language of a country. This makes the qualification less meaningful, for close to 100 percent of the population in the most advanced nation is literate by this low standard (Trewartha, 1969).

In 1930 Finland applied perhaps the strictest definition where only those persons were classified as literate who passed a rather difficult test. Those who failed were divided into two categories the semi-literate persons, who could read and write, but made orthographic errors; and the illiterates who could neither read nor write (UNESCO, 1957). The Indian census has adopted this definition too. However a distinction can be made between the literates and the educated as has been done in case of India. All those persons who are classified as literates on the basis of their ability to both read and write understanding are further sub divided into a number of categories on the basis of their length of schooling (Hussain, 1994a).

A particular ladder of education is formed and there is a pattern comprising all the stages. The pattern may differ from country to country and state to state. Every country developed its own organization pattern or ladder of education. Our own ladder is a legacy of the British rule.

The ladder that Macaulay presented was nevertheless incomplete. But it was rather complete by the woods Dispatch in 1954. Hitherto the structure of education presented a picture of a body without a head or a tail. The great Dispatch completed the picture by furnishing it with the head and a tail in the form of elementary education and the university education respectively. It suggested three prominence stages of the educational ladder viz., the elementary, the secondary and the university. Although there have been minor changes in the ladder, but the main edifice as erected by the Dispatch has continued to stand firm even to this day (Safaya, 2002).
Educational Agencies

It is generally believed that children are educated in schools and colleges. But the truth is that a child received his education from various sources besides school and colleges which may be called as ‘Agencies of education’ Bhatia has rightly remarked- society has developed a number of specialized institutions to carry out these functions of education. These institutions are known as agencies of education.

The agencies of education are formal, informal and non-formal education. Formal Education is imparted in a school or college. It is consciously and deliberately planned to bring about specific and special influence in the education. So it is synonymous with educational institutions. School is thus a formal agency of education. Informal Education takes into its orbit all indirect influences of the home and the society. The press, the libraries, the films and other such agencies are included as agencies of informal education. Their influence is subtle and imperceptible, but at the same time very important and significant. Non-formal Education is an arrangement wherein flexibility is the key word. The system is an open one with regard to a various aspects of education, i.e., admissions, curriculum, place of instructions made of instructions, and the time and duration of instruction. Open university, open learning and the correspondence courses are the various example of such a system (Aggarwal, 2002).

Factors Affecting Education

Literacy is essential for eradicating poverty and mental isolation, for cultivating peaceful and friendly international relations and for permitting the free play of demographic processes (Chandna and Sindhu, 1980). The empirical observations about the space-time diffusion of literacy transition and economic transformation, though it may be difficult to establish as to which is cause and which is effect (Chandana, 1994).

There are inter-regional and intra-regional variation in literacy rates. The literacy rates in a country are determined largely by the historical, economical, social and cultural factors.

Historical Factor

The political or historical background holds the key to the understanding of the present low level of literacy of instance the ex-colonial countries are at a low level and
did not do much for the social development of their colonies (Hussain, 1994b). One unusual aspect of English education in India, according to Varghese was its concentration on general subjects and avoidance of scientific and technical education. He claims that the neglect of these areas of study created a gap between the ruling power and its colonies. In sum, the educational policy that the British imposed in India is partly responsible for the neglect of rural areas and the advancement of urban areas (Varghese, 1986).

At the dawn of independence, the literacy rate was very low. The present government in the ex-colonial countries has taken the literacy drive, but the scarcity of resources is coming in the way of eradication of illiteracy (Hussain, 1994c). Similarly, those areas, which have had a long spell of feudalistic rule, also continue to display low literacy rate as a legacy of their historic past (Chandana, 2004a).

**Economic Factor**

The literacy rate is also closely influenced by the type of economy. The difference in the literacy levels of the industrial and agricultural nations contrast so much that one cannot help inferring a correlation between the type of economy and literacy rates (Hussain, 1994c). The agricultural operations, especially in the developing countries, are such that these do not have any demand on education. On the other hand, the requirements, of non-agricultural economy are such that acquisition of literacy skills becomes a functional prerequisite (Hussain, 1994c). In this type of economy, higher education of various types is necessary and therefore more and more institutions grow up for the benefits of the trading community, selling and trade personal (Saxena, 1998c).

Next importance is the factor of correlation between literacy rate and the standard of living. Closely associated with this is the factor of cost of education. In the less developed countries where education is not free and the cost of education is high, the cost of imparting education to the children becomes an important determinant of literacy (Chandana, 2004a). It is difficult to expect children belonging to the families that lie below the poverty line can go to school, especially when they can start helping the family in its pursuits of making a living (Saxena, 1998c).
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**Main Determinants of Education**

![Diagram of Main Determinants of Education](image)

*Source: Prepared by the Researcher*

*Fig: 1.2*
It is difficult to expect children belonging to the families that lie below the poverty line can go to school, especially when they can start helping the family in its pursuits of making a living (Saxena, 1998c).

Degree of urbanization has often been referred to as another factor of literacy. This is a positive correlation between literacy rates and the degree of development. These the most urbanized societies have very high and even universal literacy rates while the rural societies usually display low level of literacy rates. Income-wise distribution of literacy groups are at the top in regard to literacy, and the intermediate income group holds the intermediate position while the lower income group stands at the bottom of the scale in regard to literacy as well (Acharya, 1984).

A positive correlation has been observed between literacy and stage of technological development a country has attained. Technological advancement opens a new vista of progress in all fields of development in a country. The technologically advanced countries have achieved greater heights of prosperity in all areas of human activity. These countries display high literacy rate of the countries where the technological advancement was in its infancy stage (Saxena, 1998c).

The recent development of means of transportations and communication has added a new dimension to the process of propagation of literacy and education in the less developed realm. It has increased the degree of spatial interaction. The so called rural isolation has been broken, the educational institution in the urban areas have now become accessible to the country side (Chandana, 2004b).

In the areas where the means of transport and communication is not developed they face lots of problem. As a result, many of the school going students cannot attend their schools regularly. The rural society which interacts more with urban areas with the development of means of transportation and communication starts appreciating the value of education and start making the use of education institution that are not located locally (Roy, 1998).
Social and Cultural Determinants

Education promotes development in the entire sector of the economy and yields high social and economic return. There are wide inter-state disparities in educational achievements. A state like Andhra Pradesh, Assam, Bihar, Gujarat, Himachal Pradesh, Karnataka, Kerala, Tamil Nadu, and West Bengal spend a higher percentage of this budgetary expenditure on education than other states, but on per capita basis, the north-eastern states also spend more on education like Himachal Pradesh and Jammu & Kashmir.

There is a positive correlation between the state granted to the women and literacy rates. Those societies which do not give equal status to males and females suffers prejudices against female education also display, low female literacy and hence low general literacy (Chandana, 2004b). There still prevails the system of early marriage of the female, particularly in rural areas, which takes away many girls from school before becoming literate and there has also been a shortage of girl schools in the rural areas, and the girl avoided to go to schools with a co-education. The purda system was also an abstract in the attainment of education of female and thus women’s were discouraged from being educated (Mathur, 1988).

Religion has played an important role in the process or propagation of education, those religion communities where oral worship has been in vogue for millennia of years; still have low literacy in comparison to those religious communities where the reading of religious book is part of religious tenets. Religion inculcates those moral qualities which mould the educational system on democratic lines of those societies which hold fanatical religious beliefs for their education to plan in their own way and deny free thinking and liberal attitudes in their children. On the other hands societies which believe in free thinking, liberal attitude and respect all religion provide education of a secular and liberal nature and promote liberal attitude’s and respect for all religious emphasizing only moral basis for educational processes and programs (Saxena, 1998d).

Similarly, the language in which education is usually imported is another important factor determining literacy rates of an area. The medium of instruction, if the
mother tongue of the people can help accentuate the literacy transition than in the multilingual societies of the third world, it has often been found that education in the mother tongue is more acceptable than the education in English or even the national language (Chandana, 2004c).

The general value system ethereal to by the people, in general, is also an equally important factor for instance, the desire on the part of people for getting educated may be determined by the general social value system cherished by a society. Higher the socio-economic awakening more favorable is the attitude of the people towards education (Chandana, 2004d).

Much of the progress in literacy in the less developed countries, which are lagging behind, depends largely upon the availability of facilities for getting educated. There exists a positive correlation between the literacy rates and the degree of availability of educational institutions. Lower the number of people per educational institutions, higher is the literacy rate. The availability of educational facilities with an easy access and within the reach of one’s pocket works as a positive factor in the propagation of literacy and education (Chandana, 2004e).

In the end mention must be made of the policies of the government, which in their own way affect the attitudes of the people toward education. Such policies like the free and compulsory education and adult education, literacy programme have had their positive impact felt in the countries that have followed them (Chandana, 2004f).

Political ideologies also influence education to a great deal. We see that political doctrines and set up of states organize education according to their political aims and ideals which are to be achieved through the educational process and programme. The purpose is just to prepare citizens for political conformity. In India also, after independence the government has followed the policy of propagating education among its masses as it adopted the idea of welfare state consequently, India today is the largest procedure of technical hands in the third world and may soon compete with the advanced countries in this regard (Saxena, 1998e).
Literacy and level of education are basic indicators of the level of development achieved by a society. The spread of literacy is generally associated with important traits of modern civilizations such as modernization, urbanization, industrialization, communication and commerce literacy forms and important in pit in overall development of individual enabling them to comprehend their social, political and cultural environment better and respond to it appropriately. A higher level of education and literacy leads to a greater awareness and also contributes in the improvement of the economic and social condition. It acts as a catalyst for social upliftment enhancing the returns on investment made in almost every aspect of development, be it population control, health, hygiene, environmental degradation control employment of weaker sections of the society (Census India, 2011).

HEALTH

The origin and evolution of geo-medical thoughts are still considered a debatable subject matter, but primarily the geographical treatise of this kind dates back to Hippocrates ages. Today our opinion seems to differ on the matters of research and approach to the subject, but the recent origin of geo-medical field study dates back to a little more than four decades ago after the II world war was over, which necessitated geographers to define the general concept of the disease and associated health problems of man in proper perspective (Khan, 1997a).

Health is a major determinant of happiness. A sick person can never be happy, no matter how well off he may otherwise be. A person with poor health is often a liability to his family and society. A society burdened with unhealthy people cannot be prosperous. Health is really the wealth. Healthy people use their wealth more judiciously. In spite of the paramount importance of health and diseases in the life of individuals and societies, health continues to be a neglected entity. However, during the past few decades, there has been a reawakening that health is a fundamental human right and a world-wide social goal; that it is essential to the satisfaction of basic human needs and to an improved quality of life; and, that it is to be attained by all people. It is an issue of social justice (Misra, 2007a).
Perspective for Health

Different disciplines look at health from the perspective of their own specialization and thrust. Health is not perceived the same way by all members of a community, including various professional groups (e.g., biomedical scientists, social specialists, health administrators, ecologists, etc) giving rise to confusion about the concept of health. In a world of continuous change, new concepts are bound to emerge based on new patterns of thought. Health has evolved over the centuries as a concept from an individual concern to a world-wide social goal and encompasses the whole quality of life. A brief account of the changing concepts of health is given below:

Biomedical Concepts

Traditionally, health has been viewed as an “absence of disease”, and if one was free from disease, then the person was considered healthy. The concept known as the “biomedical concept” has the basis in the “germ theory of disease” which dominated medical thought at the turn of the 20th century. The medical profession viewed the human body as a machine, disease as a consequence of the breakdown of the machine and one of the doctor’s tasks as repair of the machine. In this narrow view, became the ultimate goal of medicine. The criticism that is leveled against the biomedical concept is that it has minimized the role of the environmental, social, psychological and cultural determinants of health. The biomedical model was found inadequate to solve some of the major health problems of mankind (e.g., malnutrition, chronic diseases, accidents, drug abuse, mental illness, environmental pollution, population explosion) by elaborating the medical technologies. Developments in medical and social sciences led to the conclusion that the biomedical concept of health was inadequate (Misra, 2007b).

Ecological Concept

Deficiencies in the biomedical concept gave rise to other concepts. The ecologists put forward an attractive hypothesis which viewed health as a dynamic equilibrium between man and his environment, and disease a maladjustment of the human organism to the environment. Dubos defined health saying: “Health implies the relative absence of pain and discomfort and a continuous adaptation and adjustment to the environment to ensure optimal function”. Human ecological and cultural adaptations
do determine not only the occurrence of disease, but also the availability of food and the population explosion. The ecological concept raises two issues, viz. Imperfect man and imperfect environment. History argues strongly that improvement in human adaptation to natural environments can lead to longer life expectancies and a better quality of life-even in the absence of modern health delivery services.

**Psychosocial Concepts**

Contemporary developments in social sciences revealed that health is not only a biomedical phenomenon, but one which is influenced by social, psychological, cultural, economic and political factors of the people concerned (WHO, 1986a). These factors must be taken into consideration in defining and measuring health. Thus health is both a biological and social phenomenon.

**Holistic concept**

The holistic model is a synthesis of all the above concepts. It recognizes the strength of social, economic, political and environmental influences on health. It has been variously described as a unified or a multidimensional process involving the well-being of the whole person in the context of his environment. This view corresponds to the view held by the ancients that health implies a sound mind, in a sound body, in a sound family, in the sound environment. The holistic approach implies that all sectors of society have an effect on health, in particular, agriculture, animal husbandry, food, industry, education, housing, public works, communications and other sectors (WHO, 1978)

**Definitions of Health**

“Health” is one of those terms which most people find it difficult to define, although they are confident of its meaning. Therefore, many definitions of health have been offered from time to time, including the following:

- “Soundness of body or mind; that condition in which its functions are duly and efficiently discharged” (Oxford English Dictionary)
- “A condition or quality of the human organism expressing the adequate functioning of the organism in given conditions, genetic and environmental” (WHO, 1957) The widely accepted definition of health is that given by the World
Health Organisation (1948) in the preamble to its constitution, which is as follows:

“Health is a state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity”

In recent years, this statement has been amplified to include the ability to lead a “socially and economically productive life” (WHO, 1978). The WHO definition of health has been certified as being too broad. Some argue that health cannot be defined as a “state” at all, but must be seen as a process of continuous adjustment to the changing demands of living and of the changing meaning we give to life. It is a dynamic concept, The WHO definition of health is therefore considered by many as an idealistic goal than a realistic proportion. It refers to a situation that may exist in some individuals but not in everyone all the time; it is not usually observed in groups of human beings and in communities (WHO, 1981a). Some consider it irrelevant because if we accept the WHO definition, we are all sick.

In spite of the above limitations, the concept of health as defined by WHO is broad and positive in its implications; it sets out the standard, the standard of “positive” health.

Operational Definition of Health

The WHO definition of health is not an “operational” definition. “Operational definition” has been devised by a WHO study group. In this definition, the concepts of health can be seen as “a condition or quality of the human organism expressing the adequate functioning of the organism in given conditions, genetic or environmental”. In a narrow sense- one more useful for measuring purposes- health means: (a) there is no obvious evidence of disease, and that a person is functioning normally, i.e., conforming within normal limits of variation to the standards condition of health criteria generally accepted for one’s age, sex, community, and geographic region; and (b) the several organs of the body are functioning adequately in themselves and in relation to one another, which implies a kind of equilibrium or homeostasis- a condition relatively stable but which may vary as human beings adapt to internal and external stimuli (WHO, 1957).
New Philosophy of Health

In recent years, we have acquired a new philosophy of health, which may be stated as below:

- Health is a fundamental human right.
- Health is the essence of productive life, and not the result of ever increasing expenditure on medical care.
- Health is intersectoral.
- Health is an integral part of development.
- Health is central to the concept of quality of life.
- Health involves individuals, state and international responsibility.
- Health and its maintenance is a major social investment.
- Health is world-wide social goal (Park, 2005a).

Dimensions of Health

Health is multidimensional. The WHO definition envisages three specific dimensions- the physical, the mental and the social. As the knowledge base grows, the list may be expanding. Although these dimensions function and interact with one another, each has its own nature, and for descriptive purpose will be treated separately.

Physical Dimension

The state of physical health implies that “Perfect functioning of the body”. It assumes of a state in which every organ is in perfect harmony with the rest of the body. The signs of physical health in an individual are: a good complexion, a clean skin, bright eyes, lustrous hair with a body well clothed with firm flesh, not too fat, sweet breath, a good appetite, sound sleep, easy and coordinated movements.

Mental Dimension

Good mental health is the ability to respond to the many varied experiences of life with flexibility and a sense of purpose. The signs of mentally healthy person are that he is free from internal conflicts, he is well adjusted and has a good self control, and neither overcome by emotions, nor faces problems and solves them intelligently.
Social Dimension

Social well-being implies harmony and integration within the individual, between each individual, between each individual and other member of society and between individuals and the world in which they live. It has been defined as the “quantity and quality of an individual’s interpersonal ties and the extent of involvement with the community”

Positive Health

Health in the broad sense of the world does not merely mean the absence of disease or provision of diagnostic, curative and preventive services. It also includes as embodied in the WHO definition, a state of physical, mental and social well-being. The harmonious balance of this state of the human individual integrated into his environment constitutes health, as defined by World Health Organization.

The state of positive health implies the notion of “perfect functioning” of the body and mind. It conceptualizes health biologically, as a state in which every cell and every organ is functioning at optimum capacity and in perfect harmony with the rest of the body; psychologically, as a state in which the individual feels a sense of perfect well-being and of mastery over his environment, and socially, as a state in which the individual’s capacities for participation in the social system are optimal (Park, 2005b).

Responsibility for Health

The health status of an individual, a community or a nation is determined by the interplay between the environment of the man himself and the external environment, which surrounds him. Thus health is on one hand a highly personal responsibility and on the other hand, a major public concern. Finally, it involves the joint efforts of the whole social fabric viz., the individual, the community and the state to protect and promote health (Akram, 2007). According to first five year plan, health is a positive state of well being in which harmonious developments of mental and physical capacities of individuals lead to the enjoyment of individual to his total environment-physical and social (Goel, 2003). The concept of health development as distinct from the provision of medical care is a product of recent policy thinking. It is based on the fundamental principles that government has a responsibility for the health of their people and at the
duty individually and collectively to participate in the development of their own health (Park, 2005c).

**Indicators of Health**

As the name suggests, indicators are only an indication of a given situation or a reflection of that situation. Indicators have been given scientific respectability. The ideal indicators should be valid, reliable, sensitive, specific, feasible and relevant. Our understanding of health cannot be in terms of a single indicator; it must be conceived in terms of a profile, employing many indicators, which may be classified as:

- Mortality indicators
- Morbidity indicators
- Disability rates
- Nutritional status indicators
- Health care delivery indicators
- Indicators of social and mental health
- Environmental indicators

**Mortality Indicators**

Four mortality indices have been used to measure the level of health: Disease-specific mortality, crude death rate, infant mortality rate, maternal mortality ratio and life expectancy rate. Mortality indicators continue to be used as the starting point in the health status evaluation.

**Morbidity Indicators**

To describe health in terms of mortality rates only is misleading. This is because; mortality indicators do not reveal the burden of ill health in a community, as for example mental illness and rheumatoid arthritis. Therefore morbidity indicators are used to supplement mortality data to describe the health status of a population. Morbidity rate is the number of persons suffering from any kind of disease during a given time period (WHO, 1976).

**Disability Rates**

Disability rates related to illness and injury have come into use to supplement mortality and morbidity rate. The disability rates are based on the premise or notion that
health implies a full range of daily activities. The commonly used disability rates fall into two groups: (a) event-type indicators and (b) person-type indicators.

**Nutritional Status Indicators**

Nutritional status is a positive health indicator. Three nutritional status indicators are considered important as indicators of health status. They are:

- Anthropometric measurement of preschool children, e.g., weight and height, mid-arm circumference or Body Mass Index (BMI)
- Height (and sometimes weight) of children at school entry
- Prevalence of low birth weight (less than 2.5 kg)

**Healthcare Delivery Indicators**

The frequently used indicators of healthcare delivery are:

- Doctors-population ratio
- Bed-Population ratio
- Health/sub centre-population ratio
- Health/sub centre-area ratio

**Environmental Indicators**

Environmental indicators reflect the quality of physical and biological environment in which diseases occur and in which the people live. They include indicators relating to pollution of air and water, radiation, solid wastes, noise, exposure to toxic substances in food or drink. Among these, the most useful indicators are those measuring the proportion of the population having access to safe water and sanitation facilities.

**Socio-Economic Indicator**

These indicators do not directly measure health. Nevertheless, they are of great importance in the interpretation of the indicators of healthcare. These include:

- Rate of population increase
- Per capita GNP
- Level of unemployment
- Dependency ratio
- Literacy rates, especially female literacy rates
- Family size
- Housing: the number of persons per room
- Per capita “calorie” availability (WHO, 1981b)

Nutritional status indicators, healthcare delivery indicators, environmental indicators and socio-economic indicators are Indicators-cum-factors of health.

Health is defined to be a “state of complete physical, mental and social well-being, and it is not merely an absence of disease and infirmity”. Yet it needs no saying that the disease is the strongest indicator of temporary or long continued state of disturbed health. Then it obviously follows that prevention of disease is the surest way to ward-off health from and impairment. The prevention may be effectively achieved through the eradication of or control over disease causing factors (Park, 2005d). Thus, it becomes necessary to throw light on the concept of health and diseases.

**The Concept of Health and Disease**

The experience of feeling health remains endowed in vital functions of being physically and mentally well to express full range of potentialities and it can be achieved through complete elimination of disease. The concept of degree of health, hence, makes up a continuum from the deal of an absolute physical, mental and social well-being through variations of diseasedness to death.

**Concept of the Disease**

The disease is well accepted a negative concept which goes to refer to a disorder in body and mind. In a phenomenon of disease the two phases-the pre-pathogenesis and pathogenesis are commonly involved, in which the former refers to the preliminary onset of the disease where man is not actually involved but only potentially involved. Ecologically this phase is brought about by the combined action of three factors, namely; the agent, the host and the environment and that are usually known as *epidemiological triad*. Under optimal conditions normal interaction may guarantee health, while some interactions between these three mentioned factors do result in disease that ranges from single isolated case to an epidemic.
The latter phase begins with the entry of the disease agent into the human host. A certain period of time elapses between the entry of disease agent and onset of clinical signs and symptoms, as it is called the incubation period which varies from one disease to another. The patient during the incubation period may remain apparently healthy and ambulant but not treated to be free from tissue and physiological changes which occurs during the incubation period. As these changes are sub-clinical therefore, it is difficult to recognize them by the usual method of diagnosis. After the period of incubation the signs and symptoms of disease begin to appear indicating that the patient is sick. This process ultimately ends in either complete recovery from the disease or the chronicity of the ailments, disability or death of the patient. These events in the natural history of the disease are considered quite important in understanding the pathological with its entire process (Khan, 1997b).

**Classification of Disease**

It is medically accepted that diseases may be classified in various ways, but a true distinction between acute and chronic diseases, between infectious and degenerative diseases and between malignal and non-malignal diseases being well observed according to a recognized process of their symptoms and diagnosis. Among the various set of classifiable category of diseases, however, a universal acceptance is given only to acute and chronic diseases. A direct relevance to the authors research work is concerned with the study of some important selected diseases only (Khan, 1997c). Diseases included in acute illness are malaria/dengue, fever (All Types), acute respiratory infection (ARI), diarrhoea/dysentery and any other types of acute diseases. For chronic illness; diseases considered are tuberculosis, diabetes, hypertension, asthma, cancer and any other types of chronic diseases.

Acute and chronic diseases continue to be a major cause of morbidity and mortality. In spite of bacterial, viral and parasitic infections, diseases like dengue, fever, malaria etc. re-emerged. Thus, burden of infectious diseases continues to be very high. Poor sanitation, contaminated water supply and lack of proper facilities for solid and liquid waste management both in urban and rural area are responsible for periodic outbreaks of infectious diseases
Changes in life styles, longevity and dietary habits have resulted in earlier onset of diabetes, hypertension, obesity and cardiovascular diseases over the last few decades. State wise and rural-urban disparities are of great concern in the health status outcomes.

**NATURAL HISTORY OF THE DISEASE PROCESS**


**Fig. 1.3**
The Indian health care system consists of public health sector also private sector and an informal network of providers of healthcare operating in an irregular manner of lower quality, with no controls on what services can be provided by whom, and at what cost, and no standardized protocols to help measure the quality of care. In spite of all these formal and informal groups of healthcare, there is a wide disparity in access to a particularly vulnerable section of society, further worsened by the poor functioning of the public health system (Sagar and Kishor, 2007a).

Rural population in India constitutes more than 70% of its total population and has a direct impact on health status. However the best health services and infrastructure are located in urban areas. Rural healthcare in most states is marked by absenteeism of doctors/health providers, low level of skills, shortage of medicines, inadequate supervision and harsh behavior attitudes. As a result, health outcomes in India are low compared to neighboring countries (Sagar and Kishor, 2007b). India has more persons suffering from endemic or chronic hunger than any other country, whether measured by calorie intake or anthropometric indicators of malnutrition, than any other country. The eleventh plan must have an explicit and concrete goal of “a hunger-free India” or “food and nutrition security for all” and finally the eleventh plan must ensure that clean drinking water, toilets, drainage facilities, basic health services, etc., are available to all persons at a low cost (Swaminathan, 2007).

**Determinants of Health**

Health is multifactorial. The factors which have been found to have the most significant influence on health are widely known as the determinants of health. While health services and social services make a contribution to health and social care, for example, education, employment, housing and environment. Thus conceptually, the health of individuals and whole communities may be considered to be the result of many interactions and it is very much difficult to classify these determinants, because the categories of these determinants mostly overlap or they are not discrete. We will discuss five categories of factors and each has strong implication for our health. They are heredity, natural environment and social-cultural determinants (WHO, 1998).
Heredity

Heredity means the transmission of certain traits from parents to offspring in all life forms; micro organism to human beings. The transmission takes place through decoding of genes. Gene is the ultimate biological unit of heredity; the part of or place (locus) on the chromosomes that determines the physical inheritance and the constitution. Genes carry the informational code that determines everything from the color of our hair and eyes to the structure of chemical components within the body. A disruption in the code or the wrong code can have significant effects on health. Genes determine the internal as well as external features of human beings in a number of ways, i.e. body size, disease resistance, disease susceptibility, genetically determined. In addition, a weak heart or tendency for cancer can also be inherited. Whereas it is important to realize that the practice of healthy lifestyle habits can mediate the effects of genes. It is important to counsel individual about the power of healthy living in preventing disease and injury (Misra, 2007c).

Natural Environment

Each discipline defines the environment in its own way. Medical geography treats environment as a composite milieu within which human beings live and work. Natural environment includes factors like relief, soils, climate, flora and fauna in all their details. Analytically environment can be grouped into two composite factors: organic and inorganic. The latter covers temperature, humidity, air, light, water and the trace elements present in them. Factors like radiation, magnetic field, cosmic rays, static electricity, etc. are also important. The organic elements consist of plants, animal life and micro-organisms. The relationship between human health and his environment is a two-way process. We improve our living conditions and increase our comforts, but alteration to the environment is threatening our health (Misra, 2007d).

Our environment gets polluted from a wide range of human activities: improper disposal of human excreta and garbage, smoke from coal or oil burning; fumes from vehicles, industrial discharges, such as mercury and other chemicals or the end products of nuclear fission which poison the environment and concentrate as an undesirable substance in human health. Excessive noise causes deafness.
Main Determinants of Health

General, sub-economic, cultural and Environmental Conditions

1. Agricultural Production and nutrition
2. Access to quality health
3. Exposure to environmental hazards at home and workplace
4. Living and working conditions

Social and Community Network

Individual life style and Hereditary Factors

Age Sex


Fig. 1.4
Food stuffs are contaminated during their preparation and processing and thus cause out breaks of infection. Population explosion, beyond the capacity of the soil, results in malnutrition; over consumption of food causes obesity (Kumar, 1987).

Physical environment consists of macro environment and micro environment, which affects human health in a number of ways. Contaminated water is the single greatest contributor to serious illness, particularly in developing countries. Diseases such as enteritis, diarrhoea and cholera cause many deaths in undeveloped countries. Polluted air poses more challenges than water pollution. Acid rain and the depletion of the ozone layer are one among the most serious air pollution threats.

The relationship between climate and diseases is well known. Some diseases are typical warm climate, some to wet climate and some to cold climate. Heat strokes are more common in hot and dry climatic conditions. In India, majority of people live in rural areas where houses reasons why the health scenario of rural India is highly depressing. Indian cities are full of slums. The environmental conditions of these slums are very unhygienic so that even healthy persons become easy victims of disease (Misra, 2007e).

Socio-Cultural Determinants

Socio-cultural determinants consist of religion, race/gender, socio-economic status, education, occupation, family composition, etc. Social environment and lifestyle of people have a strong impact on health. Race, income, Level of education, gender, location and occupation are some components of social environment that have been studied. The way societies govern effects policy decisions, which have implications for decisions, which have implications for distribution of resources and access healthcare.

Health requires the promotion of a healthy lifestyle. Many current-day health problems, especially in the developed countries (e.g., coronary heart disease, obesity, lung cancer, drug addiction) are associated with lifestyle changes. In developing countries such as India where traditional lifestyles still persist, the risks of illness and death are connected with lack of sanitation, poor nutrition, personal hygiene, elementary human habits, customs and cultural patterns. It may be may be noted that not all lifestyle
factors are harmful. There are many that can actually promote health. Examples include adequate nutrition, enough sleep, sufficient physical activity, etc.

In short, the achievement of optimum health demands adoption of healthy lifestyles. Health is both a consequence of healthy lifestyles. Health is both a consequence of an individual’s and a factor in determining it (WHO, 1986b). Some religion have guidelines that impact on health, for examples, some religion encouraged to eat a modified vegetarian diet, not smoke or to drink alcohol. It is thought that it is the practice of specific health habits, rather than specific religious beliefs that accounts for better health outcomes.

Various genders and health related demographic researchers agree over women’s pivotal role in health as the nation’s health and development is directly related to women. It is being recognized that education in general and women education in particular has a positive impact on health status. Women education is interlinked with a number of health determinants like age at marriage, delay in the first child birth, immunization, household hygiene and utilization of health facilities.

Health is not just an absence of disease, nor is it confined to the state of the body. It is directly related to the behavior of man in the society resulting from his world view, his style of life, particularly with his approach to others. Human society constitutes a number of diverse people and equally different interest and concerns. It can function efficiently only if their individual member follows the rules of the society.

Among the social factors that impact health, education is one of the most important factors affecting health. Education includes character building, literacy and knowledge of one’s environment and the acquisition of the ability to earn one’s livelihood. It has been proved that education is essential for healthy living; the prevailing literacy scenario in India is really a matter of great concern. It is not prime importance, because the health status unless the education of the girls is of prime importance, because the health of future mothers and children depends on it (Misra, 2007f). Education influences the health status of the people that in turn influences their earning capacities. An illiterate person neither understands the cause of diseases, nor does he know the nutritional requirement of the body. Knowledge of health facilities is also poor. That is why, the countries, which are high on literacy, are also the countries that are high on
longevity of life and low on child and maternal mortality. With so many illiterate mothers, it is not possible to bring up children well. No wonder that child mortality in India is high and so is the expectancy of life (Misra, 2007g).

Culture acts as a medium through which man perceives the world around him. Disease and their precautions and preventions, to a large extent are culturally specific.

**Socio-Economic Determinants**

Socio-economic conditions have long been known to influence human health and have direct relationship with the health status, where there are higher levels of income, education and occupation, there usually exists lower rates of mortality. It is obvious that where there are more economic resources, there is a higher standard of living which results in greater access to healthcare and medical resources. For the majority of the world’s people, health status is determined primarily by their level of socio-economic development, e.g., per capita GNP, education, nutrition, employment, housing, the political system of the country, etc. Those of major importance are:

*Economic Status:* Difference in life expectancy as disparity in mortality rates and other health measures between wealthier and poorer countries. The per capita GNP is the most widely accepted measure of general economic performance. It is the economic progress that has been the major factors in reducing morbidity, increasing life expectancy and improving the quality of life. The economic status determines the purchasing power, standard of living, quality of life, family size and the pattern of disease and deviant behavior in the community. It is also an important factor in seeking health care. Ironically, affluence may be a contributory cause of illness as exemplified by the high rates of coronary heart disease, diabetes and obesity in the upper socio-economic groups. It is estimated that at least one third of the India’s population live below the poverty line. Thus, it means that about 350 million people are undernourished and hence prone to various kinds of deficiency diseases as well as others. There is a direct correlation between health and poverty as poverty has a direct relationship with morbidity and longevity of people.

*Education:* A second major factor influencing health status is education (especially female education). The world map of illiteracy closely coincides with the
maps of poverty, malnutrition, ill health, high infant and child mortality rates. Studies indicate that education, to some extent, compensates the effects of poverty on health, irrespective of the availability of health facilities.

**Occupation:** Occupational Pattern of society has also an impact on the health status. People engaged in agriculture are more exposed to the natural calamities. The income of the persons related to primary economic activities is low as compared to those who are engaged in other sectors. This too has its influence on health through nutrition intake differentials and expenditure on health. Rural areas have very poor accessibility of health services. There are occupational specific health hazards, particularly in the industrial sectors, workers engaged in mining developed diseases related to the respiratory system including lung TB. Mine blasts cause many injuries and deaths (Misra, 2007h).

**Political System:** Health is also related to the country’s political system. Often the main obstacles to the implementation of health technology are not technical, but rather political. The degree to which health services are made available and accessible to different segments of the society are examples of the manner in which the political system can shape community health services. The percentage of GNP spent on health is a quantitative indicator of political commitment. To achieve the goal of health for all WHO has set the target of at least 5 per cent expenditure of each country’s GNP on healthcare. If poor health patterns are to be changed, then changes must be made in the entire socio-political system in any given community. Social, economic and political action is required to eliminate health hazards in people’s working and living environment (WHO, 1986c).

In spite of heredity, environment, socio-cultural and socio-economic determinants, and some other determinants like water supply, sanitation and sewerage systems also has a direct influence on human health. India needs to make adequate investments in water supply; sewerage systems and sanitation reduce that load of infectious diseases (India Health Report, 2003).
**Safe Drinking Water**

Safe drinking water and improved sanitation play a major role in well being of the people, and has a significant bearing on infant mortality rate, death rate, longevity and productivity. More than 70-80 per cent of illnesses are related to water contamination and poor sanitation. Women and children are particularly more prone to the effects of water contamination (Jetli and Sethi, 2007).

**Sanitation**

The basic elements of quality of life essentially include safe drinking water, food security, own or safe shelter and sanitation. It is well known fact that 60-80 percent of all illnesses are caused due to unhealthy sanitary conditions and unsafe water supply. The provision of safe drinking water, facilities for the human excreta disposal, cleanliness of the surroundings and public places etc. are priority for a healthy society. But unfortunately neither government nor the people have given attention seriously.

**Nutrition**

Although the country has been able to eliminate the nutritional deficiency syndrome like pellagra, beri-beri, scurvy, etc., yet chronic energy deficiency among adults, under nutrition among children and micro-nutrient deficiencies such as goitre, blindness due to vitamin-A deficiency and anemia are still prevalent across all sections of the population. Access to healthy diets and optimum nutrition are keys to good health. Both the under and over nutrition are the root causes of many types of health problems. So, good nutrition is a major component of a healthy life. It is an accepted fact that the poor health status of low income countries is the poor health status of low income countries is the product of inadequate nutrition, lack of protected water supply, and overcrowded and insanitary housing conditions. These conditions lead to deficiency diseases, airborne diseases, and feacally related and water borne diseases, which have greater impact on morbidity pattern thus diseases, arise from a set of conditions which in themselves represent poverty and deprivation (Pattnaik, 1994).
LITERATURE REVIEW

The review of literature forms an important part of research work because it deals with critical examination of various published and unpublished works related to the study undertaken. Any worthwhile research study in any field of knowledge requires an adequate familiarity with the work which has already been done in the same area. A survey of the writings provides evidence that, the research is familiar with what is already known and what is still unknown and untested. Since effective research is based on past knowledge thus step helps in eliminating the duplication of what has been done, and provides useful hypothesis and helpful suggestions for investigation. Related review is available guide to define the problems, to recognize its significance, to suggest design and sources of data for effective analysis and to arrive at fruitful conclusion. In this chapter an attempt has been made to review some of the relevant works done concerned with the title of my research work. This chapter gives a review of the available literature concerned with the education and health at national and international level.

The entire extent of studies done on different aspects of education is so vast that they cannot be recorded on few numbers of pages. Therefore, an attempt has been made to review some of the relevant work done on education.

King (1969) in his book, “Education and Development in Western Europe” has discussed about world perspective in education and social change. The present volume has two main purposes: firstly to provide an introduction to Western Europe’s main educational institutions and problems at a time of great importance for educational decision throughout the world and secondly to illustrate how comparative education can use particular themes or concepts as “points of penetration” into cultural or crises of policy.

Kotthari (1970) had written a famous book, “Education, Science and National Development” in which he explained that education has never been more important in the life of the nation than it is today. We cannot afford to hesitant or go slow in educational improvement and to make it science based. On it, more than anything else depends national development, welfare and security. Further he analyzed that Industrial growth and educational development are closely coupled together. They feed and accelerate each
other. That is why expenditure on education is productive in the sense that it pays back and leads to acceleration of economic growth.

Saxena, (1975) published his book, on the topic “Sociological Perspective in Indian Education” discussing about the basic function of the educational system giving importance to education and human resources. According to him all development basically depends on the development of human resource and since human resources themselves cannot be adequately developed without education, so education assumes the place of singular significance. Education promotes development through the agency of human resources.

Tilak, (1979) in his work evaluated the inter-state disparities in educational development in India. By constructing a weighted composite index he showed glaring inequalities in educational development among Indian States. He concluded that the states like Kerala and Himachal Pradesh are very forward in educational development where as states like Bihar, Rajasthan, Madhya Pradesh are very backward. He also emphasized that the causes for these disparities are different among the states.

The study of “Inequalities in Higher Education in India”, Bahadur and Ahmad (1981) have highlighted that education in India reflects an urban bias, especially in favor of higher order urban centers. Due to the nature of society and uneven economic development, unevenly distributed educational facilities have created a pattern in educational development which makes the problem of educational backwardness of the country more acute.

Shrivastava (1981) has discussed the spatial pattern of formal education institutions in Banda district of Uttar Pradesh. He examined their levels of development and has given a plan for the optimal organization of educational facilities by minimizing their distance and pressure of population in study area.

Dhanapal and Ahmad (1982) in their paper, “School provision in urban Delhi: A Spatial perspective” examine that there are spatial inequalities in the distribution of educational services; which is a basic component of social well being, and these
educational inequalities are not only observed in different part of the world but also exists in India too. He took urban Delhi, as an example with emphasis on school services. The analysis shows that the disparities exist in the distribution of school services in urban Delhi. Further, paper reveals that the inner city is so far as the density of school is concerned. In terms of school-population ratio the inner city is, however not in that advantageous position.

Kapoor (1984) in his book, “Education and National Development” has attempted to show the educational development at different levels. In his book he has also been described a critical assessment of the problems of education vis-a-vis development programmes focusing mainly on the education for rural development, education and technology and barriers to national development.

Redy (1985) has analyzed the inter-state disparities in the levels of educational development in India. He ranked the states in terms of educational facilities available per 100 thousand of population and concluded that north-eastern states occupied the first three ranks, while Uttar Pradesh, Rajasthan and Tamil Nadu occupied the bottom three positions. He also emphasized that the overall rural females scheduled castes and scheduled tribes are lagging behind in educational attainment.

Zaidi, (1986) has intended to analyze the disparities in educational development in different regions in India and particularly in various regions of the state of Uttar Pradesh on the basis of certain indicators of educational development. His study pointed out the inter-state as well as the intra-state inequalities in educational development.

Raza and Aggarwal (1986) in their paper, “Inequalities in the levels of literacy in India” linked educational disparity with socio-economic conditions of the districts. In the paper they concluded that there is positive correlation between educational status and socio-economic conditions of any region.

Bhuiyan and Banarjee, (1991) have analyzed the regional disparities of education (up to higher secondary levels) in Bangladesh. They concluded that educational disparities are directly related to developmental disparities of the region i.e. developed
areas have higher literacy percentages than the backward rural areas. He also emphasized that education is highly concentrated in urban locations and at places having better connectivity. They also emphasized that a planned educational policy and financial assistance should be provided to the rural poor.

Mohisini, (1991) has done an important work on, “The Status and Education of Girl Child: Taking a Historical Perspective in a Systematic Way”. He has discussed about the educational problem of girl child and suggested the strategy for solving them. Since, absence of large number of girl’s school and poverty are two major causes of poor female literacy rate, he has suggested the educational planners and administrators to put special emphasis on it by making various arrangements, like girls’ school, child care centre, free supply of books, uniform etc.

Dash (1993) studied “Regional inequalities in educational Development in Orissa”. The main objective of the paper is to assess the growth of education in Orissa and examines the inequalities among different districts in the state of Orissa. The former point is analyzed with the help of certain indicators of educational development i.e., number of institutions, enrolment ratio, number of teachers and teacher-pupil ratio. The latter is associated with the inequalities in educational development among the districts, with the help of literacy rates. It is pointed out in the paper that earlier, education was considered as an investment in human capital contributing to higher productivity and income. But now a day the productive role of education has been questioned and it comes to be regarded as one of the most important factors related with the inequality. The empirical evidence of the present study indicates that there exists an inter-district inequality in educational development.

Misra, (1997) in his paper, “Levels of Literacy among Dalits Population: A case study of Atarra Tehsil U.P.” examines the mass illiteracy among Dalits (under privileged section of the society), who are in higher ratio than any other classes in Indian society. For Dalit illiteracy he explained various causes may be described viz., poverty, unawareness of value of education, lack of basic schooling amenities etc. He lastly examines that literacy and education must be corrected with the life pattern of Dalits.
Roy (1998) in his study, “Educational Situation in Hill Village of West Bengal: A case study of Purbang Village of Darjelling” concluded that the literacy rate of Purbang is quite good, but the educational standard is poor. Secondary and College level education is not at all satisfactory. He pointed out that the high literacy rate is due to free education only up to primary level. In this study, it was also observed that the household with large landholdings have a higher literacy rate (62.38%) than the landless category (29.35%). It reveals that a better economic condition also assures a better educational background.

The study attempted by Anthony and Steves (1999) on reshaping education in the New South Africa, explores spatial aspects of human and financial resources provision, focusing on issues which have dominated educational policy debate since 1994. Rural/Urban inequalities are emphasized with reference to community schools in former black homelands, farm schools and township schools. State policies seek redistribution of resources between provinces but provincial autonomy in the use of resources is shown to be widening inter provincial inequalities.

Joshi (2000) in his article on, “Education Development in India: Spatio-Temporal Appraisal” states that there is a wide spatial variation in the distribution of Crude Literacy Rate (CLR), Female Literacy Rate (FLR), Index of Deprivation (IDP) and Education Development Index (EDI) in India. Although FLR was continuously lower than CLR but there was positive correlation between CLR and FLR i.e., the states having high CLR also have high FLR and vice-versa.

Battacharya, (2002) in his article, “Introduction: An Approach to education and Inequality” analyzed the inequality in India with reference to education. He correlates the inequality with history and explained that inequalities that were already existed in India before colonial times in access to education for the privileged and unprivileged section have been ‘liable to be exacerbated’ by the colonial education system.

Atchrarena and Gasperini (2003) have published his book, “Education for Rural Development: Towards New Policy Responses”. They have emphasized that for education a large number of people in rural areas is crucial for achieving sustainable development. According to them education and training are the two most powerful
weapons in the fight against rural poverty and for rural development. In order to bring out the significance change, education system reformers must appreciate the complexity of rural development. To meet the challenges facing the rural world today, an integrated view of education is required, contact on access to quality basis education for all.

Kaur (2003) focused on gender disparity in literacy in Punjab (India). It was found that gender disparity bears a strong inverse correlation with level of general literacy. Similarly, gender disparity in literacy was lower among the urbanites than that among the rurality. She also explained that the urbanized and economically sound regions have high literacy rates than that of rural folk.

Mitra et.al. (2003) in their study of inter-state disparity in higher education came to the conclusion that the well-off states have better professional education as compared to the poorer states.

Singh and Singh (2005) have analyzed the level of literacy among the Tharur of Mihinpurwa Block of Bahraich District, U.P. and concluded that the level of existing literacy is only up to primary stage. The study further shows that the level of literacy is higher in the village situated in the vicinity of Mihinpurwa town than that of the villages situated in the remote areas. Poverty is the main cause of low literacy. The Literacy is also influenced by the educational facilities provided by the urban centers as colleges are a recent phenomenon.

Zachariah (2005) in his article, “Universal Elementary Education” discussed India’s goal of universal elementary education. In that he discussed three main challenges: expending access, raising learning achievements and reducing gaps in education outcomes. The major road block in achieving Universal Elementary Education is the absence of quality education in schools. There is now a sense of urgency in the effects of the government both at the centre and the states, NGOs and Civil Schools to provide good quality education for all.

Ashraf, Ahmad and Khurshid (2008) in their paper entitled, “Status of Women Education in Aligarh City” said that Educational level among women of the family is one
of the most important aspect as it help us to know the socio-economic, household, environmental, health and nutritional status of the family and also awareness of women for their children and their overall development. They conclude that the status of the women is low and subordinate in major parts of Aligarh city. There has been a wide gap in the literacy level among women/girls in different wards and religion in Aligarh city. They also concluded that those households who are educationally advanced, they are more inclined towards the family planning, with low drop-out ratio in children and spend more income on education. To improve the situation to some extent they suggested that there should be increase in awareness for women education in general and scheduled castes in particular. Government schools should be provided with sufficient infrastructure facilities and credit on low interest and loan should be provided to the poor families for education.

Bhat and Padder (2008) in their article, “Indian Higher Education in the New Millennium: Challenges and Opportunities” have shown the present scenario of Indian higher education. When India became independent, it had only 20 universities and 500 colleges since then determined efforts were made to build a network of universities, and their affiliated colleges and today India ranks very high in terms of the size of the network of higher education institutions with 6.75 million students enrolled. The number of students per 100 thousand of population has increased significantly since independence from 48 per 100 thousand of population in 1951 to 613 per 100 thousand of population in 1997. In spite of the rapid expansion of the system in 50 years, access to higher education still remains an issue as the pressure of India’s very youthful population continues to bear on it. There is need to place greater emphasis on enrolment of students from unprivileged backgrounds. Most of the higher education institutions in India are public institutions, though efforts have been initiated to allow opening of private universities and result is that the rapid growth of self financing private universities and colleges is a recent phenomenon.

Ali and Hussain (2009) in their paper, “Literacy and Backwardness of Muslims in Malda District: A Planning Approach for Human Development” concluded that low level of literacy is the main cause of backwardness of the Muslim community. Enhancement of
the literacy level is the only solution to bring social consciousness among them, subsequently decrease in growth of population and increase of urbanization, in a nutshell; entire socio-economic development of Muslim community depends on the efforts of raising their literacy rate which may diminish the human group disparities in the district. In this regard they said that parents should be motivated to ensure 100 per cent enrolment of their children in primary schools, adult literacy programme should run in full swing in each village, to provide free short term professional education and training to youths that can enhance individual earning capability and productivity and to generate social awareness among community to have small size family.

Verma and Gogna (2009) in their paper, “An Empirical Investigation into Relation between Education and Development Amongst Social Groups in Punjab: A Case Study” examine empirically the relation between education and development using the household level data collected from sample survey in the Doab region of Punjab. In their study they concluded that in all surveyed districts urban literacy is higher than rural literacy and female literacy is less than the male literacy. It may also be inferred from the study that, for achieving full literacy, attention needs to be given to female literacy and in the last he suggested that mission education for all a success, there is need of taking firm steps with people’s participation and is to be implemented with cooperation and collaboration of all.

Paper “The State of Higher Education in West Bengal: A Regional Perspective” attempted by Jana and Ghosh (2011), brings to light some uncomfortable pictures of higher education in West Bengal. Higher education sector in the state is characterized by uneven regional or inter-district development as well as imbalance within the major streams. This sector is plagued by various problems viz., dearth of eligible and quality teachers, infrastructure and above all, absence of proper institutional mechanism that can ensure proper return to investment made by the exchequer. Their paper attempts to look into some important parameters in higher education and attempts to find the major areas of concern in the higher education sector in the state.
Siddqui and Hannan (2011) in their paper, “Trend and Pattern of Literacy Rate in Eastern Uttar Pradesh” examines that persons, male and female literacy rate are registered to be 66.12, 77.87 and 53.05 per cent in eastern Uttar Pradesh (Census 2011). It tends to increase from north to south in the study region. They conclude that these variations are associated with educational facilities, urbanization and infrastructural facilities. Female literacy rate may be increased by increasing high school and number of teachers in senior basic school. Further they concluded that the major factor hindering the higher education of females in rural areas is lack of colleges in or near by the villages. Hence step should be taken to establish colleges in rural areas to provide educational and employment opportunities to rural females close to their residence.

Farooqui and Khan (1972) studied the complete diet surveys conducted during the course of a year under varied seasonal setting in two contrast villages of Ganga-Yamuna Doab. The study is based on the factual information regarding the consumption of the different types of foods and the incidence of major deficiency diseases recorded over a period of one week during each of the four respective seasons in the villages. The survey indicates that the daily diet of the people in Itwarpur and Alhadinpur is far below the standard requirements and varies greatly from one season to the other. The highest incidences of deficiency diseases were found in summer and a rainy season in both the villages. An improved daily diet would perhaps minimize the incidence of the diseases substantially.

Rajagopal (1981) in his paper, “Environmental Factors in Human Health” explained that the environment can be considered to be an integral part of health development, since any impact on man's environment also influences his state of well being. Every sector of the nation’s economy while trying to develop leaves it impact on environment and therefore, every sector or department of the economy while planning for its growth should at the same time pay adequate attention to the unfavorable impact on environment and take simultaneous steps by devising suitable strategies to minimize and if possible totally eliminate consequent environmental health degradation. There should be awareness of environmental degradation and pollution with their disastrous consequences on the health and welfare of mankind.
Mc Glashan (1984) in his paper, “Towards a Medical Geographical Agenda for India” attempted to outline some of the opportunities and needs in the area of health geography in India. Thus in the field of medical services, it can be claimed that need of geographical evaluation will continue to exist until every Indian citizen from highest to lowest in this vast land has equal opportunity to enjoy a healthy and fulfilling life. The challenge to medical geographers in India, both in disease ecological studies and in health service provision is so vast that the subject could well employ the talents of every post graduate geographer for the rest of this century.

Jones and Moon (1987) in their book, “Health, Disease and Society: An Introduction to Medical Geography” has attempted to elucidate the social and environmental causes of ill health in which geography can play an important role. They also pointed out various approaches to the study of medical geography. The geographical pattern of disease with the help of the collection of individual survey based data, and the analysis of such data to relate disease patterns to social and environmental variables. They also discussed communicable diseases mental illness and the biomedical view to explain the occurrence of illness. They found the social and spatial inequalities in access to health care, author attempted to discover the root cause of these inequalities and their satisfactory explanation on the way society is structured and a number of policy initiatives are considered to ameliorate these inequalities. It examines the production of ill health and the consumption of medical care in relation to societal organization.

Chatterjee (1988) in his book, “Implementing Health Policy” discussed about where we are and where we have to go in the field of health. In 1982 the Govt. of India enunciated the National Health Policy to assess the country’s health situation and its overall goal to provide health care to all and its strategy to restructure primary health care services. The implementation of health policy has also been discussed. It examines the biomedical point of view discussing health needs in terms of redressing the three D's- death, disease and disability and also importantly, in terms of eliminating differentials in the health of different population subgroups in the country. The book focuses on the health status of woman and woman's access to health services. The underutilization of health services points also to the possibility that a lack of "demand" for primary health
care could be a major factor constraining its spread. The health policy calls for "community" participation as a means of creating demand. It discusses about private health programmes; the social and organizational requirements for primary health care, organizing intersectoral coordination and finally the adequate resource allocation to the primary health sector.

Lear Month (1988) describes the spatial patterns of disease, the causes and inter-relationship between biophysical environment, social environment, culture, health care and disease. The book, “Disease Ecology” is divided in to three parts. The first part focuses attention on the problems of health and diseases in developed countries. The universal diseases like measles, influenza and pneumonia are important in developed countries mainly as morbidity rather than mortality. While the degenerative diseases, along with accidents, are dominant causes of death in the developed world. The second part focuses attention on the health and diseases in third world countries. The universal diseases in third world countries are major cause of mortality and also discussed about the chronic hunger and malnutrition. The third part of the book has attempted to pull together the picture of health and disease and health services in both developed and developing countries. Lastly author points out the relationship between disease ecology and geography of health care and of health education.

Chatterjee (1991) studied that different environmental deficiencies lead to deterioration of environmental health and spread of diseases. The environmental deficiencies are closely linked with the vicious cycle of population pressure, malnutrition and infection. The study has been made with reference to the state of west Bengal and is limited to only two selected communicable diseases, i.e. Gastro enteritis and pulmonary T.B. An attempt was made to find out the correlation between the rising population and the disease communicability, which comes out to be positive.

Choubey (1994) in his paper, “Allopathic and Traditional Healthcare Services of Tribal Population of Bastar (M.P.)” attempted to analyze the allopathic as well as traditional health care services and their utility and effect amongst the tribal population of Bastar region of Madhya Pradesh. The author has used primary as well as secondary data
for the study. The tribal people of the area mainly prefer to the traditional healthcare system and sometime condition of the patient becomes very critical, because of inadequate medical facilities and poor means of transportation. He calculated the Hospital-Population ratio and Doctor-Population Ratio on the basis of secondary data. Finally he concluded that tribal health care system is responsible for ill-health conditions because they never like to go directly to a qualified doctor.

Singh and Kumar (1995) in their paper, “Utilization Pattern of Healthcare Facilities in Rural Areas of Varanasi” studied the utilization pattern of selected facilities e.g. maternal and child health care, immunization, family planning etc. provided by primary health centers to rural masses. Attempts were also made to analyze the same with the geographic distances and the socio-economic levels of the sampled respondents. The study revealed that although awareness amongst the respondents is relatively high yet the utilization pattern of the services rendered by primary health centre is low owing to improper location, low level of literacy and income, non-availability of emergency services etc. There remains a good scope for making suitable modifications and improvements in existing health care facilities for enhancing community participation in various national health programmes launched by the Government for them.

Bryant (1996) in his book “Health and the Developing world” analyzed many of the health problems which fall into recognizable patterns in the developing world. But the problems of each country are tied to the culture, history and socio-economic development of that individual country. He gave special attention to man power needs, and develops the concept of a health team that would include a doctor, a nurse, an auxiliary nurse and midwife. He also suggested the education of health team that would help to meet the needs of developing world, facing health problems.

Mishra and Mishra (1996) in her paper, “Spatial Planning for Medical Facilities in Rae-Bareli District, U.P. states that the majority of population swarming in rural areas and urban slums is bound to be trapped in the vicious circle of deprivation, destitution, under nutrition, ill-health, epidemic and diseases; if not taken care properly, they may lead to the reversal of the trend of development process and may endangered the sovereignty
of the nation itself. She concluded that spatial pattern of medical facilities has been considerably influenced by the political-administrative decisions and are not fully equipped too. Most of the dispensaries are not performing up to the mark because of understaffing and irregular attendance of doctors. For the above mentioned problems she suggested that the demand for various medical facilities in various development blocks and for various population strata should be accurately worked out, as per the government policy of maintaining a ratio of one PHC per 30,000 population, so the district should have at least 80 PHCs, Ayurvedic and Homeopathic dispensaries should be jointly established, adequate number of doctors, nurses and other supporting staff should be posted at each PHC this will promote efficient and healthy interaction between rural population and PHCs.

Kanchan (1997) examines the pattern of healthcare delivery in Vadodra district of Gujarat, both adequacy and accessibility have been studied and suggestions have been made to redistribute some of the new PHCs. The paper looks into two aspects of health care delivery system viz., adequacy and accessibility. Average number of population and average area covered by each PHC are the two indicators taken for knowing the adequacy of PHCs.

Verhasselt (1997) in his paper “Health Effects of Changing Lifestyles and Behavior in Cities” analyzed health effects of changing life styles and behavior in cities. The definition of "Urban" has been discussed critically. Among the health related components of urban life style, diet and the nutritional transition were examined. The urban epidemiologic transition has been complicated by emerging and re-emerging diseases. The various kind of migration is reflected in the adaptability and behavior of the new city dwellers. Migration plays an important role in the diffusion of communicable diseases. Health perception is a key issue in healthcare seeking behavior and in the acceptability of a policy of prevention. Urban stress, risky and marginal behavior are part of ill health. Classic parameters of the urban lifestyle which have health effects are: diet, specific occupational activities, habits like smoking and alcohol consumption, lack of physical activity. Health consequence is an increase of chronic illness such as cardio-
vascular diseases, cancer, diabetes, obesity, hypertension, respiratory diseases, stress and psycho-social disorders.

Hazra (1998) in his paper on, “Women and Health” investigate women’s health situation in the developed and developing countries, and the South Asian situation in the world perspective. Special emphasis is laid on the Indian situation, its multifarious problems and the achievements. The status of women’s health is evaluated by certain health indicators viz. Women’s life expectancy, maternal and infant mortality. In the correlation matrix of the health indicators and the socio-economic conditions certain interesting patterns emerges. Life expectancy is positively correlated with per capita GDP; while infant mortality is negatively correlated with female literacy and per capita GDP on the other hand the infant mortality is negatively correlated with female earned income share. The availability of healthcare services is very well correlated with both female health indicators as well as socio-economic correlates. The probable low development of health infrastructure has resulted in the deprivation in health status. In Indian perspective Kerala has made sufficient improvement in health, through the development of its infrastructure base not only in terms of a well developed healthcare delivery system but through radical reforms and popular movements. These improvements in health have largely been due to improvement of sanitation, provision of safe water supply, an effective public distribution system and an overall awareness of the population.

Singh and Rehman (1998) in their paper, “Housing and Health in the Low Income Households of Aligarh City” depict the housing conditions and health status in the poor income households of Aligarh City. The study reveals that there is acute shortage of houses in the city of Aligarh both quantitatively and qualitatively for the poorer households which do not have bathrooms, toilets, windows and proper ventilation. The disease profile and the conditions of the homes of the poor income group have a strong correlation. Having the poor housing conditions the Diarrhoea, Respiratory disease; Malaria and Jaundice are the top ranking diseases. The households of the lower income people are unauthorized and these create slums in the city.
Sood and Nagla (1998) studied the knowledge level of rural mothers in the district of Rohtak in Haryana about the simple maternal and child health interventions available through the healthcare delivery system in the rural areas. There was a significant positive correlation between total MCH and FP score of the women and the education of husband and wife both and exposure of women to mass media. The mean score for maternal care, child care, family planning was higher among women living in villages near the health institutions as compared to those in the far off villages. They also studied the various socio demographic factors related to it.

Thulasimala and Shivagnanam (1998) in their paper, “Health Hazard in Northern Tamil Nadu: An Analysis for Estimating Health by Social Determinants” they said that health may be estimated using disease occurrences and mortality patterns. In their work they have used Health Hazard Indices for grading. They concluded that wherever the healthcare facilities are available, lower is the hazardous environment, higher the SC & ST population, higher will be the hazardous level, higher the literate, especially female literates, lower will be health hazard. In the last they finally concluded that areas of very high health hazard require more number of hospitals and better healthcare facilities and better transportation.

Hazra (2000) in his paper, “Calcutta: A Study of Urban Health” pointed out that the present health situation of Calcutta’s urban health is largely a reflection of its location in an environment ecologically hostile to human habitation being the “endemic home” of cholera and ideal for the propagation of diseases like malaria. Rapid urban-growth coupled with life-style changes have on the one hand, lead to development of degenerative diseases, on the other unplanned urbanization and industrialization have resulted in acute respiratory illness, while noise pollution has disrupted the normal sleep and rest which results in hypertensions and evoked psychosomatic disorder among the masses. Healthcare infrastructure has done little to alleviate the problem. Disease types vary with the environmental situation, with water-borne communicable diseases dominating the peripheral areas and degenerative diseases associated with air pollution in the inner core areas. In the last he suggested that public healthcare facilities need to be thoroughly overhauled for the benefit of the masses and along with this a comprehensive
planning of the landscape, re-allocation and decentralization of economic activities, overhauling transportation network etc can only solve the major health issues.

Akhtar (2005) attempted to study the natural disaster like tsunami from geographical perspective. The application of various disease diffusion and health care facility location-allocation models provide holistic framework to the study of health and disease. Impact of a natural disaster like tsunami, not only lead to large scale mortality but also increase the risk of disease via, contamination of water resources, poor hygiene or through other mechanisms. Since the levels of health and disease vary between places and overtime, there is a pronounced awareness of the importance of understanding the geographic aspects of problems of human health.

Shrivastava (2006) discussed the health security concerns in Uttar Pradesh, the enormous variation in health outcome across districts with a few districts reflecting a cluster of poor inputs and equally poor output-outcome indicators. The per capita expenditure on health among the lowest across states and has stagnated in real terms over the last decade and a half. The poor delivery of health services through public health infrastructure is pushing people to unregulated private sector for curative services. The cost of accessing services, especially hospitalization services is prohibitive in relation to income thereby depriving the poor and the marginalized from reaching out to essential healthcare. Under scoring the need for improved health outcomes, Srivastava emphasizes the need for a convergent and synergistic approach to health together with decentralized planning using micro level inputs and involving people’s health committees, identifying critical resource gaps and setting up a set of core standards in basic services.

Misra (2007) in his book, 'Geography of health' examines the health scenario in India. It also discusses that how different societies, from ancient times to this day have looked at health and disease, and what has been the implication of their varying perspectives on the systems of medicine they evolved. Author has discussed about the bio-geographic factors influencing health, cultural and lifestyle factors influencing health, demographic factors influencing health socio economic factors influencing health. Access to health services, both government and private. The book focuses on health policy
planning and programmes in the country. Finally suggests the ways of dissemination of information about diseases, medicines, health facilities and ways and means of maintaining good health.

Singh, et. all (2007) in their paper, “Sanitation Conditions in Aligarh City” attempted to examine the sanitation facilities, disposal of excreta, drainage facilities and disposal of waste water, the shortage and disposal of solid wastes and the occurrence of associated diseases in the sample households of Aligarh city.

World Hunger Series 2007 report on “Hunger and Health”, explores the multiple relationship between hunger and poor health and how they affect the growth of individuals. Hunger and health are inherently related: health cannot be improved without tackling the problem of hunger; hunger in turn leads to poor health. Many of the causes of hunger also contribute to poor health. Hunger increases the severity of infectious disease and therefore the risk of dying from a disease increases. Individual suffering from illness are unable to utilize nutrients properly and as a consequence are in a weakened state that compromises the immune response to infections. Hunger and poor health also generate wide-ranging social and economic consequences and further entrench poverty and inequity. Urgent action is needed if hunger is to be eradicated in the coming decades. Government commitment to eradicate hunger and marginalized people is the only option. Action must address the human suffering caused by hunger and poor health and access to sufficient quality food and healthcare for those who miss these essential ingredients.

Ahmad, Gazanfarullah and Firdaus (2009) in their paper “Micro Regional Planning of Health Facilities in Bulandshahar District” observed that human resource which are to be considered as a pillar of the building of the nations are prone to many diseases as well as suffering from many social and biological diseases that need to be redressed. For health development not only the availability of healthcare facilities is important, but more is the fact that how these facilities are distributed, whether these are well accessible by the people living in the area or not. A diagnostic planning has been proposed based on qualitative and quantitative analysis. In the last they suggest that the
rational thinking should drive the policy maker and administrators to make a proportional allocation of socio-economic facilities in the region.

Singh and Singh (2009) in their paper, “Status of Healthcare Facilities in Sonbhadara District of the State of Uttar Pradesh, India: A Case Study in Rural Development” they revealed that healthcare facilities are required for improving health status of a population living in any region. In Sonbhadra district, there exist a serious inadequacy of healthcare facilities and services among urban and rural areas in the district. The most deprived people are the rural habitants. Rural populations do not have easy or affordable access to the healthcare. Without adequate healthcare the diseases which might readily be cured becomes untreatable and frequently leads to death. The scarcity suffered by these people has resulted in many avoidable health problems that lead to the decreased life expectancy, increased infant mortality, decreased man-hour in agricultural activities and increased poverty among the rural people. The basic aim of development cannot be achieved without providing adequate healthcare facilities and services for the rural population. Therefore, there is an urgent need for total reforms to boost the public healthcare facilities as well as to upgrade the living standard of the rural population.

Collins (2010) after conducting a research in Quelimane (Mozambique) asserted the distribution of incidence of Vibrio Cholera and Bacillary Dysentery and suggested some factors which are responsible for these diseases. He examines the interrelationships between the environment, health and population displacement and these interrelationships are related to sustainable development.

Djudemisheva (2010) in his paper “Water and Health in Kyrgyzstan” analyzed that the lack of effective and adequate sanitary conditions as well as poor quality water have become the main factor for the high morbidity of the population who suffer from intestinal diseases, typhoid, dysentery, viral hepatitis, Malaria and other parasitic diseases, especially in the southern part of the country. He concluded that although Kyrgyzstan has plenty of water resources, it actually uses the poorest quality water for both drinking and irrigation. Various international and local aid organizations have been
implemented numerous projects related to the rehabilitation and construction of new rural and municipal water supply facilities for sustainable water supply services.

Gupta and Sharma (2010) in their paper entitled, “Family Environs, Medical Facilities and Rural Infant Mortality in Shivnath Basin, Chhattisgarh”, they analyzed that mere availability of healthcare facilities is not sufficient rather its reach to beneficiaries is more important. Though the Anganbadi, Health centres and ‘Mitanin’ (Lady Friend) health care programmes of Chhattisgarh government are in vogue, but in tribal areas the people do not avail these services and depend on traditional methods and high IMR comes as result. They concluded that the mother and child welfare schemes and vaccination services should be provided to mother and child both and along with that spread of education particularly among females (mother). The educated mother will take proper care of her infant.

Leisch (2010) in his paper, “Medical Infrastructure, Demographic and Socio-Economic Development in Northern Thailand” described the disparities between the lowland area, inhabited by the Thai people, and highland area, inhabited by the Korean in the Northern Thailand in terms of medical facilities, diseases, morbidity rates etc. He asserted that because the Korean people are far from medical facilities the morbidity and mortality rates are high in the highland area as compared to lowland area where the Thai people are closer to medical facilities. The other factors of high morbidity in the highland area are worse economic conditions of the people, early marriage, climatic condition, poor clothing, Iodine deficiency etc.

Shuryawanshi (2011) in his paper entitled “Climate Change: A Geographical Perspective”, focuses that there is a great impact of climate change on human health as due to changing weather pattern number of ecological disturbances occurs, which change the food production pattern, Flotation in the climate, precipitation and humidity can influence biological microorganism or pathogens, which are responsible for various human diseases like skin diseases, cancer and number of parasitic diseases.

Chandra (2012) in her article “India’s Health-Issues and Challenges” analyze the regional variations in the deaths of mothers in the states of Uttar Pradesh, Bihar,
Jharkhand, Madhya Pradesh, Chhattisgarh, Odisha, Rajasthan and Assam show that the percentage of maternal deaths is 6 times higher than in the southern states and Infant deaths is 8 times higher than in the southern states. Public health is squarely a state responsibility and particularly so in a developing country. Challenges of the health sector can only be met when full-fledged healthcare centers with well qualified doctors, essential drugs and supporting staff are available along with this, these deprived states has to go hand-in-hand with sanitation, drinking water, health education and disease prevention schemes.

Mohd and Singh (2012) in their paper, “Domestic Solid Waste and its Impact on Health in Aliagrh City” focuses that irregular disposal practice of households and municipal workers results into heaps of waste which become the habitat of various types of diseases like diarrhoeal diseases, malaria, cholera, helminthic infection. In the last they suggest that city waste should be properly managed not only by the municipal authorities but also by the household members.

Munir, Azmi and Varshney (2012) in their paper, “Water Supply and Health Conditions in Aliagrh City” analyses that the high income households are getting water privately either from own hand pumps, jet pumps, submersible or from municipal water connections. So, they get water regular, adequate, fresh and hygienic potable water. Thus they are not suffering from any water born diseases. On the other hand, most of the lower income households do not get the minimum quantity of water necessary for daily use like drinking, cooking, bathing etc, so they are more prone to various diseases related to contaminated water, such as diarrhoea, dysentery, Cholera, worms, gastroenteritis and jaundice, etc. For improving the conditions related to water problems, the old water pipe lines should make proper plans for good and sufficient supply of water. There should be provision of government healthcare centers in the area so that the centers can mitigate the associate problems.

Sonawane (2012) in her paper, “Hazrads of Pollution & Its Impact on Environment” states that pollution is mainly found in air, water, soil, food and sound. Pollution of air is the major cause human health problems such as respiratory problems,
lung/throat, asthma, T.B, cancer etc. Pollution of water is also the main cause of health problems like gastro-enteritis like formation of ulcers, tumors, dysentery/diarrhoea, etc. Health problem due to pollution, range from simple vomiting and skin irritation to intestinal cancer, brain tumors, from simple fever to fatal hepatitis, from throat irritation to deadly heart diseases. Several measures have been adopted, suggested imposed in industries, in agriculture and urban dwelling to control the pollution. However fast growing population and high capital requirement are the major problems faced to implement the scientific methods of pollution control.

Ross and Wave (1995) have attempted to assess the impact of education on health. In their cross-country analysis, they came to the conclusion that there is a direct link between education and health. Education is the most important factor behind good health and high life expectancy in developed nation. People with good quality of education even within western society are more conscious about their health than those who are less educated. The same situation also exists in third world countries as well.

Subbarao and Raney (1995) in their paper on social gains from female education across national study, shows that female secondary education, family planning and health problems all affect fertility and mortality, and that the effect of female secondary education appears to be very strong. The results suggest that family will reduce fertility more when combined with female education, especially in countries that have small number of female enrolment at secondary school level.

Ross and Mirowsky (1999) explained the association between education and health in American society. They distinguished three aspects (quantity, credential and selectivity) of a person’s education and examined the mechanism through which they are correlated with health. The result shows that physical functioning and perceived health increased significantly with the year of formal education and colleges selectivity for those with a bachelors’ or higher degree, adjusting for age, sex, race, marital status and parental education of the three aspects of education. Years of schooling has the greatest effect.

Kickbusch (2001) in his paper, “Health Literacy: Addressing the Health and Education Divide” reviews concept and definitions of literacy and health literacy and
takes conceptual, measurement and strategic challenges. He states that literacy is the ability to read, understand, and act on health care information. He reviewed that health researchers and healthcare professionals, from both the developed and developing worlds, have long been concerned about the link between health and education. Education and literacy rank as key determinants of health, along with income and income distribution, employment, working conditions and the social environment. The developing countries highlight the positive impact of education and literacy on population, health and, in particular, women’s health and the health of children. Adult female literacy rate is one of the 10 key indicators to assess ‘women’s well-being’. A mother’s level of education correlates closely with a child’s risk of dying before age 2 years. Developing countries that have achieved a female literacy rate ranging from 70 to 83% have also achieved an infant mortality rate of 50 infants per 100 thousand of live births. Educated women are more likely to postpone marriage and childbirth, give better healthcare to their families, and send their children to school and contribute to overall economic growth. The strong relationship between women’s educational level and the total fertility rate of the society is well documented.

Siddiqui and Yadav (2005) in their paper, “Health and Educational Development in Aligarh District” have attempted to study the health and educational status of Aligarh district and as to how various health facilities are related with educational status. In the paper they concluded that high educated people are more based on government hospitals for treatment than allopathic medical practitioners while illiterate section people go to the allopathic medical practitioners. They also concluded that most of the people are based on rural government hospitals and Allopathic medical practitioners. If the standard of education among people increases, the better health and healthcare facilities also increases. If both factors of human development increase economic development and standard of life of the people also increase.

Kotthari and Jhala (2007) in their paper, “Spatial Disparity in the Status of Education and Health Amenities: A Case Study of Banswara and Dungarpur Districts” they mainly focuses on determination of components of education and health amenities and location analysis of infrastructural facilities at Panchayat Samiti level. The education
and health plays significant role in all round development of the region. The expansion of educational infrastructure leads to significant increase in enrolment of students at different stages of education and expansion of health infrastructure leads to significant decrease in mortality and morbidity rate in the region. They conclude that regional planning strategies should be based on level of development and that can be derived from availability of education and health facilities existing in the region. According to them there should be increase in registration rate of students between 7-13 years of age groups and there should be increase in number of higher educational centers and also increase in number of healthcare facilities and beds and primary health centers according to population and area.

Patra (2009) in his paper “Literacy and Health of tribal”, aim to analyze the education and health status of tribal’s in Orissa. He examines that the literacy of tribal’s is very low, particularly among the women. The health status is very adverse to the productivity and efficiency of tribal’s of the state. He concluded that education and health are very closely related specially in the tribal area of Orissa. The wide spread poverty, illiteracy, malnutrition, absence of safe drinking water and sanitary condition are responsible for higher maternal and child mortality rates among the tribes of the state. Ineffective coverage of National Health and Nutritional services is found in tribal areas which contribute to dismal health condition. Many of the infectious and parasitic diseases can be prevented by timely intervention and generation of health awareness among the tribes. The healthcare delivery services among tribal people are still poor which need to be strengthened to achieve the real goal of health in Orissa. He also suggested that full residential schools with free dress food, books and utensils should be established and ST Scholarship should be provided to the tribal student’s pursuing higher education.

Sherry Glied and Adriana (2008) explained the effect of education on health which is increasing over the past several decades. They hypothesize that increasing disparity is related to health related technical progress; educated people are the first to take advantage of technological advances that improves health. They test this hypothesis using data on disease specific mortality rates for 1980 and 1990; and cancer registry data for 1973-1993. They estimate education gradients in mortality using compulsory
schooling as measures of education, then relates these gradients to two measures of health related innovations; the number of active drug ingredients available to treat a disease and the rate of change in mortality from that disease. They find out that more-educated individuals have a greater survival advantage in those diseases for which there has been more health-related technological progress.
REFERENCES


Census India, 2011: www.censusindia.gov.in


Initiatives and Challenges, New Century Publications, New Delhi, p.131.


Kumar, R., (1987). Environmental Pollution and Health, in Environmental Pollution and Health hazards in India (ed. R. Kumar), New Delhi, pp. 4-5.


