CHAPTER -2

LITERATURE REVIEW

How healthy a child is mostly assessed with his/her nutritional status. Sound health must have good access to healthy diet and optimum nutrition. Sufficient nutrition is important element of individual welfare. Thus, there is close relationship between adequate nutrition and good health. So many studies have been found to make relating to nutritional status of an individual or children in the national and international level. Some important researches of theoretical and empirical studies are mentioned below.

2.1 Theoretical literature

There are different theories related with nutritional status of children. Among them, the investment theory is one. The investment theory dominates economics (Mayer, 2002, p. 13). In this theory the relationship between parents’ and children’s economic success is the result of biological and other endowments that parents pass on to their children, combined with what parents invest in their children. Endowments include both genetic endowments such as a child’s sex and race, as well as “cultural” endowments such as the value parents place on their children's education. Parents invest both time and money in their children's “human capital”, especially by investing in their education, but also by purchasing health, good neighbours, and other “inputs” that improve children's future well-being. How much parents invest in their children is determined by their ability to finance investments (which is influenced by their income and their access to capital). The return on investments in children may depend on children's biological endowments, so these may also influence the amount parents are willing to invest. Parents’ own values and norms may also influence their willingness
to invest in their children. Thus one might expect some variation in how much families with the same income spend on their children.

In contrast to the investment theory, “good parent” theories hold that low income hurts children not because poor families have less money to invest in their children, but because low income reduces parents’ ability to be “good” parents. There are at least two versions of the “good parent” theory: the parental stress version and the role model version. The “parental stress” version, which dominates psychology, holds that poverty is stressful and that stress diminishes parents’ ability to be supportive, consistent, and involved with their children. Poor parenting, in turn, hurts the social and emotional development of children, which limits their educational and social opportunities. “This theory implies that the Smith children will fare better than the Jones children because Mr and Mrs Smith experience less stress than Mr and Mrs Jones and consequently they are able to be “better” parents (Mayer, 2002, p. 14).”

Relative deprivation theory assumes that children or parents mainly compare themselves to others who are better off, while largely ignoring those who are worse off. If parents all compare themselves to the richest people in society, for example, they will feel poorer whenever the rich get richer. Their hopes and expectations for their children may then decline and their parenting skills may worsen. Note, however, that children or their parents may also compare themselves to the poorest people in their community rather than the richest. In this case, inequality will make most people feel relatively advantaged. People could also mostly compare themselves to some real or imagined community average. In this case inequality will make the rich feel richer and the poor feel poorer (Mayer, 2002, p. 16).

Good nutrition is indispensable component of healthy life and access to healthy diet and optimum nutrition are important to good health. Better nutrition means stronger
immune systems, less illness and better health. Whereas developing countries such as Nepal is experiencing micronutrient malnutrition and undernutrition. The negative externalities of undernutrition are many, especially among the younger age group. Nutritional deprivation and infectious diseases among pre-schoolers feature prominently among the major public health concerns in developing countries (UNICEF, The State of the World's Children, 1998). Poor child health and nutrition impose significant and long-term economic and human development costs, especially on the poorest countries and communities, further entrenching their status. Improving child health and nutrition is not only a moral imperative, but also a rational long-term investment. Under six years old children are the most vulnerable section of the society and the present study focuses on these age groups (UNICEF, The State of the World's Children, 1998).

Baker's Microeconomic (Baker, 1981) model of household production deals on the production of goods and time to production of communities that either is sold or consume at home. He has proven that household determinants are helpful to the nutritional status. Sound health of any child is related with his / her household determinants (Baker, 1981). He further states that nutrition function relates to the child's nutrition status that is measured in term of height for age or weight for age. It shows the child's intake that is breastfed and time duration of breast-feeding. It shows the child's preventing and curative medical care. It reflects the quality and quantity of time of the mother whose time given to the childcare. "The value of child care time in turn is likely to be functions of the caregiver's age, experience, education, own health status and environmental factors are also enter the production function" (Chandra, 2009). Hence, the production of goods is directly related to the child's health.
The model is estimated at two levels: at the household level and at the child level. Child nutritional status provides an indirect indicator of overall child health as well as a direct measure of access to adequate nutritious foods. Malnutrition is a vigorous indicator of the presence of severe child deprivation. Theories of social arrangements emphasized on the freedom, equality and justice in social order in the society. John Rawls’ ‘Theory of Justice’ proposes the universal access is called ‘social primary goods’ (like liberties, opportunities, self-respect etc) for all individuals in the society equally. One of the primary good, though not explicit in his theory but implicit, that has to be ensured to every citizen of the society is health. Moreover, it assumes primary significance in the perspectives of human capital, human development and human rights, the health and nutritional deprivation of children can have severe negative implications. But, the unfinished reality is that even today many children in the developing societies are deprived in health and nutrition. Anthropometry is widely recognized as one of the useful techniques to assess the growth and nutritional status of an individual or population (Rao, et al., 2001). Malnutrition is frequently part of a vicious cycle that includes poverty and disease. The three factors, viz., malnutrition, poverty and disease are interlinked in such a way that each contributes to the presence and performance of the others.

2.2 Abroad studies

First of all, the study tends to reveal the literature of reviews which are diversity in defining nutritional status of children. It is found valuable to differentiate between definitions of 'nutrition' and the specific form of 'nutrition in children'.

According to J Nutrisent "the basic concept, technical terms and technologies involve is Nutrigenomic and emerging knowledge can be applied to optimize health prevent and treat disease is Nutrigenomics" (French, et al., 2011, p. 71). People differ
greatly in their food/nutrient availability and choices depending on cultural, economic, and geographical and taste perception differences.

Malnutrition (deficiency or excess) itself can affect gene expression and genome stability. Provide better interpretation of data from epidemiological and clinical intervention studies regarding health impacts of dietary factors that may help to revise recommendations for personalized (French, et al., 2011, p. 72).

The empirical study conducted at Makurdi, Nigeria by Dinel in 2011 on nutritional status of urban primary school children, "Height and weight of 2014 (979 boys and 1035 girls), aged 9-12 years, attending public primary school in Makurdi were measured and body mass index (BMI) calculated. Anthropometric indication of weight-for-age (WA) and height-for-age (HA) were used to estimate the children's nutritional status. The BMI thinness classification was also calculated" (Dinell T Goon, 2011). There is severe malnutrition among the school children living in Makurdi. Most of the children are underweight, stunted and thinned. As such, proving community education on environmental sanitation and personal hygienic practices, proper child rearing, breast-feeding and weaning practices would possibly reverse the trends.

Salwa G Massad, F J Nieto, Mari Plata, Maureen Smith, Roseanne Clark and Abdel- Aziz Thabet were in Palestinian preschools in the Gaza found that 37% of the subjects demonstrated nutritional resilience and 15% were vulnerable (G Massad, 2012). Factors associated with nutritional resilience were children younger age, normal birth weight, actively hand or spoon feeding when the children were below two years. The only factor associated with nutritional vulnerability was lower total score on the mother's General Health Questionnaire, which was interpreted as a maker of mental health.
In 2003, a study showed that the prevalence of anemia among children under 2 years old in Gaza was 72.8%, while prevalence of wasting, stunting and underweight was 34.3%, 31.4%, 31.45% respectively. In the 2012, 19.4% of children aged 6-9 months suffered from anemia, 25.6% in Gaza and 13.4% in West Bank (G Massad, 2012).

Similarly, risk factors include individual level characteristics such as low birth weight, household-level factor such as family poverty and community-level factor such as living in a community that has suffered from political violence. Most studies of nutritional resilience in developing countries have focused on children's feeding, hygiene, maternal education, employment and income, while little is known about the effect of maternal mental health and deprivation.

Anthropometric assessment (height-for-age, weight-for-age, and weight for height) is widely used and often regarded as the best measure for the health and nutritional status in children. Malnutrition, most in its mild, moderate form, contribute more than half of the eleven million deaths each year among children under 5 years of age in developing countries. The cause of malnutrition is complex multifaceted. In developing countries, dilatory factors: intake of dilatory supplement (Iron and vitamin A and D), exclusive breast feeding for 4-6 months, complementary feeding at 6 months, maternal education, maternal mental health, and family socio-economic and environmental factors (deprivation, social support and hygiene) all may be associated with malnutrition (Massad, et al., 2012).

Richar H. Steckel and Jorome C. Rose analysed in Health and nutrition purpose of analysis, a "health index" was constructed and then used by the investigators in drawing inferences about the health of the groups and making comparisons among
them. Measurement included in the index were growth and nutritional status during childhood, inferred from measurement of the length of long bones; tooth enamel hypoplasia's as evidence of nutritional status during the early life, pitting of the skull or eye orbit (Parotic hyperostosis) as evidence of anemia; evidence of infections such as tuberculosis of syphilis and of physical trauma; dental caries and teeth had been missing prior to death as evidence of poor nutrition and, usually, of high-carbohydrate diet; and degenerative joint disease as an indicator of the degree of hard labour experienced by the individual (Steckel & Rose, 2012).

Emerson and his Colleagues agreed that malnutrition is a clinical entity with characteristic history, definite symptoms and pathological physical signs. The malnourished is a stick child and should be considered. Other has claimed that too much emphasis on the child health and well-being has been extremely bad for certain types of very nervous children. Nevertheless this method was not planned for the exceptional child; it was conceived for the ninety and nine; and it is extremely well planned for them. By putting sufficient emphasis upon the first cause-physical defects and upon their correction; by having nutrition classes in change of the physician who examines and studies the children carefully; the harm that the class program may do slight when compared with the good that has been done the average child. Nurse and social workers will find this book a treasure-trove, for it is so definitely written that it can be shared with most parents; it is text-book; and it covers the method of nutrition work with children in such detail that individual workers cannot fail to find it a useful guide. Its publication is distinct contribution to our practical literature on the subject of child welfare (Emerson, Nutrition and Growth in Children, 2012).

Food, health and care are affected by social, economic and political factors. The combination and relative importance of these factors differ from country to country.
Understanding the immediate and underlying causes of undernutrition in a given context is critical to delivering appropriate, effective and sustainable solutions and adequately meeting the needs of the most vulnerable people (The World Bank, 2013).

Today’s concerted focus on reducing stunting reflects an improved understanding of the importance of undernutrition during the most critical period of development in early life and of the long-term consequences extending into adulthood. Evidence from 54 low- and middle-income countries indicates that growth faltering on average begins during pregnancy and continues to about 24 months of age. This loss in linear growth is not recovered, and catch-up growth later on in childhood is minimal. While the UNICEF conceptual framework reflected a focus on children of preschool age, there is now more emphasis on policies and programmes that support action before the age of 2 years, especially on maternal nutrition and health, and appropriate infant and young child feeding, and care practices (The World Bank, 2013).

Authors John Livet Morse and Fritz B.Talbot wrote in first two-thirds of the book are devoted to Infant Feeding, which comes on the book are given over to Disease of Nutrition. Infant feeding, as the joint authors understand it, does not take its students beyond the single commodity milk, preferably human milk, but, if necessary, cow's milk, finding in the idiosyncrasies of cows the reason for the great difference to note in the milk of different cows, and advising mixed milk, or the milk of several cows, as better than one cow's milk as substitute for human milk. Whatever the source, the reader is warned that the milk should be examined and its exact constituents ascertained so that the infant is not left to prove the excellence of its diet by its advancing growth and increasing weight, or in reserve order, that its diet lacks some elements, as may be proved by the dwindling weight later the onset of one or more of the disease of nutrition. There was devoted to digestion and metabolism, breast feeding, Artificial feeding
follows, with much important analysis and examination for principles for artificial feeding. Diseases of digestion follow and finally happen diseases of nutrition, rickets and infantile scurvy (Emerson, Nutrition and Growth in Children, 2012).

Winfield S. Hale wrote in his book "Nutrition" as a term which includes all the physiological processes associated with "the material growth, repair, and supplies of the body", he takes his subject in the some order-beginning with the chemical composition of body-going on to the natural foods-definition of food, and classification of same as the preparation of food (Emerson, Nutrition and Growth in Children, 2012).

The author Adolph Hansen deals of the source of Carbon, the organ by which CO2 is absorbed and elaborated, the significance of light for photosynthesis (this term is used throughout), and the product. The author then considers the nitrogen supply, the organs (root) by which they are chiefly obtained, and the movement of water, including its loss and the regulation thereof. "Nutrition" is used in its widest sense; he further discusses the production of the protein, the translocation of plastic substances, and respiration. The non-green plants, both spermatophytes and fungi, receive scant treatment in a conducting chapter. The author wrote "Food of the plant is those substances without which the plant could not exit" (Morse & Talbot, 2012).

N. Tis Chutkin made a series of investigations on the activity of micro-organism in the nutrition insectivorous plants, which show that in the secretion of insectivorous plants are the protein substances are altered through the influence of micro-organism, especially bacteria; that such organism are always living in the fluid excretion of the digestion does not begin with the beginning of excretion of the digestive solution and does not occur until a sufficient number of micro-organisms are present; that the organism effective here comes from the air or from other sources; and lastly that the
part performed by the plant is only organism may live. In the fluid of the secreting organs of punguicula vulgaris, Droserarotund folia and ling folia, Dionaeamuscipula, and Nepenthe Mastersi several form bacteria were found, all being able to peptonize the albumen, and they were always living in the fluid (Hale, 2012).

There should be researcher into the requirements of food necessary to maintain health, strength and work in man, women and children engaged in various occupations. It is well known that a man who is over the average weight is an inefficient labourer, but it is not certain whether a man who is reduced in weight and receives good food is as efficient as when he is of average weight. He might be easily effective worker when thin than of average weight (Smith, The Nutrition of the Egg in Zamia, 2012).

Food has been defined as a well-tasting mixture of material, which, when taken in proper quantity into the stomach, is capable of maintaining the body in any desired state. The choice of the mixture in the form of menus, their preparation for the plate, their digestion and fate in the body, is the science of nutrition. If we have complete knowledge of every food substances and the transformation it undergoes in the body; how it is prepared for the usefulness just what purposes it the till, how it fulfils this purpose and what becomes of it after-ward-if we know all this for every food stuff; every class of substances we can use as food- we should have a completed science of nutrition.

Army's regulations define the ration as the allowances for subsistence of one man for one day. The first legislation fixing the components of the army ration is dated November 4, 1775. The Continental Congress fixed at that time one pound of beef and one pound of bread as the allowance for each man per day, "3 pints of beans or peas at a price not to exceed $1.00 per bushel, one pint of milk, half pound of rice or one pound
of Indian meal per week, one quarter of Spruce beer or Cider for each man or nine gallons of molasses for each company of man per week”. The ration included candles and soap.

In the November 5, 1917:

**Breakfast:**
Oatmeal, milk and sugar
Pork sausages, Fried potatoes
Bread and Butter, Coffee

**Dinner:**
Roast Pork or roast beef
Baked potatoes, Bread and Butter
Cornstarch pudding
Coffee, mild & sugar

**Super:**
Beef Stew, Corn Bread, Karo
Prunes, Tea

On the whole it must be said that the mess system in vogue in the American Army works well. Its weak points at this time are obviously the experience of mess officer and the mess sergeant, the fact that good cooks are not available, and the absence of an adequate system of inspection (Hansen, 2012).

In a recent issues of science (August 1, 1919) Lusk calls attention to a reconstruction problem which seems in danger of receiving less consideration than its
fundamental significance demands, viz., the food problem vital to the very existence of civilization, and propose as one agency for its study the foundation of national laboratory of human nutrition.

In the organization of such an institute there are certain general principles which should, as control:

1. It should not be burdened with executive duties. Questions of transportation, marketing, cold storage, profiteering, price, control, rationing etc. should be recognized as subject lying outside its field and with which students of nutrition as such are not specially qualified to deal. In brief, it should not be an executive department of the government nor have functions of food administration but should supply to legislative and executive authorities the scientific data upon which any successful measure of food policy must be based.

2. It should be distinctly national in character and should be means of integrating and coordinating without controlling the activities of the various existing agencies of investigation. It should be so constituted that it may represent the United State officially in any international conference involving questions of nutrition.

3. It should be under the control of scientific men and not subject to the vagaries of legislative bodies or dependent upon them for annual appropriations with the accompanying pressure to emphasize popular and spectacular work. This is an additional reason for not making it an executive department (Bay, 2012).

It is the teaching of botanists that green plants obtain their nitrogen chiefly in the form of nitrate, through ammonium salts may be utilized to some extent by certain
plants at least. Exceptions to this general rule are those plants provided with root-tuberculosis (and bog plants and other which have mycorrhiza?). These plants obtain their nitrogen in the form of organic compounds made for them by the bacteria growing in the tuberculosis.

The writer's arguments are:

1. The nitrogen nutrition of the leguminous plants and other with root-tubercles is of this character.

2. The close symbiosis between "Azotobacter" and similar nitrogen-absorbing bacteria and many species of clover is well known.

3. The increased production of timothy and other grasses when sown along with clover, not merely following, has been demonstrated.

4. The vigorous growth of the plants in soils very rich in organic matter. Such material inhibits the growth of the nitrous-nitric bacteria when growth in culture, and may do so in soil, so that nitrates may not account for this vigorous growth.

5. As a general rule the most fertile soil contain the most bacteria.

6. The doctrine that nitrates furnish the nitrogen to plants was established before the activities of bacteria in the soil were suspected and should be re-investigated under conditions absolutely controlled as to sterility. It is probably true in large part, but may not be the exclusive method (Smith, 2012).

Clude W. Mitchell wrote "qualitative and quantitative changes in nutrition will be found the universal sex-controlling factor in this group" (rotifers) (Shull, 2012). If it
be granted that other factors than nutrition also play the same role in sex determination in one rotifer as in another.

Maximum male production is determined by three factors, physiological rhythm, high nutrition and starvation during the growth period.

If nutrition means the quantity of food available, the evidence in its favour as a secondary determinant is so small as to be negligible. If the wave of rapid reproduction is accompanied by a wave of many male producers, it seems to be we are much more justifiable as assuming that both high nutrition and male production are here the result of some other physiological factor than in holding the male production to be a result of the nutrition (Shull, 2012).

Irving Fisher, Professor of Political economy at Yale University wrote to discover weather proper mastication and enjoyment of food would produce the 'physiological economy' claimed for it by Mr. Horance Flatcher, and also where it would lead to the use of low protein according to the standard advocated by professor Chittended.

The result of experimental would seem to answer both these questions in the affirmative. The experiment conducted with nine Yale students and lasted from January to June 1906. Central record of the amounts of food taken, and the constituent in, proteins, fats, and carbohydrates, was kept to each man for each day. To avoid weighing at the table, the food was all weighed in the kitchen and served in standard portions' of 100 calories each or simple fractions or multiples thereof, so that the men merely needed to record the number of portions eaten. The experiment the men followed two rules only.
The first was to a point of 'involuntary swallowing' with the attention, however, upon the taste and enjoyment of the food rather than upon more mechanical act of mastication. Any counting of 'counting of chews' was discouraged as was also the forcible holding of food in the mouth, as experience of other. Conclusion of Pawlow, seemed to show that anything which tended to make eating a bore hundred rather than helped digestion.

The second rule was to obey implicitly the leading of appetite might to the more easily followed, a wide range of choice of foods was supplied and no food was place before the men which was not specially ordered by them.

This first half of the experiment was really an experiment in natural eating, if we may assume that it is unnatural to hurry through our meals and eat what is set before us, out of politeness, habit or limitation of choice. It was found that, as a consequence of the through mastication and obedience to appetite, a profound chance occurred in the diet of the men. There was large reduction in the quantity of liquids of all kinds of meal (water, tea, coffee and soup). There was reduction in the total daily average calories consumed of about 10 per cent, a reduction of proteins of about 15 per cent, and of flesh foods (meat, fowl, fish and shell fish) of about 40 per cent.

During the second half of an experiment the two rules above mentioned where continued in force but a third was added. This was when the appetite was uncertain in its choice of foods, to give the benefit of the doubt to the low protein and non-flesh foods and to foods regarded, provisionally, as the most wholesome. This influence of suggestion was never carried however to the point of eating against appetite. This is still remained supreme. Suggestion was not decisive.
During the second half of the experiment there was a still more pronounced change in the character of the diet. Comparing the diet in June with that in January it was found that the total calories had fallen about 25 per cent, protein about 40 per cent to about one sixth of the original amount. Moreover, the protein has fallen to the level indicated as a desirable in the previous experiments of Professor Chittenden, which is one and a half calories of protein per pound of body weight.

The weight of the first half of the experiment fell on an average of two pounds and in second half fell further four pounds (Physiological Economy in Nutrition, 2012). The author wrote about devoted nutrition of animal forms, the nutrition of the protozoa and metazoan is considered in orderly sequence. The probable from in which nutrient is ingested is discussed, followed by a consideration of the physiological of equipment of each group for the digestive disintegration of the food materials and its transport within the organism. Incidentally, it may be noted that the author does not accept Putter's contention that some of the lower marine forms device their nutrient from organic compound dissolved in the water. Some attention is devoted to the possible significance and origin of the chlorophyll granules and so-called yellow cells (zooxanthellen) in protozoa. During recent years the American literature has been rich in dietary studies which have added much to our knowledge regarding accounts of nutrition. The publication of these studies by Atwar, Bnedikt, Langworthy and others in public document has awakened a wide-spread interest among other than students of nutrition. It is not the purpose reviewer to criticize adversely such publications, for their value is unquestioned, and this value lies chiefly in the attention they have attached at the hands of readers who have not made a study nutrition and whose regarding must therefore be to a large extent superficial (Bigelow, 2012).
Author wrote continued liberal allowance of protein. Liberal allowance of protein in a normal diet is a prerequisite for the maintenance of body vigor. Professor Chittenden had suffered from president rheumatism of the knee joint and determined on a course of dieting which should largely reduce the protein and calorific intake. The rheumatism disappeared and minor trouble such as ‘sick-headaches' and bilious attacks no longer recurred periodically as before. There was a greater appreciation of such as was eaten; a keener appetite, and more acute taste seemed to be developed and a more thorough linking for simple food. During the first eight months of the dieting there was a loss of body weight equal to eight kilograms. Thereafter, for nine months the body weight remained stationary.

Two months of the time were spent at an inland fishing resort, and during a part of this time a guide was dispensed with and the boat rowed by the writer frequently six to ten miles (without breakfast) and with much greater freedom from fatigue and muscular soreness than in previous year on a fuller dietary.

During this latter period of nine months as the nitrogen of the urine was determined daily. The average was 5.69 grams. During the last two months this was reduced to 5.40 grams. Experiment showed that about one gram of nitrogen was eliminated in the faces and that nitrogen equilibrium could be maintained with dietaries of low calorific value (1,613 and 1,549 calories) containing 6.40 grams of nitrogen. These figures correspond to diets containing 40 and 36.6 grams of protein instead of 118 grams commended by Voit and honoured by habit and tradition. The foods with the strongest flavours are meats. Professor Chittenden believes that the large quantity of ported in the ordinary diet is due to self-indulgence. He protests against such indulgence and be lives that a futile strain is here by placed upon the liver, kidneys and
other organs concerned in the transformation and elimination of the end products of protein metabolism (Chittenden, 2012).

The Carnegie Institution of Washington has for several years been interested the study of problems in human nutrition, which it has aided with grant. Professor W.O. Atwater and Dr. F.G. Benedict's joint effort has been directed to increasing the efficiency and precision of the respiration colorimeter, previously developed with of this department and especially to providing the oxygen annex, making it a closed-circuit apparatus. There are many problems concerned with nutrition in disease and convalescence and with the energy output and hence the food requirement of the body under various pathological conditions, as well as many questions of ventilation other branches of hygiene, to the respiration calorimeter is especially adapted. Such questions have a wide interest and are of far-reaching importance, and as the determent's researchers have developed; there have been urgent request that they be taken up. They are, however, distinctly separate from the investigation of the nutritive value of agricultural food products, to which the department's efforts have been directed, and have seemed rather to belong to some other agency than one working primarily in the interest of agriculture and looing to annual appropriations for continuation (Experiments on Human Nutrition, 2012).

Casimir Funk first brought to the attention of the public, the hither to unknown dietary essential under the collective term vitamins, nutrition experts have felt that they had something tangible to investigate-something the importance of which it was necessary to prove or disprove. As experimentation revealed symptoms attributable to vitamin deficiency, the general public, ever easily impressed by matters unexpected, and matters so vital as to revolutionize the connection as to what constitutes an adequate diet, soon become alarmed. At present it is probably not overstating the situation when
it is said that the previously considered all-important attributes of an adequate ration, such as sufficient protein, calories and salt, have probably been slighted by the sudden interest take in vitamins. Nor is this so very remarkable. Certainly no individuals have been more impressed with the important role that vitamins have in the diet than the investigators engaged in this field of nutrition (Steenbock, 2012).

Author wrote in his books the problem of nutrition-actual problem of malnutrition and of family feeding on low economics in the association for improving the condition of the poor. The books start with the comparison of the weights and heights of the girls in the class with the standards for their ages. Following this is a study of food values as to fuel, protein, mineral, vitamins, and the requirements of a good diet. The authors have supplied the text generously with valuable tables and illuminating grasp on these subjects. A splendid makes the book a well-rounded and teachable text. At the close of each chapter are interesting concrete problems designed to stimulate the immediate application of nutritional facts to real life-problems, to answer what shall I eat and how much to maintain health. They many arithmetical problems bring out both food requirement and food costs. However, the time limitation of the average high-school course will necessitate some selection of problems.

Following the general study of the basis for planning meals, the author makes an interesting concrete section of the book by selecting a family containing children of various age and discussing the marketing problems of this family. The high-school girl thus makes application of their earlier nutrition study to actual food purchase for the family's need. The food requirements of the "Irving family" are discussed in such a way as to make it possible for each member of the class to adept the suggestion to her own individual problem (Willard & Gillett, 2012).
The evidence is conclusive that almost all people living under primitive conditions are physically well developed. The teeth of the people of Europe and America have deteriorated very rapidly during the last century, and parallel with this determination has run a general tendency to inferiority in physical development. The causes for this are not to be summed up in the simple statement, "lack of vitamins". The condition is brought about by a number of defects in the diet, and the remedy is to be found an ease choice of food, not in taking preparations sold commercially. The logical basis for this conclusion can be the appreciated in the light of a brief account of the newer viewpoints brought to light by modern nutrition investigation (McCollum, 2012).

Simon N. Pattern Author wrote over-nutrition, surplus energy, rhythmic or alternating motion, and pleasure are different steps in one series. In looking for the causes of social control we need not go outside the field of economics. The same causes are in operation, but they show their effects in another way. At bottoms the difference between the new form of progress and the old is that psychic control is improved by the elimination of the under feed, while social control is created by the elimination of the overfed. A more staking way of putting this contrast would be to say that men are killed of either by starvation or by dissipation. The underfed starve and the overfed lose their economic advantage through indulgences that weaken their physic advantage through indulgences that weaken their physic control and reduce their energy. Over-nutrition is a dangerous as under-five years and fully as fatal. Through the increase of physic control and the industrial efficiency that goes with it, men are able to secure more nutrition and thus, approach to the line of complete nutrition; but this line must not be crossed. To avoid the latter evil the surviving part of society modifies their consumption so that even with their increased efficiency they never cross the fatal line.
It should be noticed that survival depends upon two conditions. In the direct struggle with their fellows those have an advantage whose energy and psychic is the greatest and this, in economic terms, means those who have the greatest productive power. This advantage is lost or turned into advantage is lost or turned into a disadvantage if so many goods are produced that their consumption leads to over-nutrition or to any form of over-stimulation. Social progress, therefore, demands a steady improvement in psychic control through which the productive power is increased and corresponding modification of consumption in such ways as will avoid over-nutrition. These two ends are harmonized only through an increased variety of consumption (Linda Vesel, Use of new World Health Organization child growth standards to assess how infant malnutrition relates to breastfeeding and mortality, 2010).

Malnutrition contributes to about one-third of the 9.7 million child deaths that occur each year. Recently, the World Health Organization (WHO) introduced new child growth standers for use in deriving indicators of nutritional status, such as stunting, wasting and underweight. These standards are based on the growth of infants from six different regions of the world that were fed according to WHO and UNICEF feeding recommendations, had non-smoking mothers, had success to primary health care and did not have any serious constraint on health during infancy or early childhood.

The prevalence of malnutrition estimated using WHO standard is expected to differ from that base on the Nutritional Center for Health Statistics (HCHS) growth reference because there are differences in median weight-for-age, height-for-age and weight-for-height between the two. Recent studies have investigated the direction and magnitude of these differences. In which age 6-59 months, the prevalence of stunting (i.e. how height-for-age) and wasting (i.e. weight-for-height) were higher when WHO
Malnutrition is an unspecific term used to define an inadequate nutritional condition. It is characterized by either a deficiency or an excess of energy with measurable adverse effects on clinical outcome. Even though malnutrition has been defined or described in many ways, no consensus exists a specific definition to identify children at risk. The WHO recommends the weight-for-height index to assess the nutritional status of children and adolescents. However, it is proposed that a loss in body weight of ≥ 5% constitutes acute malnutrition and height-for-age value below the 5th percentile may reflect chronic undernutrition in children (Bauer, Jürgens, & Frühwald, 2011). Ironically, many children suffering from cancer do not meet these criteria. Particularly those with solid abdominal message (i.e. embryonic neoplasm such as neuroblastoma, hepatoblastoma, or wilmstumor) may present with normal weight despite serve malnutrition. Nutritional depletion furthermore is masked in children by enema due to the corticosteroid treatment. Even if no gold standard definition for undernourishment in children exits, concise definitions are needed for the institution of preventive policies (Bauer, Jürgens, & Frühwald, 2011).

Current information regarding the prevalence of malnutrition in childhood Cancer is critically influenced by several factors:

1. Different diagnostic technics to assess the malnutrition status.

2. Historical type and stage of malignancy during assessment.
3. The child's individual susceptibility forward malnutrition and anticancer regimens during classification.


Role of parenteral nutrition in the intensive care setting: Given the association between negative energy balance/malnutrition and both morbidity, and mortality, ensuring that critically ill patients receive adequate caloric and nutrient intake should be a high priority for intensive care clinicians. Current guidelines recommended that all the ICU patients who tolerate enteral nutrition (EN) should receive EN (approximately 25-30 kcal/kg per day) if they are not expected to be on a full oral diet within 3 days (Bauer, Jürgens, & Frühwald, 2011). However, within the ICO setting EN may be frequently interrupted because of diagnostic investigations, surgery, diarrhoea, vomiting, mechanical problems (e.g. tube displacement) or patient transfers. EN may be contraindicated in patients with anatomic gastrointestinal disorder, severe diarrhoea, and reduced intestinal blood flow. Parenteral nutrition (PN) is therefore recommended under certain circumstances (Bauer, Jürgens, & Frühwald, 2011).

The role of lipid emulsions in parenteral nutrition: Early PN formulations consisted primarily of high concentrations of glucose and amino acids in order to provide adequate calories and were often associated with a number of complications (Calder, Jensen, Koletzko, Singer, & Wanten, 2010). Prolonged use of formulation was associated with essential fatty acid (EFA) deficiency because they did not provide linoleic acid (LA) or α-linoleic acid (ALA), which are not synthesized by the body and must be obtain from the diet. Furthermore, the high dextrose loads provided by early PN solutions were associated with a variety of other complications, such as
excessive CO2 production metabolic stress (increased concentration of cortisol, epinephrine, and glucagon), fever and hepatic ateatosis. As a critical illness can be associated with impaired glucose tolerance, overzealous infusion of hypertonic dextrose solutions was often also associated with hyperglycaemia, which, if undetected and untreated, can progress to hyperosmolar nonketotic ill patients, such as severe infections, multiple organ failure, and increased mortality rate (Calder, Jensen, Koletzko, Singer, & Wanten, 2010).

2.3 Studies in Nepal

While getting evidence of nutritional deficiencies under five years of children, it seems in early age of children. It appears in early life span: it occurs from mother’s pregnancy to two years in age. In this period, there is adverse impact on child survival as well as in growth. Thus, this period is vulnerable to the children (GoN, MoHP, DoHS, 2010, p. 5). “The chronic under-nutrition in early childhood also results in diminished cognitive and physical development, which puts children at a disadvantage for the rest of their lives. They may perform poorly in school, and as adults they may be less productive, earn less and face a higher risk of disease than adults who were not undernourished as children (GoN, MoHP, DoHS, 2010).”

Growth starts from conception. The first phase of intrauterine growth consists of rapid increase in the number of cells. The second phase consists of slow multiplication of cells and increased number of cells as well as an increase in the size of cells. In the third phase of growth, there is an increase only in the size of the cells. A deficiency of nutrients in the maternal diet results in retardation in the third phase of growth (Adhikari & Krantz, 2001, p. 5).
If a child has a chronic nutritional deficiencies and frequent bouts of illness in early life is best indicated by the infant’s growth in length and the child’s growth in height. Stunted is the cause of day to day nutritional deficiencies. They may not gain height in later age; those who live in developing countries (GoN, MoHP, DoHS, 2010).” While a deficit in height i.e. stunting is difficult to correct, underweight can be recovered if nutrition and health is improved later in childhood. If the compromised of height at age is covered at the age of four to five, it masks the imbalance of nutrition during pregnancy period. (UNICEF, 2009).

Khadka (2012, p. 177) wrote in his case studies on food security about the major nutritional issues in Nepal as follow:

1. Harmful feeding practices and behaviours (e.g. males eat first, low weight during pregnancy, traditional practices toward pregnant women and young)
2. Inadequate understanding of nutrition, particularly for pregnant women and young children (e.g. breastfeeding, complementary feeding, infant and young child feeding)
3. Limited access to safe drinking water and sanitation facilities and poor sanitation and hygiene awareness (e.g. food safety and preparation; hand washing)
4. Inadequate access to and/or utilization of high nutrient food, and
5. Food behaviours and practices remain the major barriers and lack of food diversity (Khadka, 2012, p. 177)

National Planning Commission (NPC) has prepared food security and nutrition planning frame work and action plan. Government of Nepal as decided that
Ministry of Agriculture Development is focal point for food security. In recent year, significant efforts have been made for awareness and commitment for addressing food insecurity and malnutrition. Food security and nutrition has received considerable priority in the three years plan, 2010-13, and global Scaling up Nutrition (SUN) framework. NPC is providing policy guidance and leadership for the food and nutrition Security Plan of Action. The World Bank, UNICEF, the World Food Program and the REACH Initiative have all committed to supporting the NPC to create a Secretariat to track the implementation of the multi-sectorial planning framework for food security and nutrition. Ministry of Agriculture development has implemented the Nepal Food Security Monitoring and Analysis System (NeKSAP) with the WFP (Khadka, 2012).

Childhood malnutrition is one of the leading causes of morbidity and mortality. It is a complicating factor for other illnesses. The situation of child malnutrition in Nepal is very high due to the cultural, social, economic, educational and political structure of Nepal (Chapagain, et al., 2004). Stunting, underweight and wasting are more common in Mid and Far-West Hills, and Mountain areas than other parts of the country. Approximately 50% children in Nepal are undernourished out of which 49% are stunting, 39% are underweight and 12% are wasting (Sharma, 2012). The immediate implication of malnutrition is weight loss and faltering growth, as well as increased susceptibility to disease. The long term effect of malnutrition or stunting has intergenerational implication as well.

Bhattarai and colleagues (2012) explored that regarding children, two third of male and 50% female were malnourished. Similarly, 51.2% of male and 28% of female were found stunted indicating chronic malnutrition and 39% of male and 42% of female were found suffering Chronic Energy Deficiency (Thinness) while 3% male had class-
I obesity and they were overweight. Almost all of the children were forced to the moderate work, due to cultural impact, lack of awareness and social bad impact. “Adult man, women and children from 13 months to 5 years obtained total energy from their daily food” (Bhattarai, Rai, & Rai, 2012, p. 222).

There are different causes of under-nutrition. They are economical, cultural, environmental, lack of awareness, etc. To come out of these different causes food security policy act is needed. However, “in Nepal, a separate policy for food safety and quality doesn’t exit. How as expects of food safety and quality have been reflected in other policy and strategies such as Nepal Plan of Action on Nutrition 1998, Multi-sectorial Nutritional Plan 2013 have stressed the impotence of food safety and quality. Food safety and quality policy has been drafted and yet to be approved by the Government of Nepal.” (Wasti & Purna, 2013, p. 8).

In the case of Early Childhood Care and Development (ECCD), Nepal related literatures are very few. The historical background of ECD education in Nepal began from 1948 A.D. when the first Montessori School established in Kathmandu as pre-primary education. It was shifted to the laboratory school in 1956. Later on, it was operated as Kindergarten (KG) section in the laboratory school. As a name of pre-primary section or wing, private sectors started the ECD programs in Nepal. Now, the pre-primary sections are categorized or levelled as play group, Nursery, Lower KG, Upper KG, etc. Similarly, now government funded ECD programs are found in the community schools.

The major aim of the ECD program is to prepare ready to enrol in grade one (CERID (Center for Educational Research and Development ), 2004). Early Childhood Education (ECE) programs have social as well as educational roles to prepare the child
up to school entry age. It is an organized and supervised program as served child care center in the absence of their parents with diversity of programs. Such types of centers are named as pre-school, pre-primary school, child care center, Montessori School, Kids World, etc.

In Nepal, pre-primary education is not compulsory. “The Local Self-governance Act (1999) gives the authority of pre-primary education to local bodies (The World Bank, 2013, p. 5).” According to the Act, the Village Development Committees and municipalities can regulate those preschools with their resources. Pre-primary education is not required to all children, those who go through 1 to 12 grades, however, it is a part of formal education. “The Education Act (2028) identified two forms of early childhood care and education (ECCE): pre-primary classes based in schools are targeted primarily for children ages 4 and 5. Some of these pre-primary classes are private and charge fees, but many public schools (community schools) now offer ECCE classes, which do not charge fees” (The World Bank, 2013, p. 5).

According to the annual report 2013 prepared by Save the Children Nepal (2013), Nepal commitment to Early Childhood care and development (ECCD) with the government is resulting in greater acceptance of ECCD among communities as an integral part of children’s learning. “Parents are seeing out ECCD opportunities for children. 63% of 4-years-old from our working areas are now enrolled in ECCD. More children with early learning experience are entering primary school increasing their chance of doing well in school-54% first graders in our working areas were ECCD graduates ( Save the Children Nepal, 2013).” The second type of ECCE is child development centres, which are community-based and are primarily targeted towards children below 4 years. The centres are free of charge and receive technical support
from the Department of Education (DoE)—the executive department of the Ministry of Education (MoE)—and District Education Offices (The World Bank, 2013, pp. 5-6).

Rearing of children is mostly responsible to mothers than fathers especially in peasants groups. Thus, mothers are more directly involved in children's school readiness. The findings of a report by Plan Nepal reported that "The fathers' involvement was almost lacking Parent to Child Stimulation (PCES) programmes. This might be due to the involvement of fathers in outdoor activities. However, they allow their wives to attend monthly meeting and life skills training." (Maharjan, Gautam, Gautam, & Tamrakar, 2003, December, p. 23)

**Health seeking behaviour**

Pokharel states the reasons of poor maternal health status in Nepal. "The poverty, illiteracy, women's low status in the society, lack of access and difficult geographical terrain are major reasons for poor maternal health status in Nepal" (Pokhrel, 2012, p. 125). Similarly, he opines about the health seeking behaviour of mothers as follow:

The overall institutional delivery in study population was found 24.5%. Low socio-economic status, Illiteracy and poverty in women are the major challenging features of pregnancy and children birth. Health seeking behaviour during pregnancy and child birth was defined as the women having attended whether government (including sub-health post/ health post, PHC or hospitals) or private institutions during birth and number of antenatal care (ANC) visits. (Pokhrel, 2012, p. 125)

Chomat and his colleagues found the causes of poor maternal health are as follow with statistics:
Extreme poverty, poor education, and poor access to basic resources were prevalent. Out of 100 women 14–41 years old, 33% did not use the formal health care sector for antenatal care; the majority consulted a traditional birth attendant. Only 13% delivered in a hospital. Lower socioeconomic status, lack of fluency in Spanish, and no ownership of a motorized vehicle were associated with the highest likelihood of poor utilization of services. (p. 113)

Similarly, (Sreeramareddy, Chandrashekhar T, P, Sreekumaran, Joshi, & Uma studied on mother's attitudes and behaviours towards health seeking behaviours of child's health. They found the following behaviours:

A large proportion of mothers did not seek 'appropriate' and 'prompt' care for childhood illness and most often the care was sought from pharmacies instead of from qualified medical practitioners. The mothers tended to seek 'appropriate care' more often when they perceived the illness as 'serious'. However, a large proportion of the mothers were not aware of the danger signs of the childhood illness. Total family income, mother's education, number of symptoms and mother's perceptions about severity of illness were the predictors of the seeking behaviour. Complementary introduction of community-based Integrated Management of Childhood Illness (IMCI) programmes may improve family's care seeking behaviour and their ability to recognize danger signs of childhood illness. Socioeconomic development of the urban community can improve care seeking behaviour during the childhood illness. (p. 12)

This study on health seeking behaviour of mothers supports prior research indicating past use is the best predictor of future health care use. In addition, the study suggests that maternal perceptions of child health and maternal emotional functioning influence the decision-making process involved in seeking health care on behalf of
children. Effective management of paediatric health care use needs to address broader needs of the child and family beyond solely the child’s health, most notably maternal functioning (Janicke, Finney, & Riley, 2001).

In efforts to reduce gender and socioeconomic disparities in the health of populations, the provision of medical services alone is clearly inadequate. While socioeconomic development is assumed important in rectifying gender and socioeconomic inequities in health care access, service use and ultimately, outcomes, empirical evidence of its impact is limited. While reported treatment seeking from qualified allopaths is more prevalent in the BRAC group, non-members use the para-professional services of community health care workers almost twice as frequently. In both BRAC member and non-member groups, women suffering illness report seeking care significantly less often than men. The policy and programmatic implications of between group and gender differences in care seeking are discussed with reference to the literature (Ashed, Admas, Chowdhury, & Bhuiya, 2000).

Prompt and appropriate health seeking is critical in the management of childhood illnesses. This paper examines the health seeking behaviour in under-five child morbidity. It explores in detail actions taken by 28 mothers when their children become sick. Sixty-two in-depth interviews with mothers were conducted from four study communities. The mothers were identified from a demographic surveillance system. The interviews were tape-recorded, transcribed and thematically analysed. The study shows that mothers classify childhood illnesses into four main categories: (1) not serious—coughs, colds, diarrhoea; (2) serious but not life-threatening—malaria; (3) sudden and serious—pneumonia; and (4) chronic and therefore not requiring immediate action—malnutrition, tuberculosis, chronic coughs. This classification is reflected in the actions taken and time it takes to act. Shops are used as the first source of healthcare,
and when the program care moves out of the home, private health facilities are used more compared to public health facilities, while even fewer mothers consult traditional healers. Consequently we conclude that there is a need to train mothers to recognize potentially life-threatening conditions and to seek appropriate treatment promptly. Drug vendors should be involved in interventions because they reach many mothers at the critical time of health seeking (Nyamongo & Nyamongo, 2006).

A wide variety of health care options—home-based, indigenous, and cosmopolitan—exists in northern Balochistan, Pakistan. This paper examines health-seeking behaviour in the area of mother and child health for villagers in this pluralistic medical setting. The analysis of a specific series of illness episodes shows that the majority of cases obtain treatment from different medical systems for a single episode. Interest in medications takes precedence over practitioners, and the meaning the villagers attach to such substances is explored. Long-established patterns of behavior relating to indigenous medicine continue to occur when cosmopolitan medicine is utilized. Information presented here helps to explain problems in utilization of cosmopolitan pharmaceuticals and delineates areas for future health programme activity (Sultana & Hunte, 2002).

Anthropometric measurement was then used to determine if children were underweight (weight-for-age), wasting (weight-for-height) and stunting (height-for-age) based on CDC/WHO reference. Prevalence of underweight, stunting and wasting was 22.7%, 37.3% and 25.7% respectively. Study indicated that the risk of stunting increases with age. Socioeconomic status was most important factors associated with stunting, underweight and wasting. Meeting the minimum dietary diversity, minimum meal frequency and
minimum acceptable diet was associated with better nutritional status of children (Ruwali, 2011, p. 14).

### 2.4 School Readiness

As discussed for developmental models of school readiness and for early educational results revealed significant differences favouring children in the enriched intervention classrooms on measures of vocabulary, emergent literacy, emotional understanding, social problem solving, social behaviour, and learning engagement. Implications are its programs and policies (Karen, Celen, Rober, & Nelson, Promoting Academic and Social-Emotional School Readiness: The Head Start REDI Program, 2013).

For most children, interior of the home and its immediate surroundings are the first environments they experience throughout their early years. Young children, spend the majority of their time in the home. Home environments have been shown to be a major factor that influences the overall development of children. Within the home, children also have their early interactions with the members of their family, and availability and quality of resources for learning and playing largely determine the nature of these interactions (Iltus, 2007, p. 2).

The term ECD (ECD) in the title of the paper and throughout the text is used advisedly. It is very important, at least to those working in the ECD field, that we try not to talk about preschool education. The latter term implies an emphasis on a formal institutional approach at the early childhood stage. This is only one form of intervention within the field of ECD. Reference to school introduces the major challenge of this paper, which is to present a view of education which goes beyond the narrow confines of "schooling" and sees education as a developmental process in each human being.
which begins at birth, or even before birth, and ends only with death (Torkington, 2015, p. 145).

ECD programmes can have important effects on a child's primary school readiness, enrolment, progress, and performance. This review provides a critical examination of that evidence, within a framework positing an interactive effect between the readiness of children for schools and the readiness of schools for children. In this review, "readiness" refers to individual characteristics of children and schools as well as to family and community characteristics, values, expectations, structures, and organization (Myers & Landers, Preparing Children for School and Schools for Children, 1989, p. 2).

Three interlinked dimensions currently define school readiness: a) ready children; b) ready schools; and c) ready families. Children, schools and families are considered ready when they have gained the competencies and skills required to interface with the other dimensions and support smooth transitions. For example, the child transitions to school, the school transitions to accepting new children into Grade 1, and the families transition to sending their children to school on time and interacting with the school (UNICEF, School Readiness and Transitions, 2012, p. 3).

The United Nations World Fit for Children (WFFC) mission statement of 2002 is an excellent example of more current concepts of school readiness, namely, a good start in life, in a nurturing and safe environment that enables children to survive and be physically healthy, mentally alert, emotionally secure, socially competent and able to learn.

School readiness is defined by two characteristic features on three dimensions. The characteristic features are ‘transition’ and ‘gaining competencies’, and the
dimensions are children’s readiness for school, schools’ readiness for children, and families’ and communities’ readiness for school (Britto, 2012, p. 6).

National Education Goals Panel, school readiness encompasses five dimensions: (1) physical well-being and motor development; (2) social and emotional development; (3) approaches to learning; (4) language development (including early literacy); and (5) cognition and general knowledge.[6] The school readiness indicator reported on here includes four skills related to early literacy and cognitive development: a child’s ability to recognize letters, count to 20 or higher, write his or her first name, and read words in a book (Early School Readiness, 2015).

In conclusion, the findings from this large-scale Australian study show many consistencies with the international research into the type of factors found to be relevant to children’s school readiness. Most factors applied similarly, to children from financially disadvantaged and non–financially disadvantaged households, although some distinct relationships were found for particular groups. The findings make clear that children from financially disadvantaged families are at greater risk of poor school readiness, due to the much higher rates of risk factors evident among this group and the accumulation of risks experienced. The implications drawn from the findings could be used to guide future interventions to reduce the gap between financially disadvantaged and non–financially disadvantaged children in school readiness and to assist in helping all children make a positive start to school (Edwards, Baxter, Smart, Sanson, & Hayes, 2009, p. 30).

The first three years of a child's life are the most crucial for a child's development, as the child grows rapidly than during this period (WHO, 2003). Healthy eating not only support growth, it is fundamental to brain development and has been linked to
learning and school readiness. The effects of poor nutrition early in life can lead to a variety of challenges in children, such as:

- Delayed motor and cognitive development
- Social/emotional problems
- Attention difficulties
- Poor academic achievement (WHO, 2003).

Another significant concern is the growing problem of childhood obesity. In 2004, it was reported that 26% of Canadian children and youth aged 2 to 17 were either overweight or obese. Obesity has been linked to a number of illnesses such as diabetes, stroke, heart disease, hypertension, and certain cancers (Leitch, 2007).

Parents are a child’s first educator. A child’s family and home environment has a strong impact on his/her language and literacy development and educational achievement. This impact is stronger during the child’s early years but continues throughout their school years. Many background variables affect the impact of the family and home environment (such as socio-economic status, level of parental education, family size, etc.) but parental attitudes and behaviour, especially parents’ involvement in home learning activities, can be crucial to children’s achievement and can overcome the influences of other factors (Bonci, 2011, p. 2).

School readiness includes the readiness of the individual child, the school's readiness for children, and the ability of the family and community to support optimal early child development. It is the responsibility of schools to be ready for all children at all levels of readiness. Children's readiness for kindergarten should become an outcome measure for community-based programs, rather than an exclusion criterion at the beginning of the formal educational experience. Our new knowledge of early brain
and child development has revealed that modifiable factors in a child's early experience can greatly affect that child's learning trajectory. Many US children enter kindergarten with limitations in their social, emotional, cognitive, and physical development that might have been significantly diminished or eliminated through early identification of and attention to child and family needs. American Academy of pediatrics policy statements “Quality Early Education and Child Care from Birth to Kindergarten” and “The Inappropriate Use of School ‘Readiness’ Tests” (High, 2008).

Recent research has redefined what it means for a child to “be ready” for kindergarten. This primary objective of Goals 2000 set by the National Education Goals Panel1 was “to insure that all children enter school ready to learn.” Historically, views on readiness have placed differing levels of priority on children’s social and academic preparedness.

2.5 Research Gap

The above review of various research studies on child nutritional status has given an important insight into the factors influencing child nutritional status of preschool children. The review has clearly shown that such factors as household economic status, education of mother, employment of mother, employment of father, source of water and availability of toilet facility, child mobility, age of child, birth order, birth interval, maternal nutritional status and availability of medical facility have a significant influence on child nutritional status. However, little attention seem to have given to important of environment and hygiene among the households in the earlier studies. Very few studies emphasized on the influence of the type of family on child nutritional status. None of the studies done earlier has made an attempt to correlate household deprivation status and nutritional status of the preschool children. The
present study aims to fulfil the gap that exists in the literature on nutritional status of preschool children.