

CONCLUSION

Among the several disciplines in which human health and disorders are studied for human welfare, geography is one of them. Various environmental components and nutritional status play a vital role in the incidence of various health conditions. As a sub branch of geography, Medical geography is one of the new additions in geographical research, which is emerging as a systematic branch of the subject. Medical Geography is still in infancy stage in our country, in which various environmental and nutritional studies are taken up.

Basically the study of health and nutrition is concerned with the scholars of medicine and home-science, but it is also fact that various geographical components play vital role in the field of health and nutrition. So this type of inter disciplinary study is very useful to detect the basic lacuna in health and nutritional status of the people particularly, children. Natural and cultural environment in which people live, their dietary habits and nutritional status become the main determinants of the health disorders which they suffer from.

SCHOOL CHILDREN AND HEALTH

School age is the period when children begin their formal learning and teaching and in this period they acquire certain belief, value of social skills which become a permanent part of his personality. Few basic aspects of life like adequate nutrition, proper education and congenial environment are very essential for over all development of children. Health and Nutritional status of school age children are very vital because they are the nation's biggest assets for development and harmony. The physical and

mental development of school age children determines the prosperity and peace of tomorrow. Therefore, it is an index of what the nation is investing in the development of its future manpower potentials. An individual health status directly depends upon the nutritional intake because nutrients are the components by which health status of children affect directly.

School going children normally consists of the group of children of class I to V, and their age normally falls between 6 to 12 years. This segment of population is very prime group as far as nutritional status is concerned because this is the period of learning and maturation. Few other development such as physical, mental, social, emotional and language related development also take place in this period. School is the first and foremost place after home where these children learn the basic knowledge of the life. Thus that school environment and teachers are the most important constituents for further development of the children.

Good nutrition is very essential for health. In other words, health and nutrition are inter-related with each other. Children need adequate food for growth, development and to lead an active and healthy life. Recent trends show positive and modest nutritional status of children. The improvement has been marked especially in reference to prevalence of severe-malnutrition. Over the past two decades there has been a substantial and progressive decline in child mortality rate in our country.

Nutrition and health are complimentary. These factors control the quality of life of man very strongly, especially in the developing countries like India. As a whole nutrition is regarded as a vital component of health. The later is an ultimate objective of nutrition. In fact nutrition i.e. water and food consumption, and health are the two basic rights of human. The importance of health can hardly be exaggerated in the human resource development while framing a national policy.

Now there is a general consensus that the interaction of nutrition and health is complementary both conceptually and operationally. Nutritional status of an individual or a community, which is not too distant past was regarded as nothing special to the nutritionists and related food intake is now regarded as an indicator of national health and of the quality of life.

The basic components, which affect the health and nutritional status of school going children can be basically grouped into two groups (i) Constant Components and (ii) Changing Components.

(i) Constant Component

This includes physical features, geology soil and natural vegetation etc. Geology largely determines soil conditions, while agriculture very largely depends on the soil. As far as, the present study is concerned climate is the most important factor, which affects health directly as well as indirectly, in the same way soil as constant as well as changing factor affects nutritional status of school going children.

Various causative environmental agents which determine the health status of school children are noticed by the author herself. It is observed during the fieldwork that many diseases like typhoid cholera dysentery and other digestive disorder are caused due to use of contaminated water.

(ii) Changing Components

Men himself is the most important component of various aspects of population such as density of population, sex ratio, literacy. At the same time several cultural characteristics like religious tradition, occupation, settlement, way of living, water supply and sanitation are equally important. In present concern all these components are very much related with nutritional status of the school going children.

School Environment

Among schools chosen for the present study (51), only 48 schools have their own building. There are very few school buildings which belong to pucca category and most of the school buildings are semi pucca. Well and hand pumps are the common source of the drinking water. Schools are generally located in the open space. Environment and climatic conditions of the rural school are better while as the condition of many schools in urban or city areas is not up to the mark. There are many significant differences among the private and government schools. The facilities prevailed in the private schools are better than the government schools of the study area. Generally Tat Patti is used as furniture in these schools. Normally children stay in the school for 4-5 hours daily. Scarcity of the school equipments like blackboard, chalk, duster, maps are observed by the author her self. Many of these schools are run by one or two teacher without any supporting staff like peon, sweeper etc. Annual health check-up is common in all the schools. As far as Teacher-Student Ratio is concern there were 38 students per teacher in the study area. The teacher student ratio was found 1:44 in the sample schools(51).

Educational Outlook

There were 1188 primary schools in the all seven blocks of the study area. The number of enrolled students were 1,43,881 out of which 76,683 were boys and 67,198 were girls. In the present study 660 students were selected. Out of which 333 were boys and 327 were girls. To get various information on socio-economic status, surrounding environment, family background etc., mothers of the sample students have been also interviewed. It is observed that number of enrolment of the students is high in Damoh block of the study region from where 178 children have been

selected for the study. Comparatively less number of children(57) were selected from Batiagarh block.

During the study of sample children it is found that most of the children (392) like Hindi as their interested subject. Same time 151 children like maths, 53 children like environmental studies., 42 children like science and 26 children like English as their favourite subjects. Memory is one of the other important aspect of students. Study of memory of the school going children shows that 389 children have average memory, 217 has good and 54 children have excellent memory. Sport activities and playing are the primary necessity of any children for their occupation, settlement, way of living, water supply, sanitation It is also found that most of the sample children (579) play regularly but 81 children play occasionally.

Entertainment is the prominent source of the overall development of children. During the study it is found that children prefer to see television, then tape record and radio. Children are found irregular in the school during festive occasion and in the season of harvesting. It is also found particularly in rural areas that parent were not interested about children education or to send their children to school.

Dietary Pattern

The food habits of the children of the region depend mostly upon the locally availability of foodstuffs. Food habits are also influenced by season, customs, religious beliefs etc. Social factors are also influenced the food habits of the children. The diet consumption pattern very from place to place in the study area. The chief food stuffs of this region are wheat, gram, rice, jowar, local leafy vegetables and fruits such as mango, guava and some seasonal fruits.

The food intake pattern in particular area is determine by the various factors i.e., the customs, religion, economic condition and

production or availability of food stuffs. From the analysis of food stuffs it is found that intake of cereal and millets was surplus from the standard requirement and intake of pulses, fat and oil was deficit from standard requirement. Intake of fruits and leafy vegetables was less than standard requirement because these were not easily available and was costly.

Nutritional status of the children is influenced by many factors such as customs and beliefs, economic condition, education, agriculture, food stuffs availability and improper cooking practices etc. Analysis of different nutrients, shows that intake of nutrients was deficit to the standard requirement.

Main determinants of malnutrition, which detect during field study are poverty, scarcity of the eatable products, lack of knowledge, ignorance family size, food habit and belief etc. Analysis shows that I grade malnutrition was higher in most of the children (both girls as well as boys). The average percentage of the Normal grade, I grade, II grade and III grade malnutrition was 39.5, 40.25, 17.72 and 2.52 per cent respectively.

Nutritional deficiency is one of the serious problem observed in the study area. Diseases which are reported in the study region are divided into two part i.e. nutritional deficiency diseases and environmental disease. Protein-calorie malnutrition is an important health problem among school children of the region. Anaemia is another deficiency disease of the region, while, Bitot's spot, night blindness, conjunctiva and keratomalacia are major vitamin 'A' deficiency diseases which is found in selected school children.

Vitamin 'C' deficiency diseases, scurvy and bleeding of ribs are also reported in unit under study. Enlargement of spleen and liver, phryonderma etc. are main other health disorders of the region..

Malaria is also major health hazard of the area. Beside this different skin diseases and water born diseases are also reported frequently by the children of the study unit.

Conclusion

To sum up the observations which are observed during the extensive field study and the analysis of the collected data the following causative agents as well as man made determinates are found responsible for various nutritional and health conditions of school children of the area under study:

- (i) The polluted environment and deficient dietary intake are the main cause of the health problem of fifty percent children of the area.
- (ii) Majority of the children are bound to use contaminated drinking water from unsafe sources. Polluted water is one of the important cause of major health problems in the area and it is responsible for many health disorder like dysentery, typhoid, jaundice etc.
- (iii) Dietary habits, selection of food stuffs, cooking method etc. are influenced by the tradition and resulted as under-nutrition and malnutrition.
- (iv) Personal bad habits like improper cleanliness of teeth and clothes, irregular bathing, nail biting is common among children.
- (v) Unhygienic condition, lack of ventilation, insufficient space in the houses and schools, improper cooking methods, ignorance etc. are also responsible for the occurrence of various ill health conditions.
- (vi) Diet of the children, food habits, standard of living, dress, use of utensils all these factors are influenced by social customs and beliefs. People have faith in their own tradition, which also indirectly affects the health of the children.

- (vii) Government health facilities are inadequate in the study region, so people are bound to take the health care services from the private doctors. These private medical facilities are comparatively costly. Thus poor people are unable to offer the private clinics for their treatment.

Suggestions

Environmental factor and man-made factor can be solved if the importance of children awareness and educational programme are started for rural and urban people to educate them regarding the health and nutritional status of school children. Because they are the future adult energetic population of the country on which the development of the nation depend.

In view of minimizing the present health and nutritional status of school children it is essential to take the necessary steps to provide facilities for uncontaminated drinking water and various facilities for community sanitation.

To improve the health and nutritional status of the children the per capita income of the parents and dietary habits of the family are largely depend upon their occupation, including agricultural problem also need to be improved as far as their children development is concerned.

Some health problem of children has very close relationship with the present environmental condition in the region, on the other hand their dietary habits, nutritional intake are responsible for various nutritional health problems.

This study was undertaken to gain an insight into the health and nutritional problems, establish a database for involving measures, and to improve the health and nutritional profile of the children in the study region.

Proper monthly health check-up and immunization work of the school children should also be ascertained. So that seasonal and communicable disease are not occurred.

It will be better if Mid Day Meal programme is started in schools through Government agencies or through community participation to improve the nutritional health status of the school children.

Education to school dropouts, adults and school children is provided through non-formal education centres and district literacy programmes. Parents should be motivated to attend these education centres which may help them to provide awareness and information about the necessity as well as awareness for provision of better nutrition.

Parents should be encouraged to send their children especially girls to school. Due to the preoccupied work at home, the girls are unable to attend schools. Thus attempts have to be made to spare the girls to enrol and attend schools regularly.

Under the sample study it is observed that there is very low literacy rates among men and women in comparison to those for the other district of the state. An association between the parents educational status and school attendance and the coverage of immunization has also been observed. Moreover, only 80 per cent children are reported to be enrolled in different schools.

Emphasis on locally available carotene rich green leafy vegetables to be given to improve the dietary adequacy of vitamin 'A' e.g. amaranth, Bengal gram leaves, spinach, bathua and fenugreek leaves are to be used fresh in season and dry form (local name sukhi bhaji) in off season. If the same are not purchased from the market, the villagers are to be encouraged to grow them in their kitchen garden.

Messages relating to nutrition should be integrated in the curricula of literacy campaigns and educational programmes targeted at different age groups providing equal status to the girl child.

The control of malnutrition in poor communities has to be based on the following approaches:

(a) Educating mothers in rural areas in formulating, at their own homes, about diets for their children of good nutritive value from locally available resources and within their reach.

(b) Encouraging small-scale industries in rural areas to produce and undertake - simple processing and distribution of nutritious foods for children, suitable for the community from the resources available in the areas. This may be done either through village co-operative or through other commercial channels.

(c) Establishing in urban centres facilities for more elaborate centralised processing of suitable nutritious foods for distribution in these centres.

To improve the nutritional status it is essential to educate the parents regarding the nutritional and health status of the child so that their health and nutritional status should be improve for this. It is advisable to start the nutritional health oriented educational programme in the entire region.

As far as present study area is concerned it is also essential to modify the present food cropping pattern so that more nutritious food stuffs are to be produced to improve the health of the children.

It is also advisable to educate the mothers of the children regarding nutrition health and food stuff to minimize the loss of nutrients during cooking as well as regarding the bottoms of living environment and personal hygiene, to avoid various related health disorders.

Step should also be taken to provide the uncontaminated drinking water in schools as well as for the natives of village and town.

Which will definitely reduce the incidence of various health disorder and diseases among school children and the natives.

The production of pulses, fruits and vegetable should be encouraged locally. Flesh food to be increased as these are the source of protective elements of nutrition.

The social and education advancement which have occurred now will influence people into limiting the size of their families, to bring a balance between resource and growth of population.

To improve economic condition of people it is necessary to make a systematic plan such as cottage industries should be established. Such work would increase the annual income and increase purchasing power of the people of the area. This way nutritional status of children will be improved.

It is recommended that the State Government should allocate higher funds for development of roads and transport for the better utilization of the services from urban to rural areas.

It is suggested that measures to provide potable water to the villages through pipe supply, repair of non functional hand pumps and deep boring of wells are to be taken up. The quality of drinking water should be tested and purified regularly. Leasehold methods for water purification should be demonstrated.

Technology for low cost sanitary latrines should be extended to villages. Garbage bins should be installed for proper waste/refuge disposal as garbage dumps are found scattered around in the villages.