Nature and Causes of Malnutrition in Rural India

A Study of Betul in Madhya Pradesh

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MALNUTRITION is a condition which occurs when the body does not get the required amount of nutrients for the maintenance of positive health. It is a global problem, especially in the developing countries. Nutritional deficiency disorders among mothers and children of under five years are very common in India. Mainly it is due to inadequate consumption of calories by mothers during pregnancy and lactation and an improper feeding habit during childhood.

Inadequate calorie intake by mothers and children leads to chronic under-nutrition. During pregnancy it leads to low birth weight babies, premature labour, abortion and under-nourished children. In children, the chronic under nutrition is reflected as growth retardation (less weight and height for age).

Malnutrition reduces resistance to any disease. So the child gets infection very soon, and due to frequent infection and diseases the child becomes malnourished. Once the child has become the victim of malnurition, after correction also his physical and mental development will not be as normal as with other children. Like that high mortality and morbidity occurs in children due to malnutrition and infection.

Research Studies

Research studies are conducted in some nations and have proved that protein energy malnutrition occurs not because of decreased intake of protein, but it is due to decreased intake of food. About 80 per cent of the total under-five population suffers from protein energy malnutrition. About five to ten per cent of under-five children have signs of Vitamin A deficiency. Approximately sixty per cent of mothers and under-five children suffer from anaemia (Umesh Kapil, M.D.).

In a study (James, 1984) it is observed that fifty per cent of malnourished children live in such houses where there is no shortage of food. It is due to ignorance of nutritional requirements of the children and nutritive value of common food, faulty feeding habits, superstition, traditional customs and habits etc. People choose poor diets when good ones are available. Due to ignorance of correct cooking methods they lose some amount of nutrients while cooking the food. Malnutrition can be prevented by improving the feeding habits in infants and food habits in young children and adults, through the nutrition education and motivation of the community, and not only by drugs. By preventing malnutrition, mortality and morbidity among children can be reduced.

Betul is a tribal district of Madhya Pradesh. It has a healthy climate. It has four tehsils and ten blocks. Out of the ten blocks, seven are tribal blocks and three are non-tribal blocks. There are 1297 revenue villages and 101 forest villages. Total population of this district is 9,25,387. Density of population is 92 per sq km. 84.60 per cent is village population. Scheduled Castes are 10.52 per cent and Scheduled Tribes are 36.19 per cent. 35.52 per cent are children under 14 years of age. Literacy rate of this district is 27.95 per cent according to 1981 Census. Diet of the people of this district is ill-balanced with or without sufficient carbohydrate and very little protective foods like milk, meat, fish, eggs, fruits, dal and green leafy vegetables. So the mothers and children of Betul district become the victims of nutritional deficiency diseases. The need of scientific study of the causes of malnutrition, its environment and prevention is very essential. Present paper attempts to fulfil it.

The main nutritional deficiency diseases found in Betul district are protein energy malnutrition, Vitamin-A deficiency, nutritional anaemia and goitre.

Causes of Malnutrition

Poverty is the main cause of malnutrition in this district. Still there are people in this district who live in the remote and hilly areas untouched by the winds of modernisation and cultural change. In the rural area most of the people are dependent on their agricultural land only which is insufficient for their fulfilment. Whatever they get from their field, they consume it. Others work from morning to evening. In the evening, whatever they earn, they eat. So most of the people are unable to fill the stomachs of their children and of their own.

Ignorance of balanced diet, special diet for vulnerable groups and nutritive value of foodstuffs are the other important causes of malnutrition. In the villages, most of the women are illiterate. A housewife has no idea of preparing balanced diet from her

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limited resources. They sell the valuable foods such as milk, eggs, fruits, etc., and earn money to buy cereals and other things, instead of feeding their children. Ignorance of child care leads the child to get more infections from various sources. Frequent infection and illness leads the child to malnutrition.

Superstition, traditional customs and habits are also the important causes of malnutrition. Even today, in the villages, people are practising some sort of wrong beliefs. They believe that some diseases are due to God's curse, such as measles and chicken pox. In these cases they take the advice of the 'Bhagat' instead of medical treatment. They believe that certain foods are harmful to pregnant women, lactating mothers and children. They believe that certain foods are heat producing and some have cold effects. If they consume heat producing food such as jaggery and papaya during pregnancy, abortion may occur. Cold causing food such as curd, fruits, rice and green leafy vegetables may give trouble during labour. If they eat cold producing food during lactation, the child will suffer from cold and cough.

Most of the villagers believe that the children's liver will be enlarged due to cereal foods. So they start weaning too late and the child will be dependent only on breast feed for one or two years. Due to jaggery, worm infestation will occur. Cold producing food such as plantain, guava, etc., will cause cold and cough. Like that they avoid certain valuable food during childhood. Due to these wrong beliefs the child becomes malnourished.

Varying Food Habits

The traditional customs and habits are varying widely from country to country and from region to region. In the families food habits are passed from one generation to another. It varies from family to family. Some are in the habit of eating once a day, whereas others are in the habit of eating twice or thrice a day. In some families, men eat first and women eat last and poorly. It may cause malnutrition among women. It leads to abortion, low birth weight babies, premature labour and undernourished children. Low birth weight and undernourished children have more chances to get infection soon.

The selection of food has also a very important role in the development of malnutrition. For example, most of the people in Betul district eat dal daily once or twice. But most of them select only one type of dal, whereas they have to consume at least four types of dal. Then only they can meet their protein requirement, especially for the vegetarians. The faulty cooking practices also have a very important role in the development of malnutrition. For example, draining away the rice water at the end of cooking. By throwing the cooked rice water, they lose some amount of starch, Vitamins and minerals. Prolonged boiling and frying in open pans destroys some amount of nutrients. By peeling, cutting the vegetables in small pieces and washing the vegetables after cutting also decrease some amount of nutritive value. Almost all the people eat green leafy vegetables. But due to their faulty cooking practices, they are losing a good amount of vitamins and minerals.

Large family is another cause of malnutrition. In a large family there may be two or three children below five years of age. All need extra milk, other nutritive food and special care. Due to frequent pregnancy, the mother may not be able to look after the children properly; they may not get proper diet for their requirement. Usually these children are neglected by their parents. In these situations, children will become the victims of malnutrition.

Poor Living Conditions

Another important cause of malnutrition is poor living standards. In this environment the child may get infection and illness more frequently and they become the victims of malnutrition.

Diarrhoeal diseases, measles, whooping cough and respiratory infections are also important problems for malnutrition and death among children. The effect is more serious in such children who are already malnourished.

The best and most reliable methods for early identification of malnutrition of young children are to weigh them regularly until they are five years old. Because the monthly growth and development of the child is not visible. It can also be done by measuring the circumference of the middle of the upper arm by using the specially marked Arm Circumference Scale.

Prevention

Family is one of the most important and basic units of the community. In the family, the housewife is responsible for catering. In some families the husband determines what food should be consumed. So the husband and wife of the family should be educated about the importance of balanced diet, special diet for vulnerable groups (pregnant mothers, lactating mothers and children), selection of the right kind of foods within their income, value of animal proteins, advantage of kitchen garden, proper method of cooking and eating practices.

In the community, people have so many wrong beliefs on food consumption. They follow their own customs and culture. The community should be educated to change their wrong beliefs and accept the right ones.

Protective food should be made easily available in the community in all the seasons. It should be within their purchasing capacity. The people should be encouraged to produce more protective foods, such as eggs, fish, milk, dals, vegetables and fruits, etc. They should be taught about the value of its consumption by the vulnerable groups and also how they can increase and improve their food consumption with their own efforts. The production of protective foods will increase their income and living standards. It will help to prevent malnutrition and

improve their health.

Promotion of correct feeding practice through nutrition education of mothers is very essential. A new born baby should get breast feed soon after birth as early as possible. The child should be fed whenever he needs. Breast feeding provides the best possible nutrition for the first four to six months of life and to protect the infant against common infections. The child should not be on bottle feed. If he requires top feed, feed him with a cup and spoon. Weaning should be started at the age of four to six months alongwith breast milk and gradually the diet may be increased. Breast feeding should be continued as long as possible. The child should be trained to eat family diet at the age of one year. Tinned baby food should be avoided. In a country like India, the government must take steps to provide at least one time food daily to the poor children.

All children should be immunized against all preventable diseases in proper time. Mothers should be convinced and motivated to get their children immunized in proper age and it is for their welfare only. Proper distribution of Vitamin A solution or capsules and iron folic acid tablets will help to prevent night blindness and nutritional anaemia among children. Regular supply of iodized salt will help to prevent goitre. Regular health check-up and treatment of worm infestation will also help to prevent some amount of malnutrition. Malnutrition can be avoided to a great extent by immunizing the children against preventable diseases.

The mothers should be convinced and motivated to have proper spacing between two children and adopt a small family to have a healthy mother and healthy children.

Nutritional deficiency diseases are very dangerous to the children. Due to these diseases, high mortality and mortality occur in children.

High female literacy will help to reduce the infant mortality rate. Kerala State is the best example for it, where the infant mortality rate is around 41 in rural and 34 in urban areas per 1000 live births, whereas the national average is 124 and 114 infant in rural and urban India respectively. Female literacy is 71 per cent in Kerala which is much higher than the national average female literacy.

Conclusion

A malnourished child is lacking both physical and mental health throughout his life. An unhealthy citizen can never build up a healthy nation. To bring up a healthy citizen, it is our responsibility to protect our children right from the womb. It can be achieved with the joint efforts of the government, its employees, the community and, above all, the parents of the growing child.

Each and every citizen should be aware of the nutritional requirements for themselves and their children. In order to bring up a healthy nation, all of us should realize that our children's health is our health and our health is the nation's health.

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