Community Nutrition

Community nutrition deals with a variety of food and nutrition issues related to individuals, families, and special groups that have a common link in terms of a particular region, language, culture or health-related issues. This segment covers public health nutrition, nutrition education and medical nutrition therapy. Community nutrition is gaining importance in health promotion and disease prevention, since an individual’s behavior is influenced by the living environment, local norms and beliefs.1

**Concept of Community Nutrition**

The World Health Organization (WHO) defines community as a social group determined by geographic boundaries and/or common values or interests. A community can also be defined on the basis of a common interest or goal. Many successful health awareness and disease prevention efforts such as improved services and awareness of certain community-specific problems have been possible in common-interest communities. Community nutrition initiatives aim at involving community nutrition and dietetics professionals to provide nutrition services according to the needs of the individuals through primary, secondary and tertiary prevention.

- **Primary prevention** involves designing activities to prevent a disease or condition before it occurs. Public health nutrition also focuses on the promotion of good health through nutrition, primary prevention of nutrition-related illness and maintaining the nutritional health of populations.
- **Secondary prevention** involves planning activities related to early diagnosis and treatment including screening for diseases.
- **Tertiary prevention** consists of designing activities to treat a disease state or condition such as malnutrition or injury in order to prevent it from progressing further.

These professionals liaise with other professionals for a wide range of education and human services such as child care agencies, social work agencies, services for older individuals, and community-based epidemiological research.

Another branch, public health and nutrition, is viewed as the scientific diagnosis and treatment of the community as a whole. Public health is defined as the science and art of preventing disease, prolonging life and promoting health and efficiency through organized community efforts. Thus, community nutritionists and health workers can focus on the community strengths, which could be education, support systems, spirituality among others, and provide nutrition knowledge to reduce healthcare costs.

**Malnutrition and Its Causes**

Malnutrition is a pathological state resulting from a relative or absolute deficiency or excess of one or more essential nutrients.2 In developing countries, infection and infestation are the two main important factors involved in the causation
of severe malnutrition among preschool children consuming inadequate and ill-balanced diet. Broadly, the causes for malnutrition can be categorized into three groups, namely food taboos and beliefs, infectious diseases and food hygiene.

**Malnutrition**

- Food taboos and beliefs
- Infectious diseases
- Food hygiene

**Food Taboos and Food Beliefs**

Certain food habits and beliefs are deeply entrenched in culture. Many customs and beliefs exist about food consumption, and these generally apply to the most vulnerable groups that comprise infants, toddlers, and expectant and lactating women. The most common determinants of malnutrition are religion, geography, tradition and changing food habits and choices.³

**Geography**

Early settlers consume whatever is locally cultivated. However, rampant consumption of staple foods without much variety could lead to protein-energy malnutrition and even certain vitamin deficiencies. For example, rice is the main food crop in tropical countries receiving high rainfall, whereas millets are grown in abundance in areas getting low rainfall. In such areas, the incidence of vitamin B deficiency is observed.³

**Religious Beliefs**

India is a country with many religions and it does exert some influence on food habits. Certain foods are not allowed in some religions. For example, in some sects, nonvegetarian foods are shunned. It is also believed that nonvegetarian food should not be consumed on certain days like Saturdays or Fridays. Fasting is also a common practice among people. Such practices may cause vitamin deficiencies.³

**Traditional Beliefs**

Certain traditional beliefs exist about food habits among populations which are illiterate about the nutritive value of foods. The most common food taboo is seen in pregnant women, wherein they are advised against consumption of papaya and sesame seeds due to the risk of abortion. Certain combinations of foods are also advised against for fear of adverse effects. It is believed that snake gourd and egg if eaten together may cause death; milk and fish if consumed together may cause leukoderma and leprosy.³ Ayurvedic texts advice against certain food combinations as it may hamper digestion.⁴ However, scientific studies are warranted before following these age-old recommendations.

**Concept of Hot and Cold Foods**

Foods such as meat, eggs, legumes, nuts, and oilseeds are considered ‘hot’, since they produce more heat in the body. On the other hand, foods such as fruits, curd, vegetables and milk are considered ‘cold’.³

**Food Fads and Changing Food Habits**

Certain beliefs attribute great curative or preventative properties to certain foods or ingredients. Some prevalent food fads are that beetroots help build ‘blood’, meat gives strength, raw cucumber without salt could be poisonous, curds should
not be consumed at night, etc. On the other hand, milling and processing of rice and flour has increased the consumption of white rice and maida. Processing removes the fibre layer and also processes out the gastroprotective lipids naturally contained within the germ.

Faulty Feeding Habits of Mothers

There are some misconceptions regarding feeding practices in infants. Many mothers think that it would be fine to feed cow’s milk to infants or to feed solid foods to a hungry infant before 4 months of age. Feeding cow milk to an infant puts them at an increased risk for iron deficiency. In addition, cow milk protein and mineral content are too high which will increase the renal load causing host of problems.

The prevalence of such food fads and beliefs, especially among vulnerable groups, can contribute to nutritional deficiencies and malnutrition. These problems can be overcome by increasing nutrition education and awareness. Cultural changes are difficult to bring about, but by proposing simple alterations backed by scientific evidence, these rigorous beliefs can be eventually changed.

Infectious Diseases

Studies have found that frequent occurrence of infectious diseases such as diarrhea, dysentery or even malaria adversely affects the health of the infant. Most field studies have identified diarrhea as the major determinant factor leading to malnutrition in developing countries. A child suffering multiple episodes of diarrhea loses nutrients and water through stools, and may also have malabsorption and poor appetite. Malnutrition, in return, reduces the immunity predisposing to acute respiratory infections. Another vulnerable population is older adults, with community-acquired pneumonia being the most common infection. World over, an estimated 90% deaths occur due to pneumonia among adults aged over 65 years. Urinary tract infection is also one of the common sources of bacteria among this age group.

Food Hygiene

Food hygiene is an important determinant of health, as it can lead to infections. Consumption and use of contaminated food, milk or water can predispose one to diarrhea and in case of the vulnerable populations, it can lead to malnutrition. The Codex Alimentarius defines food hygiene as all conditions and measures necessary to ensure the safety and suitability of food at all stages of the food chain. Thus, effective hygiene control is imperative to avoid adverse health events such as food-borne illness and injury. The 2006 Food Safety and Standards Act consolidated all the laws related to food safety. The Food Safety and Standards Authority in India lays down science-based standards for foods and regulates their manufacture, storage, distribution, sale, and import.
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References