Diet quality and nutritional status of ethnic children: a mini review

Abstract

Nutrition is the base of sound and good health irrespective of age and sex. If we do not care them early they will be less productive and often become ill. This mini review was aimed to find gap/missing of existing literature in order to make foundation of new research. After repeated critical review of few original articles, some gaps have been found. Almost every article they focused on outcome and mildly highlighted input variables but did not consider all possible variables and missed to show interlink between those variables.

Introduction

There are number of ethnic group in Bangladesh namely Chakma, Marma, Tripura, Garo, Santal etc. They traditionally lead diverse life style and their way of life is indigenous. Nature and forest dependent life style makes them unique area of study. They constitute 1% of total population. We know children, pregnant women and aged people are vulnerable in any community. It is heard about 1000 days concept but what about effect after those days particularly on ethnic children need to review indeed. This mini review only focuses diet quality and nutritional status ethnic children.

Diet and nutritional status

Bhattacharyya K and Sarkar TK conducted a community-based cross-sectional observational study among three tribal villages of the Chanchal II block of the Maldah district in West Bengal to assess nutritional profile of 188 children less than 5years of age. They found more than half of the study subjects (63.83%) were suffering from different grades of malnutrition.1 After go through and critical review of this paper it is found that they did not show dietary quality and quantity which is an important determinants of nutritional status. Along with diet information on hygiene practice was also absent in their article. There is a gap between environmental factors and nutritional status. In terms of socioeconomic status this paper only shows age and sex of the children, occupation and income of parents but no information was found about education of mother which is a strong influencing factor in determining child nutritional status. So if we want to get complete picture of nutritional status of ethnic children, it is necessary to consider all possible variables. Traditional system of cultivation is an important feature of ethnic people. Cultural belief, traditional healing system, faulty food habit, indigenous cooking system are commonly observed among these diverse communities. Literature suggests in India most of the tribal people convey their own geographically isolated life style. Evidence supports inadequate food habits, along with traditional sociocultural and biological activities, may lead to a high proportion of child under-nutrition.2–4 Another study was done to investigate the nutritional status amongst Shabar children living in urban, rural and forest habitats and factors associated to nutritional state. The results revealed that children from forest regions had the highest prevalence of under-nutrition followed by their rural and urban counterparts, 33.87%, 24.62% and 20.16%, respectively.5 They had taken 5 to 19years children. This type of study can be conducted in our context because no information is available specially those ethnic children live in deep dense forest and riverine area. Again this literature misses to take information about amount of calorie intake by individual, source of drinking water, sanitation system, personal hygiene practice and collective hygienic status. According to Bangladesh Demographic and Health Survey (BDHS) of 2014, the national prevalence figures for stunting and underweight are 36% and 33% respectively. But data on tribe to tribe variation of nutritional status was scanty. Large scale study is needed so that separate information of specific tribe can be drawn. Samiran Bisai et al carried out a study to assess the nutritional status among Kora-Mudi children based on recently developed body mass index (BMI) cutoff points for children and adolescents from two villages in Paschim Medinipur District of West Bengal, India. This study found the overall prevalence of thinness, normal weight and overweight were 67.2%, 31.9%, and 0.8%, respectively.6 After scrutinizing review of this paper, no information was found regarding complete sociodemographic status as well as food habit and living standard. They recommended that effective public health policies should be undertaken to combat the child malnutrition in India and adjoining countries. So it is a timely matter to carry out a survey based study in our country including all dimensions.

A cross sectional study was carried out in the Baigachak area in 2002-2003 to study the nutrition profile of the Baiga Tribe. About 61% of the pre-school children were underweight out of them 24.3% children were severely underweight. Stunting and wasting were seen in 44.3% and 37% children respectively. They consumed cereal based diet whereas other foodstuff was lower than the RDA.7 This literature concluded that malnutrition was widely prevalent among the Baiga tribe which is mainly due to inadequate dietary intake. After critical review it is found that they only used 24hour recall method that means quantity of food is achievable but missing quality of food which can be found by using food frequency questionnaire. United Nations Development Programme (UNDP) Bangladesh requested Helen Keller International to conduct a comprehensive food and nutrition survey to hard-to-reach indigenous communities in the Chittagong Hill Tracts. This report showed the prevalence of underweight among under-5 children was over 30%, and more than 7% of these children exhibited signs of severe malnutrition. It is alarming that if
this livelihood and food insecurity continue or worsen with seasonal fluctuations, moderately undernourished children and mothers can very quickly slide into categories of more severe malnutrition. But this report did not show any interlink such as association or correlation or prediction between variables.

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Conflict of interest

The author declares no conflict of interest.

References


