THE STUDY OF THE CAUSES OF MACRO AND MICRO ELEMENTS DEFICIENCY IN WOMEN OF REPRODUCTIVE AGE

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Abstract. *Nutritional deficiencies are a global public health problem, especially among women of reproductive age. The present study is aimed at studying the causes of macro- and micronutrient deficiencies in women of reproductive age. A comprehensive literature review was conducted to identify factors associated with nutritional deficiencies in women. The findings suggest that inadequate micronutrient intake, poor dietary habits and socioeconomic factors are key causes of nutritional deficiencies among women of reproductive age.*
Keywords: *nutrient deficiency, women of reproductive age, macro- and micronutrients, dietary habits, socioeconomic status.*

Introduction. Nutritional deficiencies are a major public health problem worldwide, affecting the well-being of millions of people, especially women of reproductive age (WRA) (1). According to the World Health Organization (WHO), 52% of the global burden of anemia is due to iron deficiency, which is more common among women of reproductive age (2). In addition, WRAs are at higher risk of other micronutrient deficiencies such as zinc, vitamin A, vitamin D, folic acid, and iodine, which can affect their health and the health of their offspring (3). The causes of nutritional deficiencies in women are multifactorial and complex, involving the interaction of various economic, social, cultural and behavioral factors (4). Inadequate food intake, poor dietary habits, and low socioeconomic status are some of the main causes of nutritional deficiencies in WRA (5). Insufficient intake of macro- and micronutrients during pregnancy and lactation can have serious consequences for maternal and child health, leading to impaired cognitive development, intrauterine growth retardation, low birth weight and increased risk of infant mortality (6). Assessment of nutritional status is an essential component of public health interventions to improve maternal and child health (7). Identifying the factors associated with nutritional deficiencies in WRA is essential to develop effective interventions to address the underlying causes of these deficiencies. Therefore, this study aims to review the literature to identify factors that contribute to macro- and micronutrient deficiencies in WRA. This review highlights the complex relationship between multiple factors, including dietary behavior, socioeconomic status, and cultural factors, that contribute to nutritional deficiencies in WRA. Therefore, it is important to develop targeted interventions that address the underlying causes of macro- and micronutrient deficiencies in WRA in order to optimize maternal and child health outcomes.

Methods and results. To study the causes of deficiency of macro- and microelements in women of reproductive age, a comprehensive review of the literature was carried out. PubMed,

Google Scholar, and other academic databases were searched for articles published over the past 10 years on macro- and micronutrient deficiencies in women of reproductive age.

Inclusion criteria for the selection of articles were as follows: the study must be conducted on women of reproductive age (18-49 years), the study must assess the macro- or micronutrient status of women, and also identify the causes of deficiency of these nutrients. The exclusion criteria were those articles that were not written in English or did not meet the above criteria (8, 9).

A total of 20 articles were included in the study. Data on macro- and micronutrient deficiencies in women, socio-demographic factors, dietary patterns, lifestyle and other factors contributing to nutritional deficiencies were extracted and analyzed.

The data were then synthesized and presented descriptively. A descriptive synthesis was used to describe the results and identify the underlying causes of macro- and micronutrient deficiencies in women of reproductive age (10).

Conclusions. This study showed that micronutrient deficiencies are common among women of reproductive age. The most common micronutrient deficiencies reported in this study include iron, folic acid, vitamin D, and vitamin B12 (11). These deficiencies are the result of poor nutrition as well as consumption of diets that lack essential nutrients.

Another important factor in micronutrient deficiencies in women of reproductive age is the presence of comorbidities such as anemia, gastrointestinal disorders, and celiac disease. These conditions lead to poor absorption of nutrients from food, leading to deficiencies in essential micronutrients.

In addition, socio-demographic factors such as poverty, low level of education and place of residence affect the diet of women of reproductive age. The diet of women in developing countries is largely grain-based and lacks essential micronutrients, leading to micronutrient deficiencies.

Insufficient food intake, poor food choices and disordered eating patterns are also major causes of macro- and micronutrient deficiencies in women of reproductive age. Malnutrition often leads to an imbalance of macro- and micronutrients in the body, leading to their deficiency.

In conclusion, the results of this study highlight the need for targeted interventions to reduce the prevalence of macro- and micronutrient deficiencies in women of reproductive age. These include promoting healthy diets, increasing access to affordable, nutrient-rich foods, addressing major health concerns, and improving the socio-demographic factors that influence diets. Future research should focus on identifying the most effective interventions to reduce micronutrient deficiencies in women of reproductive age, especially in low-income countries.

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