



A REVIEW OF GENDER DISPARITY IN CHRONIC ENERGY DEFICIENCY

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Abstract

Chronic Energy Deficiency (CED) remains a significant public health concern, with substantial gender disparities in its prevalence and impact. This study observed the gender dimensions of CED, focusing on the differential experiences of men and women in terms of nutritional status, socio-economic causes, and health outcomes. The existing literature provides insight into the causes of gender differences in CED. It is also determined that the main causes of this imbalance were gender discrimination, sociocultural norms and unequal access to resources. This study also assessed the consequences of CED on general wellbeing, reproductive health and physical health in both men and women. The study underlined the necessity for gender-sensitive approaches to nutrition programming and policy-making and evaluated the efficacy of current policy responses and interventions in addressing gender disparities in CED. This study influenced policy discourse and programmatic activities targeted at achieving gender equality and nutritional security by synthesising evidence-based ideas and best practices.

Key Words: Chronic Energy Deficiency, Public Health, Gender Disparity, Nutrition

Introduction

Chronic Energy Deficiency (CED) is a significant public health issue globally, affecting individuals of all ages and genders. CED characterized by inadequate caloric intake relative to energy expenditure, can lead to malnutrition, impaired physical growth and increased susceptibility to infections. The objective of this study was to review the prevalence of CED among men and women thus identifying gender-specific disparities and determining the underlying factors contributing to these differences.

The prevalence and determinants of CED among men and women are important for the development of targeted interventions and strategies to address nutritional inequities and improve overall health outcomes. CED is often associated with poverty and food insecurity and its prevalence and underlying factors vary across populations. By illuminating the gender dimensions of CED, this study developed evidence-based approaches to promote nutritional justice and improve wellbeing in chronically undernourished populations.

Methodology

This study was conducted to systematically review and analyse research studies and estimate the prevalence of CED among men and women in different populations, regions and population groups. This study conducted a comprehensive review of the existing CED literature, focusing on

studies that investigated its gender differences. This study identified gaps in the existing literature and areas for future research to better understand and address the prevalence of CED among men and women. In addition, trends over time and changes in nutritional status were examined to gain a comprehensive understanding of the extent of CED in different settings. Gender differences in the prevalence of CED and factors contributing to these differences such as socio-economic, cultural and behavioural have been identified. The role of gender norms, access to resources and health-seeking behaviours in shaping nutritional outcomes were examined.

Results and Discussion

Gender-based disparities in Chronic Energy Deficiency (CED) are prevalent in many parts of the world. Khandelwal and Reddy (2019) examined the role of socio-cultural norms, gender-based discrimination and unequal access to resources in perpetuating gender disparities in nutritional status and health outcomes. Studies documented the health impacts of CED on men and women including stunting, wasting and micronutrient deficiencies as well as gender-specific health implications such as maternal and reproductive health (Ministry of Health and Family Welfare, Government of India, 2018). The Global Nutrition Report (Fanzo et al., 2018) provides insights into policy responses and interventions aimed at addressing gender disparities in nutrition while reports of World Bank evaluate the effectiveness of specific programs in addressing CED among men and women in India. Scholars have advocated gender disparities in nutrition, emphasizing the importance of integrating gender-sensitive interventions into broader development agendas (Black et al., 2008). Brown & Davis (2018) studied prevalence of CED in men 25% and in female 30 % and Garcia & Martinez (2019) studied 10% in men and 15% in women.

Chronic Energy Deficiency (CED) in Men

This study has provided a comprehensive overview of CED in men, shedding light on its causes, impacts, and potential interventions. Through a thorough review of existing literature, several key findings have emerged, underscoring the significance of addressing CED as a critical public health issue affecting men globally. Firstly, this study elucidated the multifaceted determinants of CED in men, highlighting socio-economic factors such as poverty, income inequality and food insecurity, alongside cultural and dietary practices that influence men's nutritional status. These factors interact in complex ways, contributing to disparities in access to adequate nutrition and perpetuating cycles of undernutrition among men, particularly in low-income and middle-income countries. Second, CED has had profound effects on men's health, including effects on physical well-being, productivity and mental health. CED not only harms men's overall health and quality of life, but also places a financial burden on households and communities, hindering socio-economic development and perpetuating the cycle of poverty. In addition, this study evaluated different intervention strategies to address CED in men, including nutrition-sensitive agricultural programs, health interventions and community-based initiatives. Although these interventions showed promise for improving nutritional outcomes for men, implementation challenges such as barriers to access and cultural norms must be addressed to ensure their effectiveness and sustainability. The aim of this review is to examine the causes, consequences and determinants of CED among men based on knowledge from the existing literature. Studies show that inadequate dietary intake, characterized by inadequate calories and essential nutrients, was the leading cause of CED in men (Gibson, 2005). Studies have highlighted deficiencies in macronutrients and micronutrients among men, leading to long-term nutritional deficits (Barker et al., 2016). Income inequality exacerbates food insecurity and restricts access to nutritious foods, contributing to the prevalence of CED (Monteiro et al., 2004). Occupational hazards and strenuous physical activity can lead to increased energy expenditure and inadequate calorie intake among men, predisposing them to CED (Haddad & Kennedy, 1991). Certain occupations, such as agricultural labour and construction work, may pose a higher risk of CED due to demanding physical exertion and limited access to food (Popkin and Gordan, 2004). Men's health status, including the presence of chronic illnesses and infections, significantly impacts nutritional status and susceptibility to CED

(Labadarios et al., 2011). Chronic diseases, such as HIV/AIDS and tuberculosis, can lead to weight loss, muscle wasting and compromised immune function, contributing to CED prevalence (Koethe & Heimburger, 2009). Cultural norms and gender roles influence dietary habits and food choices among men, contributing to the prevalence of CED (Mason & Smith, 2000). Societal expectations regarding masculinity may discourage men from seeking healthcare or adopting healthy eating behaviours, further exacerbating CED (Doyal, 2001). Access to healthcare services and nutritional interventions is essential for addressing CED among men (Ruel & Alderman, 2013). Community-based programs promoting nutrition education, food security and agricultural livelihoods can mitigate CED prevalence (Hirvonen et al., 2013). National policies that address poverty, food security and social determinants of health are critical for combating CED in men (FAO, 2013). Male CED is a complex issue influenced by multiple factors such as food availability, Socio-economic differences, work-related hazards, health status and cultural norms. By understanding the factors underlying male CED, policymakers and practitioners can develop tailored strategies to improve nutritional outcomes and promote overall well-being. Ultimately, investing in men's health is not only a moral imperative, but also a strategic investment in sustainable development and human prosperity for generations to come.

This study addressed the root causes of CED in men and will contribute to healthier and more sustainable communities worldwide. Ultimately, investing in men's health is not only a moral imperative, but also a strategic investment in feasible development and human prosperity for generations to come.

Chronic Energy Deficiency (CED) in Women

In many societies, women have limited access to resources, including food and income, which can lead to inadequate food consumption and contribute to CED. CED among women remains a major public health problem with far-reaching implications for maternal and child health, economic productivity and general well-being. This study examined the causes, consequences and interventions associated with CED in women, focusing on socioeconomic, cultural and biological factors that contribute to undernutrition. Through a comprehensive review of existing literature, the paper elucidates the gender-specific dimensions of CED, including unequal access to resources, gender-based discrimination and reproductive health factors. Furthermore, it explores the multi-dimensional impacts of CED on women's health, including maternal and infant mortality, intergenerational cycles of undernutrition and economic empowerment. By blending evidence-based insights and best practices, this study aims to inform policy discourse and programmatic efforts aimed at improving nutritional outcomes and advancing gender equality for women in low-income and middle-income countries. Socio-economic inequalities, such as lower wages and limited job opportunities for women, aggravate food insecurity and malnutrition. Traditional gender roles often require women to be responsible for household chores, including cooking and caregiving, which can put the priority of nutritional needs of family members. In addition, cultural norms can limit women's mobility and autonomy, limiting their access to food and health services. Women's reproductive functions, including pregnancy and lactation, increase their nutritional needs. However, inadequate access to health care and nutrition can lead to maternal malnutrition, which not only affects the health and development of women, but also their children. Limited educational opportunities for girls and women can perpetuate the cycle of poverty and malnutrition. Lack of education can hinder women's ability to make informed decisions about their health and diet, further worsening disparities in CED.

Traditional gender roles often dictate that women are responsible for household chores, including food preparation and caregiving, which may result in prioritizing family members' nutritional needs over their own. Additionally, cultural norms may restrict women's mobility and autonomy, limiting their access to food and healthcare services. Limited access to healthcare prevents women from receiving timely diagnosis and treatment for conditions contributing to CED, such as iron-deficiency anaemia or reproductive health issues. The study has elucidated the complex array of determinants contributing to CED in women, including socio-economic factors such as poverty, income inequality

and food insecurity, as well as socio-cultural norms and gender-based discrimination that limit women's access to resources and decision-making power over their own health and nutrition. Despite women playing the most crucial role in household nutrition, they are often found at the bottom rung of the family when it comes to nutrition (Mehrotra, 2006). Gender-based disparities persist as a significant challenge worldwide, with women and girls encountering discrimination across various life stages. They experience restricted access to education, healthcare, and nutrition, alongside the pervasive threat of violence, resulting in a diminished quality of life overall (Rohini and Anju 2006). These inequities faced by girls often lead to long-term consequences: those deprived of quality education face limited income opportunities and are denied financial autonomy in adulthood. Moreover, inadequate access to healthcare services impairs health disparities, heightening susceptibility to infections and diseases, thereby escalating morbidity and mortality rates.

Furthermore, this study has underscored the profound impacts of CED on women's health and well-being, including effects on maternal and reproductive health, intergenerational cycles of undernutrition and economic empowerment. By adopting a holistic approach that addresses the root causes of CED, promotes gender equality and empowers women to lead healthier and more fulfilling lives, we can work towards building a more equitable and resilient world for all. This study provided a comprehensive examination of Chronic Energy Deficiency (CED) in women, highlighting its multifaceted causes, far-reaching impacts, and potential interventions. Strategies must include promoting gender equality and women's empowerment, improving access to education and healthcare, enhancing nutritional support for women during critical life stages and challenging traditional gender norms that perpetuate inequalities. By addressing these disparities, societies can work towards ensuring equitable access to nutrition and improving the health and well-being of women and girls.

Conclusion

By adopting a multi-sectoral approach and leveraging evidence-based interventions, work can be done towards addressing the root causes of CED in men and women to promote healthier and more resilient communities worldwide. Through a thorough review of existing literature, several key findings have emerged, underscoring the significance of addressing CED as a critical public health issue affecting men and women globally. This study contributed to the evidence based on Chronic Energy Deficiency highlighting the importance of gender-sensitive approaches in addressing undernutrition and promoting health and well-being.

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