



## AN OVERVIEW FAMILY MEDICINE, PHARMACIST AND NURSING TOGETHER WITH DIETICIAN IN MANAGEMENT OF MALNUTRITION CHILDREN

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### Abstract:

Acute malnutrition is characterized by rapid decreases in the quantity of food consumed or the quality of the diet, and it is frequently accompanied by pathogenic reasons. There are a number of different ways that acute malnutrition has been characterized, and it has also been referred to by a number of different names, some of which have meanings that partially overlap with one another. These names include protein-energy malnutrition, wasting, kwashiorkor, and marasmus. Both acute malnutrition and wasting are terms that are used interchangeably throughout this chapter. SAM has been overlooked by child survival programs, and the World Health Organization does not recognize the phrase "acute malnutrition." This is despite the fact that SAM is of worldwide importance. Inpatient treatment involves a significant amount of resources and a large number of staff members who are both skilled and motivated. In areas where SAM is prevalent, the number of cases exceeds the available inpatient capacity, which restricts the effectiveness of treatment; the case-fatality rate occurs between 20 and 30 percent, and coverage is typically less than 10 percent. The rates of case fatalities are significantly reduced and coverage rates are increased by the implementation of community-based rehabilitative care programs. These programs make use of therapeutic foods that are brand new and ready to be used. They are intended to expand access to services, decrease opportunity costs, encourage early presentation and compliance, and ultimately increase coverage and recovery rates. In this particular context, the department plays a very important role in the management of malnourished children, along with family physicians and nurses.

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### **Introduction:**

In practically all Western countries, the prevalence of age-related malnutrition is increasing at the same time that life expectancy is increasing within such countries. Malnutrition that is associated with advancing age is a significant issue because it has a detrimental impact on the functional and medical condition, quality of life, and survival rate of the senior population. Determinants such as physical (for example, being physically unable to shop), medical (for example, dysphagia that is triggered by an underlying illness), and psychosocial (for example, depression) factors are responsible for this phenomenon. The presence of these variables can be observed in any environment, including communities, nursing homes, and hospitals [1]. Age-related malnutrition is difficult to control because of the many different factors that contribute to it, many of which interact with one another. Furthermore, it is difficult to manage malnutrition in the elderly since food, eating, and drinking not only have a nutritional value, but also social, cultural, and psychological implications. This makes it difficult to provide adequate nourishment to the old. It is possible for elderly persons to have deeply ingrained eating habits that are difficult to change, despite the fact that doing so may be required for medical reasons. A increased risk of diseases that might directly or indirectly affect the consumption of food and drink is also associated with them. For example, cancer-induced dysphagia is one example of a sickness that can have this effect. Last but not least, the elderly (as well as professionals working in the medical field) could be confronted with moral conundrums about judgments regarding artificial nourishment support [2].

These extensive and diverse food-related issues require treatment from qualified medical experts in the context of well-organized care settings in order to reach the highest possible level of care. In situations where older people are suffering from malnutrition, whether in the context of hospitals, care homes, or the community, it is advised that they receive therapy from multiple disciplines. Due to the fact that they are experts on the aforementioned components of food-related issues, dietitians, nurses, and family physicians have to be at the center of the treatment of these issues. As a result, patients should benefit from a central role of the dietitian in comparison to other health professionals. This is not only due to the specialized knowledge that dietitians possess, but also due to the fact that dietitians and nurses may be able to appreciate the consequences of the aforementioned social, cultural, and psychological

meanings of food for the management of malnutrition in the elderly [3]. There are also other actors participating in nutrition-related care, such as informal caregivers and other health professionals. This is true regardless of whether the treatment is provided in a multidisciplinary environment or not. The knowledge and skills of dietitians are closely related to those of a wide variety of other disciplines, including those of medical professionals, specialized nurses, nutrition assistants, and many more. Dietitians are the nutritional specialists; yet, they are rarely at the forefront of everyday care because they encounter patients much less frequently than nurses do. On the other hand, physicians are typically in control of and responsible for the treatment of patients, despite the fact that they are not necessarily nutritional experts. As a result, the role of the dietitian, nurses, and family physicians, who are the specialists in the therapy of malnutrition in the elderly, is not always unambiguous [4]. The guidelines and protocols that are used to address malnutrition in the elderly frequently stay theoretical and unchanging, and the practices that are now being used may differ from these guidelines and protocols. The practical implementation of a proposal is frequently fluid, and it is contingent upon the manner in which each particular dietitian or other health professional defines their position. It is important to note that there is a dearth of published material that investigates the manner in which dietitians, in comparison to other health professionals, define their role in the management of malnutrition in the elderly. There are no systematic review studies that we are aware of that pertain to this subject, as far as we are aware. When it comes to the topic of the management of malnutrition in children, research has been conducted to investigate the responsibilities that nurses and family physicians play in relation to those of other physicians and other health professionals [5].

### **Review:**

Severe acute malnutrition (SAM) is defined as a weight-for-height measurement that is seventy percent or more below the median, or three standard deviations or more below the mean National Centre for Health Statistics reference values (that will likely be replaced by new WHO growth curves), which is referred to as "wasted." Additionally, the presence of bilateral pitting oedema of nutritional origin, which is referred to as "oedematous malnutrition," or a mid-upper-arm circumference that is less than 110 millimeters in

children aged 1. The presence of a concomitant infectious illness, in particular an acute respiratory infection, diarrhea, and gram-negative septicaemia, can exacerbate a significant number of advanced cases of SAM syndrome. On the other hand, chronic malnutrition, also known as "stunted," is characterized by a height-for-age indication. A weight-for-age indicator is also used to characterize a composite form of malnutrition that has elements of both stunting and wasting among its components. In order to differentiate between these many types of malnutrition, which are caused by distinct factors and require treatment that is significantly different from one another, there is a need for a clear nomenclature [6]. Case-fatality rates in hospitals treating SAM in poor countries have remained stable since the 1950s, despite the fact that clinical care procedures capable of reducing case-fatality rates to 1–5% have been in existence for 30 years. The average case-fatality rate in these hospitals is between 20 and 30 percent. This failure to translate scientific knowledge of what is required to treat malnutrition into effective large-scale interventions was criticized as "nutrition malpractice" in the year 1992. Thirteen years and a large number of studies and clinical manuals later, there is an even greater discrepancy between the actual practice within the majority of institutions that treat SAM and our knowledge of what is effective [7]. The treatment of severe acute malnutrition is a special case that falls somewhere between the realms of clinical medicine and public health. Poverty, social exclusion, poor public health, and a loss of entitlement are the primary reasons, and the majority of instances can be avoided through economic growth and public health policies that are designed to raise dietary quantity and quality on their own, without the need for therapeutic treatment. It is [8]. However, as the severity of acute malnutrition increases, the natural physiological mechanisms that allow the body to adjust to a low food intake become more prominent. These so-called "reductive adaptations" have an effect on every physiological function in the body, mobilizing energy and nutrient stores and decreasing energy and nutritional demands. These adaptations are initially advantageous and allow the organism to maintain homeostasis. However, when the quantity of dietary insulin increases, these adaptations limit the body's ability to respond to challenges such as infection in a gradual manner. When it comes to the treatment of SAM, inpatient units frequently have the challenge of dealing with patients who are in critical condition and require urgent medical and

nursing care. Due to severe capacity restrictions, the majority of these units are located in the most impoverished regions of the most impoverished countries. In particular, there are extremely few competent staff members. To add insult to injury, the majority of caregivers for malnourished patients are from the poorest families and have a lot of demands placed on their day [9]. Malnutrition is a significant public health issue that is prevalent throughout the developing world. It is a contributing factor in more than fifty percent of the ten to eleven million children under the age of five who pass away annually due to illnesses that could have been avoided. Despite the fact that the child survival movement frequently emphasizes the significance of undernutrition, which is defined as having a low weight in relation to one's age, the significance of acute malnutrition is rarely brought up. To cite just one example, acute malnutrition is not included in any of the five publications that were published in *The Lancet* as part of the child survival series [10]. There is a direct correlation between the degree of acute malnutrition and the risk of mortality. For example, moderate wasting is connected with a mortality rate of 30–148 per 1000 children per year, whereas severe wasting is associated with a mortality rate of 73–187 per 1000 children per year. Each year, this translates to more than 1.5 million fatalities of children that are related with severe wasting, and three and a half million deaths associated with moderate wasting [11]. It is often believed that the continued existence of high case-fatality rates might be ascribed to unsuitable case management, which is a consequence of inadequate information. In order to significantly reduce the number of deaths that occur as a result of cases all over the world, it is generally agreed upon that the WHO guidelines should be implemented more broadly through in-service training and incorporated into the curriculum of medical and nursing schools. On the other hand, although there is convincing evidence that adequate training of health personnel in the management of SAM is necessary for the successful implementation of the WHO guidelines, the evidence base that supports the view that the wider implementation of the WHO guidelines is essential to the reduction of case-fatality rates is not very strong. There are no published controlled trials that have been conducted to investigate the effects of the utilization of the WHO protocol in operational situations. In their absence, the proof of the good impacts of these protocols comes from observational studies carried out in a select number of hospitals or humanitarian operations that are carried out by non-governmental organizations that

have adequate resources. According to the findings of all of these research, one of the most important factors that determines levels of success and effectiveness is the availability of appropriate resources, notably health staff that is both skilled and motivated. In actuality, the large number of trained personnel that is required is rarely accessible. It is worth noting that in Malawi during the 2003–2004 period, there were a mere 1.13 physicians and 25.6 nurses for every 100 000 individuals [12].

### Conclusion:

When it comes to the management of malnutrition in the elderly, the roles that dietitians, family physicians, and nurses play in relation to those of other health professionals are significant. It demonstrates that this position is not clear or cohesive, but rather is shaped by the structural qualities of settings, the manner in which family physicians, nurses, and dietitians cope with these characteristics, and the attitude of other professionals working in the health care field. Within the context of this enforced and sometimes coerced freedom, the question of how dietitians might provide the most effective care of malnutrition in children is subject to discussion. Community-based therapeutic treatment is one example of a new approach to the management of SAM that complements the existing inpatient procedures developed by the World Health Organization. In order to treat the majority of children who are suffering from SAM as outpatients, these programs make use of therapeutic food that is already prepared for usage. Inpatient therapy is reserved for children who have difficulties. Their purpose is to lessen the obstacles that stand in the way of access, to encourage early presentation, to lessen the opportunity costs that are connected with treatment, and to encourage patients to comply with their treatment. Inpatient caseloads are reduced to more manageable levels when the majority of kids with SAM are treated only as outpatients. This helps decongest crowded inpatient units, minimizes the risks of nosocomial infection, and increases the amount of time that staff members are able to dedicate to the sickest children.

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