CHAPTER 14

GERIATRIC MALNUTRITION

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Introduction

Older adults (aged ≥ 60 yrs.) tend to be more prone to nutritional deficiencies, because ageing may come with an accumulation of disease and impairments, including cognitive and physical decline, depressive symptoms and emotional changes, and poor oral health, along with socio economic changes. All of these factors may directly influence the balance between nutritional needs and intake. Dietary behaviour of older individuals may change because of health or social reasons, decrease in taste and smell or a reduced ability to purchase or prepare food. Even in case of adequate nutrient and energy intake, the nutritional status of older adults can be challenged by a compromised nutrient metabolism (such as absorption, distribution, storage utilization and excretion), drug nutrition interaction, or altered nutrient needs.

This combination of symptoms or conditions put older individual at a higher risk of malnutrition. In 2002, there were an estimated 605 million older person in the world, nearly 400 million of whom were living in low-income countries. By 2025, the number of older persons worldwide is expected to reach more than 1.2 billion, with about 840 million of these in low-income countries. The quality nutrition in the elderly may significantly influence the overall condition and severe deficiencies contribute to multiple morbidities and this is found to be more common in resource poor

countries. India is the second most popular country in the world also has approximately 76.6 million people at or over the age of 60 yrs., constituting above 7.7% of the total population. In India, the prevalence of malnutrition is high in elderly from existing studies.

The prevalence of malnutrition and risk of malnutrition among the elderly was 18.29% - 48.17%. The prevalence of malnutrition was higher among female is 16.67% and urban areas is 19.29%. It is because of lack of knowledge about nutrition. Kerala has registered the highest proportion of elderly in the whole of India. The aged in Kerala constitute 11% of the population as compared to 7.7% in India. Their population, which was 9% in 1991, is expected to increase to 37% by 2051. This rise in the geriatric population is the One fourth of the patients who are nutritionally at risk does not receive nutritional support or counselling, despite having contact with health care professionals.

This suggests that the condition of older adults at risk of malnutrition should be investigated and improved. For this identification of prognostic determinants of malnutrition is required. Several studies analyzed factors associated with malnutrition. Most of these studies, however, had a cross sectional design, whereby casualty cannot establish.

Risk Factors of Geriatric Malnutrition

Malnutrition is the deficiency of intake or uptake of nutrients, which eventually results in altered body composition, leading to reduced physical function and worse clinical consequences. There is significant evidence to demonstrate that protein-energy malnutrition from inadequate dietary intake can increase the risk of infectious diseases. Malnutrition is associated with number of diseases and impact on immunity system of human body. Leads to number of diseases such as Diabetes, cold, cough, and moreover internal organs working mechanism will be affected and other health problems have been notified in humans (Anibera, et al., 2019).

A large number of unmet health needs, such as un operated cataract, uncontrolled hypertension, uncorrected hearing impairment and tobacco use, exist in marginalized groups. Health interventions for these are needed in developing countries. Preventive services such as tobacco cessation campaigns among the elderly should also get priority . Just as there is no one type of woman, there is no single strategy for promoting good health among all women in India or other Asian countries, at all stages of their lives. Whether it's researching how to increase the survival of girl child, promote breastfeeding, immunization, mammogram usage among certain populations, increasing cardiovascular disease preventive behaviours, or promoting safer sex practices among at-risk women, you have to constantly look for new and innovative ways to have access to all the women from newborn babe to extreme old age. To truly have an impact on women's health, we must ask questions that address every aspect of a woman's life and at all the stages from birth to sunset (Meenal, 2009).

Osteoporosis and osteoporotic fractures are among the major problems of elderly population. Although deaths related to bone disease usually have indirect causes it is assessed that approximately 20% patients die due to complications within first year after hip fracture and another 30% need permanent care. Some of the risk factors of osteoporotic fracture can be modified by lifestyle (diet, habits, exercise) intervention. To introduce these modifications elderly people, need to be aware of the burden, risk factors and preventive measures of osteoporosis.

Wound healing processes form a cascade of inflammation, proliferation, and remodelling. Both micronutrients and macronutrients are essential in all three phases of wound healing. Researchers have shown that for DNA synthesis, cell division, and proliferation minerals like zinc and iron play an important role. For structural processes such as collagen synthesis and strength as well as re-epithelialisation, proteins, iron, zinc, vitamin-A, and vitamin-C are important (Barchitta, et al., 2019). Immune processes e.g., antibody response, leukocyte migration to the wound site, disposal of waste products produced by leukocytes, size as well as a number of

lymphocytes and killer T-cells, are altered by the status of these nutrients in elderly (Harris and Fraser, 2004). Therefore, malnutrition leads to poor wound healing and delay in post-surgical recovery.

Nutritional needs change from birth to adulthood to serve the requirements of growth, development, health, and reproduction. As senescence sets in, a further change in nutrition is required to counteract ageing processes and associated co-morbidities. This is a huge challenge because current research is insufficient to quantify nutritional needs across the whole spectrum of ageing, which differs from person to person. Malnutrition is common in the elderly. The causes range from poor access to food due to poverty, neglect, or isolation; inability to eat due to disease, loss of dentition or altered taste sensation. Often there is a lack of nutritional information among health professionals and the public (Alka, 2020).

Conclusion

Poor nutritional status and malnutrition in the elderly population are important areas of concern. Malnutrition and unintentional weight loss contribute to progressive decline in health, reduced physical and cognitive functional status, increased utilization of health care services, premature institutionalization, and increased mortality. Nonetheless, many health care practitioners inadequately address the multi factorial issues that contribute to nutritional risk and to malnutrition. A common assumption is that nutritional deficiencies are an inevitable consequence of aging and disease and that intervention for these deficiencies are only minimally effective. Nutritional assessment and treatment should be a routine part of care for all elderly persons, whether in the outpatient setting, acute care hospital, or long-term institutional care setting.

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