Malnutrition in Elderly

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Malnutrition is common but under-recognised in the elderly. Clinicians are seldom taught about the subject during their undergraduate or postgraduate level. Malnutrition can lead to serious consequences in terms of morbidity and mortality. It is being seen as a marker for illness but usually ignored in daily clinical practice both in the hospital and community settings. A practical approach to the prevention and management is becoming an imminent issue in public health.¹²

- Height not recorded in 56% of cases
- Body weight not recorded in 23% of cases
- 61% of whose weight was recorded lost > 6 kg
- 37% had albumin < 3.0 g/dl

Locally, a study was conducted in an acute geriatric ward, malnutrition was under-diagnosed in 50% of the elderly patients.³

Up to 44% of healthy elderly people are at risk of malnutrition⁴, while the prevalence may be over 50% in hospitalised elderly patients⁵. Malnutrition can impair wound healing, immunity and functioning, and can contribute to sarcopenia, failure to thrive, high medical cost, prolonged hospital stay and death.

The Latin-America Nutrition Study, involving more than nine thousand subjects in 13 countries showed 50.1% are malnourished. 12.6% were considered severe.⁵

In IBRANUTRI (Brazilian National Survey) which included 4000 subjects, 48.1% were found to be malnourished and 12.6% considered severely malnourished.⁶

Risk Factors of Malnourishment
- Alcoholism
- Debilitating disease
- Dementia
- Depression
- Inadequate eating assistance
- Inappropriate use of restricted diet
- Infectious illness
- Isolation
- Multiple medical problems
- Polypharmacy
- Poor oral and dental status
- Poverty

Diagnosis/Assessment
There are still no standard criteria to define malnutrition. A complete evaluation will include:
- Dietary History and weight changes
- Anthropometric measures
- Biochemical indexes
- Physical examination

Specific tools for screening and assessment⁷⁻¹³
- Malnutrition Screening Tool (MST)
- Malnutrition Universal Screening Tool (MUST)
- DETERMINE for screening and assessment
- Subjective Global Assessment (SGA)
- Mini Nutritional Assessment (MNA)
- Nutritional Risk Index (NRI)

While assessment reflects nutritional status, screening is a simple way to identify elders at risk in a wider population for developing malnutrition.

There are various tools developed for either self-evaluation or interview for the community or institution level.

The tools are not a substitute for a detailed nutritional assessment.

Management and Intervention
The strategy for implementation of nutritional intervention is multifaceted and varies among different settings e.g hospital, community and institution. Reversible non-physiological risk factors should be sought out and rectified. At times there may be a need to draw up a management plan tailored for individual needs paying attention to personal choice, cultural and socioeconomic background. Multidisciplinary approach will be needed in the high-risk elders especially those hospitalised.

Medical nutrition therapy includes review and analysis of the medical and diet history, physical examination, biochemical data and anthropometric measurements.¹⁴⁻¹⁹

Choices of nutritional modalities are:
- Diet modification, counselling and tailored made dietary plan
- Special diet and therapies such as nutrients supplementation, enteral or parenteral nutrition.²⁰

Depending on resources, consultation with nutritional experts such as the dietitian or the nutritional support team
Medical Bulletin

is very helpful especially in complex cases. Monitoring system should be set up to ensure recommendations and outcomes are documented in those with the greatest need.

There is still a lack of strong evidence of a firm clinical pathway in regards to nutritional management. Further research will be needed in this complex issue.

Nutritional needs of the elderly

To ensure health and fitness in the elderly, special attention should be given to their nutritional needs. There is a need to incorporate nutrition assessment in routine practice. While low-calorie diets may be prescribed to reduce cardiovascular risk, more precaution is needed to evaluate the risk of undernourishment associated with such restrictive diets especially in frail elderly. It is recommended that the elderly consume sufficient calories to maintain their daily activities. To counter sarcopenia or muscle wastage in aging, daily protein intake must be 1.0 to 1.2 g for every kilogram of body weight. Vitamin and mineral requirements for the elderly should be met, especially calcium, vitamin D, B vitamins and folic acid.

Reference:
3. C Wong, Bkong Malnutrition in Hospitalised Geriatric Patients Experimental Biology. 97 USA - poster display.
8. bapen.org.uk/the-must.htm.