

MEETING THE NUTRITIONAL NEEDS OF OLDER PATIENTS IN HOSPITAL SETTING

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Introduction:

Malnutrition in hospitalised older patients may present in the form of micro-nutrient deficiency such as mineral and/or vitamin deficiencies or macronutrient deficiency represented by protein-energy malnutrition (Ojo, 2017; Holst et al, 2013; National Institute for Health and Care Excellence, 2012). The prevalence of protein – energy malnutrition among elderly hospitalised patients may vary depending on the population, the setting and the screening tool being used (Holst et al, 2013). However, poor nutrition among this population in hospital setting appears to be a global problem and it is often associated with increased mortality, morbidity and longer lengths of hospital stay (Roberts, 2017). In the UK, the prevalence of malnutrition in patients admitted to the medical ward was estimated to be about 34% and a comparable prevalence level of about 38.7% was reported among hospitalised patients aged over 65 years in a multinational study (Howson et al, 2017). In another study in rural Wales, Rasheed and Woods (2013) found 44% of patients older than 60 years admitted to hospital were malnourished at first assessment. In addition to the high prevalence of malnutrition in hospitalised older patients, the cost of undernutrition can also be profound. In 2011 – 2012, malnutrition was estimated to cost the UK economy about £19.6 billion (Howson et al, 2017). Therefore, strategies for identifying nutritional inadequacy and for meeting the needs of hospitalised older patients have to be robust in order to mitigate the consequences associated with poor nutrition and promote optimal nutrition and health.

Factors Contributing to Undernutrition

The aetiology of malnutrition in older people is complex (Ahmed and Haboubi, 2010). Reduced appetite, biological and physiological dysfunction including delay in gastric emptying, reduced senses of smell and tastes, pathological changes due to aging including chronic diseases and psychological illness are some of the factors contributing to the

aetiology of malnutrition in the hospitalised elderly patients (Ahmed and Haboubi, 2010). Other factors known to contribute to poor dietary intake among the elderly population in hospital include acute illness, co-morbidities, cognitive impairment, low mood and the effect of medication (Roberts, 2017). The hospital environment itself such as the time pressure on hospital staff, the tendency for foods to go cold, placing foods out of the reach of patients and limited support during mealtime to assist patients who are increasingly dependent are also important factors contributing to malnutrition (Roberts, 2017).

There are additional issues such as staffing levels/skill mix, lack of coordination among the multidisciplinary team, poor knowledge of nutritional care, poor interdisciplinary communication, the failure of shared responsibility to nutritional care and patient associated problems including non-compliance to feeding plans (Ross et al, 2011). Others problems include poor managerial decision making, lack of resources and the lack of priority given to nutrition (O'Shea et al, 2017).

Impact of Malnutrition

Nutrition is an important aspect in the provision of care and promotion of health in older people. However, poor nutrition can affect the aging process (Ahmed and Haboubi, 2010). In addition, malnutrition can lead to a decline in functional status, decrease in muscle and bone mass, impaired immune function, anaemia, decline in cognitive ability, poor wound healing, delayed recovery from surgery and higher hospital re-admission rates (Ahmed and Haboubi, 2010). It is also associated with increased health care utilisation, costs, institutionalisation, mortality and has been shown to predict discharge destination (Zhong et al, 2017; O'Shea et al, 2017; Rasheed and Woods, 2013).

Malnutrition has been linked to poor quality of life in hospitalised older patients due partly to decreased functional status and eating related problems (Rasheed and Woods, 2014). While

the provision of adequate nutrition is essential in the prevention of pressure ulcers, undernutrition is one of the factors which affect healing when pressure ulcer has developed (Taylor, 2017).

Screening Older Patients for Malnutrition

Nutritional screening is useful in identifying older patients in hospital who may be at risk of malnutrition and this should include the determination of body mass index, percentage of unintentional weight loss, the time over which this has occurred and the likelihood of future impaired nutrient intake (Roberts, 2017; Holmes, 2006). This view is supported by the National Institute for Health and Care Excellence (NICE, 2012) recommendation that all hospital inpatients including older patients should be screened on admission. According to O'Shea et al (2017), nutritional screening in clinical practice for older patients on admission in hospital should be prioritised especially those with dementia, increased functional dependency and/or co-morbidities and those that are frail.

However, it is sometimes difficult to distinguish between age-related changes in older hospitalised patients and the manifestation of nutritional deficit (Holmes, 2006). Therefore, nutritional screening of older patients for malnutrition and repeated weekly screening may be necessary if period of admission was protracted (NICE, 2012; Holmes, 2006).

A range of factors may provide indications for nutritional deficit in older patients in hospital setting and these may include clinical impression (underweight, obvious muscle wasting), unintentional weight loss (clothes that do not fit well), evidence of decreased food intake, swallowing problems, inadequate dentition, infection, electrolyte imbalance, anaemia and altered skin integrity (Holmes, 2006). Other factors may include poor wound healing, apathy, altered taste sensation, altered bowel habit and prolonged intercurrent illness (NICE, 2012). Therefore, the use of accurate and reliable tool such as the Malnutrition Universal Screening

Tool (MUST) in order to identify patients who are risk of malnutrition (not getting enough calories and nutrients, such as protein and vitamins) and to develop a management plan that will support these patients to improve their nutritional status is important (Taylor, 2017; NICE, 2012). A zero (0) score on the MUST tool would suggest a low risk of undernutrition, whereas a score of 1 is regarded as moderate risk of malnutrition (British Association for Parenteral and Enteral Nutrition, 2011). In addition, a MUST score of 2 or above would indicate a high risk of malnutrition. Therefore, patients that have been identified as being malnourished or at risk of malnutrition would benefit from a more detailed nutritional status assessment and referral to a dietitian (Isenring, 2009). However, hospital departments who identify groups of patients with a low risk of malnutrition and choose to opt out of screening these groups, should follow the due process including engaging the local clinical governance framework that involves the nutrition support specialist (NICE, 2012).

It is useful to highlight that differences exist in terms of the sensitivity of various malnutrition screening tools. For example, in a study in Sweden, a significant variation in the prevalence of nutritional risk among hospitalised elderly patients was observed between the mini – nutritional screening tool (MNA) which reported 68% prevalence level, compared with the Malnutrition Universal Screening Tool (MUST) which reported 47% and the nutritional screening with a 54% prevalence (Holst et al, 2013).

Interventions to support undernourished hospitalised Older Patients

Ahmed and Haboubi (2010) emphasised the need to employ a holistic approach to the management of nutritional deficit in hospitalised older patients. This should include treating the underlying causes of malnutrition such as chronic conditions and social isolation (Ahmed and Haboubi, 2010).

In addition, interventions to manage malnutrition usually rely on dietary supplementation including the provision of oral nutritional supplements or enteral feeding to those who are at risk of malnutrition or are unable to meet their daily nutritional requirements (Ahmed and Haboubi, 2010). The use of specialised oral nutritional supplements to support malnourished older hospitalised patients is cost-effective and can extend the lives of hospitalised patients (Zhong et al, 2017). The intervention may also include supplementing the meals of older patients who have poor appetite with nutritious snacks between meals with protein and energy rich meals (Taylor, 2017). However, Campbell et al (2013) demonstrated that patients achieved the recommended nutritional intake with conventional commercial supplements (1 cal/ml) and the MedPass (2 cal/ml supplement delivered 60ml four times a day at medication rounds), and that despite lower cost, higher satisfaction and quality of life with the selective mid – meal trolley (snack trolley offered between meals), this did not achieve the recommended energy and protein requirements.

The provision of additional staff and the use of mealtime assistants who are trained staff or volunteers to support older patients at mealtime including cutting up food for patients with poor manual dexterity, opening packaging, feeding patients, positioning trays and cleaning the table of patients are important strategies for enhancing dietary intake and promoting health (Howson et al, 2017). In addition, the use of red trays, protected mealtimes are useful initiatives aimed at ameliorating nutritional deficits in hospitalised older people (Roberts, 2017). During ‘Protected mealtimes’, nurses should be free to focus on supporting patients with their meals and no clinical tasks should be undertaken during the period (Holmes, 2008).

Other interventions that can be used to encourage patients to eat include; not interrupting patients with procedures during mealtimes, encouraging family members to support their relatives with feeding, attempting to meet patients’ food preferences, ensuring enough staff

are available, supporting patients with oral care and placing dentures before meals, removing bed pans, urinals and vomit bowls from rooms before meals (Holmes, 2008).

In conclusion, the prevalence of malnutrition is high in hospitalised older patients and a number of factors including patient related problems and the hospital environment are responsible for this development. Therefore, strategies for meeting the nutritional needs of older people in hospital should include the use of validated nutritional screening tools to identify those at risk of malnutrition and developing management interventions including the provision of oral nutritional supplements to ameliorate the undernutrition and promote health.

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