Title

Identifying and managing malnutrition in the older person – the responsibility of the primary care nurse

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Key learning points

1. Malnutrition in the older person can be prevented.
2. Primary care nurses have a responsibility to undertake screening which is essential to identify those at risk of malnutrition.
3. Managing malnutrition requires a combination of approaches for longer term impact.

Introduction

Malnutrition is a huge public health problem, which currently affects more than three million people in the UK[1]. With an aging population, the number of people aged 65 and over is projected to rise by almost 40% in the next 20 years[2], it is a problem that cannot be ignored. Studies show that 1.2 million people over 65 living in the community[2], 33% of hospital admissions and 37% of those who have recently moved to a care home are malnourished or at risk of malnutrition[3].

Not only is malnutrition a growing burden, it is costly with annual figures estimated to be more than £19.6 billion and accounting for 15% of the total spend on health and social care[3]. Thus proactive efforts are needed to raise the profile of malnutrition and to improve its management. Improving the identification and treatment of malnutrition is estimated to have the highest potential to deliver cost savings to the NHS[4] due to its effects on health, disease and wellbeing. This article is the first of two articles which consider the definition and causes of malnutrition, current national guidance to assess risk, management and the role of the primary care nurse. In the second article, new innovative approaches and strategies will be discussed to implement nutritional care in the community for the screening, prevention and treatment of malnutrition in older people living in the community.

Malnutrition is defined as having too many or too few nutrients in the diet (generally energy from fats, carbohydrates or protein). For the purpose of this article, malnutrition will refer to a state of under-nutrition which is commonly used in practice and is defined by NICE[5] as :

> "a state in which a deficiency of nutrients such as energy, protein, vitamins and minerals causes measurable adverse effects on body composition, function (including social and psychological) and clinical outcome."

Causes of malnutrition

Unintentional weight loss is a common problem in older people due to reduced food intake, increased need for nutrients, inability to absorb enough and utilize nutrients from the diet. The onset of malnutrition can be slow, occurring over weeks or months if food intake does not match need.

Common indicators of malnutrition include:

- Weight loss revealed by loose clothes, rings, dentures etc
- Loss of appetite
- Heart failure

- Increased risk of pressure sores
- Impaired immune response and increased risk of respiratory tract infections
- Poor wound healing

The onset of nutritional depletion and malnutrition may be accelerated if reasons for nutritional requirements are higher than usual due to infection, pressure sores or increased losses such as vomiting or diarrhoea. There may be other contributing factors, associated with ageing, lifestyle, psychological and social issues:

- **Physical problems** with eating or preparing food brought on by arthritis, stroke or reduced cognitive ability.

- **Medication** side effects can lead to appetite changes, dry mouth, taste changes and constipation.

- **Indigestion** and discomfort can lead to a reluctance to eat and drink.

- **Oral** problems such as poorly fitting dentures or sore gums can lead to mealtimes becoming a painful experience. Further swallowing and chewing difficulties leading to dysphagia may mean food looks unpalatable. Cases of dysphagia should be referred to trained healthcare professionals with the skills in the diagnosis, assessment and management of swallowing disorders.

- **Incontinence** or the difficulties in physically getting to the toilet can mean individuals are reluctant to drink compounding constipation and other health problems.

- **Mental health and wellbeing.** Depression can lead to loss of interest in food. Dementia and cognitive impairment can be a major cause of not eating and drinking due to difficulties such as communication, the activity of eating, lack of concentration and extra energy needs due to wandering.

- **Tiredness** caused by sleep disorders or medication can lead to difficulties concentrating at meal times and co-ordinating oneself to prepare meals.

- **Afraid** or too proud to ask for assistance.

- **Social isolation**, always eating alone and depression can impact on the enjoyment of food especially after a long term partner dies.

- **Reduced physical activity** and lack of involvement in food and drink can lead to a lack of appetite.

- **Poverty** can affect food choices and accessibility to purchasing food.

Screening

Providing best practice nutrition care involves five key principles, which incorporate NICE's Nutrition support in adults quality standard (QS24)[5] and clinical guidance (CG32)[6]. These are 1) raising awareness to prevent and treat malnutrition, 2) working together within and across organisations, 3) identifying malnutrition risk early using screening tools, 4) developing

individualized care plans, and 5) monitoring and evaluating the impact of care on an individual's outcome.

The most important way to identify those at risk of malnutrition is to identify weight loss by regular weighing and reporting changes in weight. The 5 step validated screening tool known as the Malnutrition Universal Screening Tool (MUST) is now widely used by staff working in hospitals, primary care and care homes[7]. It is supported by a range of organisations including The Royal College of Nursing and the Registered Nursing Home Association and consists of[8]:

1. Calculating the individual's BMI using weight and height measures. *If BMI cannot be established through weighing and measuring an approximate measure can be obtained using mid upper arm circumference. In the absence of any measurements the observational warning indicators above can help form a judgement.*
2. Determining how much weight has been lost intentionally over the last 6 months.
3. Establishing if the individual is acutely ill and if they have eaten nothing for more than 5 days.
4. Calculating the overall risk of malnutrition.
5. Using management guidelines and/or local policy to develop a care plan with goals to boost food and energy intake for risk scores of medium (1) or high risk (2).

The malnutrition pathway[9] recommends initial screening when an individual has their first contact within a care setting for example upon registration with a GP practice, first home visit, or admission to care home or hospital. Other occasions might include where there is clinical concern such as unintentional weight loss, poor wound healing or pressure ulcers. Regular screening should be undertaken when an individual has been highlighted at risk of malnutrition and will help to determine further action.

Further details of MUST and how to use it can be found at:

http://www.bapen.org.uk/screening-and-must/must/introducing-must

Managing malnutrition in the older person.

Once an individual has been identified at being at risk of malnutrition person centred goals should be put in place immediately to improve nutritional care. These should involve all those involved with the care of the individual, nurses, family and the older person to reduce risk. When the individual experiences a blend of settings such as the community, hospital or care home or has a range of health conditions communication across these settings will enable continuity of meeting these goals.

Management should include a range of different routes that address food availability, social issues, the eating environment and activity based on local policy. National guidance outlines that goals should include a food based approach as well as the use of oral nutrition supplements (ONS) to boost energy and nutritional intake[9]. Food and energy intake can be enhanced through:

- Food fortification, adding butter, double cream and cheese to recipes can increase energy intake considerably. This works particularly well with mashed potato, custard, milk puddings, smoothies, milk shakes, porridge, and mousses.

- Meeting the need of smaller appetites by suggesting smaller more frequent meals including finger food, high protein and energy snacks and mini meals. If insomnia is a problem then consider encouraging some food and drink consumption 24 hours a day.

ONS are useful to meet additional nutritional need especially when food intake is inadequate and should be included as part of an integrated care pathway. These are available on prescription and evidence strongly supports this combined approach which can lead to weight gain in older people and reduced mortality[10]. Despite this evidence to support the use of ONS, prescription rates vary across the country largely due to lack of education of malnutrition and appropriate protocols in place[11]. For longer term effects it is important that they are used to supplement meals and not as meal replacers.

Whilst more research is needed to understand the impact of other nutritional interventions[12], there is need for greater recognition by nursing staff of influencing factors such as psychological and social need that affects nutritional status. Considerations include:

- Relationships and social interaction can impact on how we enjoy food and drink. Family, visitors and health care professionals, staff in the residential environment can impact on the enjoyment of food and drink. Our culture is based on socialisation when consuming food and drink, special occasions, coffee with friends etc. Efforts are encouraged to enable the older person to maintain a sense of community if they would like it.
- A comfortable supportive environment to encourage independence including specific eating, drinking and food preparation tools (seek specialist help when necessary)
- Training of support staff to ensure understanding of MUST screening, person centred and dignified nutritional care, understanding of nutritional care pathways etc
- Food preferences should be respected.
- Food related activities can increase anticipation of meal times, assist the gastric enzymes to work and increase appetite. Other activities can promote a sense of purpose and belonging as well as independence and wellbeing which can positively impact on food and drink consumption.

As part of a multi disciplinary team primary care nurses are at the forefront of identifying the risk factors associated with malnutrition and hence in the best position to undertake screening. National guidelines stress the importance of identifying individuals at risk of malnutrition with subsequent person centred goal setting to manage weight gain which can have a positive impact on the health and wellbeing of the older person.

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