



Nutritional Advice in Common Clinical Situations

Compendium Document 2.5 (Revised August 2009)

1. INTRODUCTION

The incidence of under nutrition among patients admitted to hospitals in UK is around 28% and is 25% greater in older subjects [1]. Because those with under nutrition have longer lengths of stay, the corresponding prevalence is nearer 40% [2]. In care homes, 30% of residents were found to be undernourished [1]. Under nutrition is poorly detected by nursing and medical staff [2].

2. NUTRITION SCREENING

2.1 The purpose of screening, specifically for protein and energy under nutrition, is “to predict the probability of a better or worse outcome due to nutritional factors, and whether nutritional treatment is likely to influence this” [3]. This includes not only those individuals who are undernourished but also those likely to become so. Because under nutrition is so common and so under-recognised, especially in older subjects, screening is mandatory for all those admitted to hospital and care homes [4].

2.2 The Malnutrition Universal Screening Tool (MUST) developed by the Malnutrition Advisory Group of BAPEN is commonly used in UK although locally devised tools are in use in many hospitals. Whatever screening tool is used, it is important that the result leads to the development of a nutritional care plan which, for many patients, cases will include full assessment by a dietician.

2.3 It is very important to monitor intake of any nutritional intervention as accurately as possible since many of the patients will be anorexic and supplements tend to be poorly tolerated. Intake is generally over-estimated by care staff [7]. Regular weighing while taking care to examine for the development of oedema is also a basic requirement.

2.4 Environment

The importance of creating the right environment to support eating and drinking has been highlighted through key policy initiatives [8], [9]. The Essence of Care Benchmark on nutrition is a patient-focused approach and can provide organisations with an auditable standard upon which to base practice.

Similarly, the Implementing the Protected Mealtime initiative on wards provides a practical solution to support hospital in-patients in ensuring they are able to receive the optimum amount of nutrition throughout the day.

Other areas that can be considered include:

- *Implementing the ‘patients at risk’ initiative –using the ‘red tray/card/napkin’ to highlight those patients who are at risk nutritionally and need help to eat and drink.*
- *Making sure that all wards/areas where people are cared for have appropriate equipment to support a patient’s nutritional needs (weighing scales, adapted cutlery, crockery and non-slip mats etc)*
- *Making use of appropriately trained volunteers to help patients with eating and drinking.*

2.5 Nutrition and Dysphagia

There can be little doubt that the patient suffering with dysphagia is at risk, not only nutritionally but also from complications which could arise from aspiration of fluids and/or food. It is clear that this risk is minimised through careful observation and screening of swallow function by specifically trained staff, followed by prompt referral to the Speech And Language Therapist and Dietician for early risk assessment. This will then inform the development of an appropriate care plan for those patients with dysphagia who are able to take food orally.

3. MANAGEMENT OF UNDER NUTRITION IN HOSPITAL

3.1 Under nutrition in older people admitted to hospital is common. Four out of 10 older people admitted to hospital have malnutrition on arrival. The situation gets worse as the risk of being malnourished increases during hospitalisation. Patients over the age of 80 admitted to hospital have five times higher prevalence of malnutrition than those under 50. Malnutrition leads to a longer length of stay, development of complications especially after surgery and increased mortality. The total cost of malnutrition on health and health care is greater than £7.3billion per year (much more than obesity) (Age Concern Hungry to be Heard report) More than 50% of this cost is spent on people aged 65 years and above. Therefore tackling malnutrition in older people should be one of the top priorities by all hospital authorities and staff.

3.2 Every hospital should implement the seven steps to end malnutrition in hospital as recommended by the Age Concern Hungry to be Heard report:

- *Hospital staff must listen to older people, their relatives and carers and act on what they say.*
- *All ward staff must become "food aware".*
- *Hospital staff must follow their own professional codes and guidance from other bodies*
- *Older people must be assessed for signs or danger of malnutrition on admission and at regular intervals during their stay.*
- *Hospital wards should introduce 'protected meal times' for patients.*
- *Hospital should introduce a 'red tray' system to help those who need assistance in feeding and ensure it works in practice.*
- *Hospitals should introduce volunteers where appropriate*

3.3 **Weight Chart:** Every older patient admitted to hospital should have admission weight recorded and weighed at regular interval. Any unintentional weight loss should be appropriately investigated and action plan implemented.

3.4 **Food Chart:** A daily food chart should be maintained for every older person admitted to hospital and the chart reviewed daily during ward rounds and at the nursing hand over meeting. Any concern should be acted on.

3.5 **Role of Multidisciplinary Team (MDT):** Ward MDT meeting discussion should include nutritional status of patient and record MUST score both in medical and nursing care plan. A MUST care pathway can be designed locally for implementing action plan for those patients with high MUST score. This could include trigger for involvement of ward nutritionists.

- 3.5 Maintenance of oral health:** Oral health plays an important part both in ingestion and digestion of food. Regular oral hygiene and provision of appropriate and clean dentures should be ensured by staff caring for older people in hospitals or other settings.
- 3.6 Role of education and Training of health care staff:**
Healthcare staff in hospitals need to have dedicated educational sessions about nutritional need of older people in hospital and consequences of under nutrition. Specific training sessions should be held to train staff in administering a) nutritional assessment scales such as MUST, b) insertion of nasogastric tube including bridled tube for maintaining nutrition in dysphagic patients on Nil By Mouth (NBM) order, c) importance of adding dietary supplements in those without adequate nutritional intake.
- 3.7 Role of Clinical Audit in improving nutritional care in hospital:**
Written Guidelines and standards are unlikely to achieve the ultimate objectives of providing appropriate nutrition to hospitalised older people unless regular short cycle, **Plan Do Study Act (PDSA)** style clinical audits are conducted with forward action plan to demonstrate that quality of care for undernourished older people is improving.
- 3.8** The Department of Health “Improving Nutritional Care - A joint action plan” www.dh.gov (2007) details key priorities by which under nutrition can be tackled by health and social organisations.
- 3.9** Documents it refers to include the Council of Europe Resolution “10 Key Characteristics of good nutritional care in hospitals” www.bda.uk.com/resources/071012CoEHospitalNutrition.pdf
- 3.10** Staff should refer to the Age Concern ‘Hungry to be heard’ document. www.ageconcern.org.uk/AgeConcern/hungry2bheard.asp .
- 3.11** The British Association for Parenteral and Enteral Nutrition (BAPEN) “Organisation of Food and Nutrition Support in Hospitals” www.bapen.org.uk/ofnsh/index.html also provides useful information regarding the structures and processes which should be in place.
- 3.12** After identifying a person to be undernourished or at risk of under nutrition using a validated screening tool such as MUST (www.nice.org.uk/Guidance/CG32) the resulting nutrition care plan should indicate the appropriate support for the individual. If they are able to eat they should initially be offered fortified food items and/or oral nutritional supplements / multivitamins. Patients must receive a good quality food service: nutrition support must be patient-centred, oral intake of diet and fluids must be charted, provision of assistance where necessary (bearing in mind Dignity in Care guidance and checking the patient’s weight regularly noting the presence of oedema/ascites).
- 3.13.** If patients are unable to meet their nutritional needs through the oral route alone or the present nutrition care plan is ineffective for other reasons dietetic advice should be sought to determine the most appropriate nutrition support www.nice.org.uk/Guidance/CG32. When the GI tract is accessible and functioning enteral nutrition support should always be given taking care to promote good oral hygiene.

- 3.14 Re-feeding syndrome:** The nutrition care plan should also consider if an individual is at risk of re-feeding syndrome giving specific guidance as to the identification of such individuals, what to monitor and give orally for those identified as being at risk of this syndrome www.nice.org.uk/Guidance/CG32 .

4. **ETHICAL AND LEGAL CONSIDERATIONS**

- 4.1 The GMC has defined good practice in decision-making on withholding and withdrawing life-prolonging treatments [10]. This, together with updated BMA guidance [11], has ensured that clinicians in the UK have an explicit framework for making the difficult and sensitive decisions necessary to provide optimum care of patients who are both unable to maintain their own nutrition and hydration and not competent to make decisions for themselves.
- 4.2 These documents are fully referenced from both the medical and legal literature, the new edition of the BMA guidance in considerable detail in the light of recent court cases and changes in practice required under the Mental Capacity Act. They should therefore help to reassure patients, their family and carers, and the wider public that such decisions are made in a transparent and open manner, free from ageism and are not influenced by resource constraints in the NHS. Indeed the GMC document makes clear that individual clinicians are accountable for any deviation from the published guidance.
- 4.3 In light of this it is felt that there are at least two conditions common in the care of older people where some specific guidance on nutrition might be of help to BGS members, namely stroke and dementia.

5. **NUTRITION AND STROKE**

- 5.1 A significant number of stroke patients are under-nourished on admission and, as with other under-nourished hospital patients; their nutritional status tends to worsen after admission. Furthermore, under-nutrition in hospital is a strong and independent predictor of morbidity and mortality after stroke [11].
- 5.2 Routine administration of oral nutritional supplements to stroke patients, in acute and rehabilitation phases, has not been shown to improve overall outcome and should, therefore, be reserved for those who are under-nourished on admission or have deteriorating nutritional status [12].
- 5.3 Early naso-gastric (NG) tube feeding has been shown to reduce mortality, but at the expense of increasing the proportion of survivors with severe disability [13]. Nevertheless NICE guidelines recommend NG tube feeding within 24 hours of admission for those unable to take adequate fluids and food orally [14]. NG tube feeding seems safer than PEG feeding and is the recommended route for those who require enteral feeding in the first few weeks after a stroke. PEG tube feeding has been shown to be associated with increased mortality and poor outcome and should be reserved for those who cannot be fed via a NG tube, or where enteral feeding is prolonged [12].
- 5.4 Some patients who receive PEG tubes are in the terminal phase of their illness, calling into question the appropriateness of the intervention. The physician's role is to

provide best quality information [10] on the short and long-term consequences of a trial of NG or PEG feeding [14], having investigated the options, listened to all relevant parties [10] and considered the patient's circumstances, quality of life and prognosis [15], before deciding on the appropriateness or otherwise of either procedure.

6. NUTRITION AND DEMENTIA

- 6.1 Anorexia, weight loss and also dysphagia are common in patients with advanced dementia. In these patients intercurrent infection, environmental change, depression, poor carer rapport, pain, oral hygiene, ill-fitting dentures and nursing availability are just some potentially reversible and treatable causes of reduced food and fluid intake. The role of enteral, mainly PEG tube, feeding in such individuals is controversial [16, 17], even in the ethical and theological literature [18].
- 6.2 The best available evidence, in the absence of randomised controlled trials, suggests that PEG tube feeding does not improve overall prognosis in patients with advanced dementia [19]. It does not prevent aspiration [20], prolong survival, improve quality of life, functional status or nutritional status [21,22]. The latter is likely to be due to the presence of cytokines which induce cachexia such as TNF-alpha and IL-6 [23]. PEG tubes are generally poorly tolerated by patients with dementia and there is some evidence that hand feeding can be as effective [24].
- 6.3 Despite the above evidence which questions the value of enteral tube feeding in general in dementia there remains a need for physicians to consider each clinical situation on its merits [14]. There are wide cultural differences in recommending PEG tubes for dementia [25] and younger patients may do better than the very elderly [26]. Each individual has a right to be treated with dignity and this can be used as an argument both for and against the administration of artificial nutrition and hydration. Respect for individual autonomy is paramount, as is extensive consultation, when acting in the best interest of a patient who is not competent. There is an acknowledged need for palliative care provision for patients with advanced dementia [27].
- 6.4 Where dietary intake is insufficient but death is not imminent, the GMC states that a second opinion must be sought from a senior clinician not directly involved in the patient's care, before the decision to withhold artificial feeding is finalised and that where significant conflicts remain, either within the healthcare team or with those close to the patient, legal advice should be sought [10].

7. NUTRITION IN THE COMMUNITY AND CARE HOMES

- 7.1 Malnutrition is equally common within community settings, and can be the product of single or multiple long-term conditions, especially as end-organ failure develops. It is worsened by social issues, such as loneliness and access to nutritious meals, and mental health issues.
- 7.2 Principles described above, such as high quality, nutritious and attractive meals at the right time, assistance with eating, company at mealtimes, good dentition, and oral hygiene apply equally outside hospital. Within Care Homes it is important that cooks have had training in the nutritional needs of frail older people, and how to maximise

nutritional value within meals of altered texture. Attention to detail may resolve the malnutrition.

- 7.3 Where inadequate nutrition and weight loss continue in spite of attention to these details, further simple methods of dietary adjustment should be employed to maximise oral intake. Dietitian advice may often be required at this stage, and should be available to individuals at home and in care homes.
- 7.4 Oral nutrition supplements eg sip feeds should be prescribed where there is considered to be disease-related malnutrition, and there has been an unsatisfactory response to the above measures. They will usually be given for a trial period of around 28 days under the supervision of a dietitian, who will identify patient preferences for appropriate supplements. If there has been no clinical benefit or weight gain over that period, the trial will usually be withdrawn. Where improvement is seen, a target will usually be set, with ongoing review. Sip feeds would not usually be continued indefinitely.

8. RECOMMENDATIONS

- 8.1 Advice of dietitians and speech and language therapists must be sought early and they must be integral to the team assessing the most appropriate method of meeting individual nutritional requirements in patients at risk of under-nutrition.
- 8.2 Nursing, medical, catering staff and other health professionals involved in the care of patients with stroke or dementia should have access to the necessary basic training which will enable them to assess and meet the nutritional demands of those at risk.
- 8.3 All members of the multidisciplinary team should be involved in decisions to recommend PEG feeding for patients with dysphagia. The treating doctor has a duty to obtain informed consent from competent patients and to undertake adequate consultation with those closest to patients not competent to make the decision [28].
- 8.4 There should be a clear policy and standards for the management of dysphagia
- 8.5 There should be clear policies for short- and long-term review of patients with PEG feeding.
- 8.6 Trusts should develop a clear policy to support nutrition- which includes auditable standards.

9. REFERENCES

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