Strategies for nutritional care in acute settings

Nurses must be alert to vulnerable patients who are at risk of malnutrition. Carolyn Best and Jill Summers present a range of practical courses of action they can take.

Summary

Many reports have highlighted the challenges to nutritional care that older people can face when they are in hospital. Nurses can influence and implement effective nutritional care for hospitalised older people. People at risk of malnutrition should be identified through screening and people who require help to eat and drink should receive appropriate help. This article explores some of the practical issues that affect the nutritional care of older people in hospital and provides suggestions to improve care.

Keywords

Acute care, food and nutrition, older people

UP TO 14 per cent of people aged over 65 years in the UK are malnourished (Elia 2003, Age Concern 2006, European Nutrition for Health Alliance (ENHA) 2006), increasing to one in three people admitted to acute hospitals (Russell and Elia 2008, 2009). More than half of the annual costs of disease-related malnutrition in the UK relate to people over the age of 65 (Elia et al 2005, ENHA 2006). Almost two thirds of general and acute hospital beds are occupied by people over the age of 65 (Department of Health (DH) 2001a). Patients over the age of 80 have a five times higher prevalence of malnutrition than those under the age of 50 (Age Concern 2006). Therefore this is an area of practice that should be of interest to nurses working with older people.

Hungry in Hospital?, a briefing paper published by the Association of Community Health Councils (1997), identified that hospital patients were hungry because ward staff were not providing assistance to those who required it and meals were often placed out of patients’ reach.

Almost ten years later, Age Concern’s (2006) report Hungry to be Heard warned of the continuing scandal of poor nutritional care for older people in hospital and set out seven steps that hospitals should adopt to improve their nutritional care (Box 1). It also highlighted that despite standards and guidelines being published as a result of the Hungry in Hospital? report, malnutrition in older patients in acute settings was still a major issue and called for action from the NHS, Healthcare Commission and DH.

With an increasing older population and the ever-changing demands and constraints on the NHS, this problem will not disappear. Therefore, increasing awareness of the important part nurses have to play in influencing and implementing effective nutritional care for older people is crucial.

There are a number of reasons why older adults are more vulnerable to malnutrition, including reduced activity and mobility, a reduction in food

Box 1  Seven steps to end malnutrition in hospital

- 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.
- Assess older people for the signs or danger of malnourishment on admission and at regular intervals during their stay.
- Introduce ‘protected mealtimes’.
- Implement a ‘red tray’ system and ensure that it works in practice.
- Use volunteers to assist with eating where appropriate.

(Age Concern 2006)
intake, body composition changes, physical and mental illness and disability (Gariballa 2004). When older adults are hospitalised this risk increases (Shepherd 2009). Understanding the factors that contribute to this increased risk of malnutrition will assist in tackling the issue (Table 1).

**Screening**

The use of a nutrition screening tool to identify patients who are malnourished or who are at risk of malnutrition early in their hospital admission will assist in the timely initiation of an appropriate nutritional treatment plan. It is not uncommon for malnutrition to go undetected and older patients may journey on a ‘malnutrition carousel’ as they go from hospital to community and then back into hospital without having their nutritional status addressed (Malnutrition Advisory Group 2003).

The National Institute for Health and Clinical Excellence (NICE) (2006) recommends that on admission to hospital all patients should be screened for malnutrition. However, with more than 50 nutritional screening tools in clinical use in the UK (Elia 2003), choosing one that is suitable for use in the acute setting is vital. To be effective, a screening tool must be quick and easy to use and provide transferable results. NICE (2006) recommends the use of a validated nutrition screening tool such as the Malnutrition Universal Screening tool (MUSt), which can be adapted for use in primary and secondary care settings (British Association for Parenteral and Enteral Nutrition 2008). It has also been shown to be an effective screening tool for older patients (Stratton et al 2006).

The five-step screening process of the MUST aims to identify patients with significant malnutrition or those who are at risk of becoming malnourished. If a patient is identified as being malnourished or at risk of malnutrition, nutritional care plans in the screening tool provide nursing staff with guidance to initiate the appropriate level of nutritional treatment immediately.

This may comprise starting patients on a food record chart to monitor how much they are eating, ordering a high protein/high calorie diet, or where possible, offering extra snacks. In many hospitals nursing staff can also offer patients a nutritional supplement drink. However, nurses may complete the screening tool but fail to implement the nursing treatment plans. It is essential that nurses recognise their role in implementing and monitoring patients’ nutritional care. Even if the patient is identified as being at high risk of malnutrition and requires referral to a dietician, failure to implement the nursing treatment plan may delay the appropriate nutritional care.

**Adequate and appropriate nutrition**

Ensuring that the nutritional requirements of vulnerable older adults are met while they are in hospital requires a considered approach. Nursing staff should be aware of any special dietary requirements patients may have, whether they require assistance to eat their meals and whether

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**Table 1** Factors that may affect nutritional intake among older hospitalised patients

<table>
<thead>
<tr>
<th>Psychological/perceptual issues</th>
<th>Physical ability/mechanical problems</th>
<th>Medical condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute or chronic confusion or memory loss</td>
<td>Poor eyesight</td>
<td>Dysphagia</td>
</tr>
<tr>
<td>Poor motivation to eat</td>
<td>Poor positioning if having to eat in bed</td>
<td>Pain or discomfort suppressing appetite</td>
</tr>
<tr>
<td>Eating in a strange environment or in front of strangers</td>
<td>Appropriate assistance to eat is not provided or available</td>
<td>Dyspnœa</td>
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<tr>
<td>Inability to recognise food</td>
<td>Difficulty in manipulating cutlery or drinking vessels</td>
<td>Side effects of medication, for example, nausea, vomiting, constipation, dry mouth, gastric irritation, drowsiness</td>
</tr>
<tr>
<td>Giving the patient food that makes them different from others, for example, a puréed or soft diet</td>
<td>Poorly fitting or absent dentures</td>
<td>Nil by mouth status</td>
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(Best 2008)
the menus meet their cultural needs. They should communicate these needs to the catering service by making appropriate meal choices indicated on a general menu card, for example, for high protein, vegetarian or gluten-free meals or by using a specific menu, for example, for soft or pureéd diets.

Where normal diet alone does not adequately meet patients’ nutritional needs, a variety of measures can be implemented by nursing staff. Using more energy-dense food choices will increase the protein and calorie content of meals. For example, having scrambled eggs as a breakfast option and providing a milk pudding rather than a fruit dessert, can be implemented at ward level.

The use of food fortification can boost protein and calorie intake without increasing volume. In hospital this would be instigated in the catering department. To fortify meals an energy-dense food, such as cheese, butter, cream or milk powder, is added to a menu choice. For example, grated cheese is added to beans on toast or cream is added to mashed potato.

Where possible, offering nutritious snacks between meals can be particularly useful for those patients who struggle with large meals. Snacks could include cheese and biscuits, yoghurts and milky drinks.

**Assistance to eat**

There are a number of ways in which older patients in hospital can be helped to improve or maintain their nutritional intake. Individual assessment will help identify the level and timing of assistance required without limiting independence or undermining the patient’s ability or confidence.

Assistance may be required to:
- Complete menus, for example, for patients with poor eyesight, difficulty reading or writing, or those who have lost or broken spectacles.
- Identify which meals are appropriate for their medical condition, for example, diabetic, high protein, low potassium or gluten free.
- Obtain correct consistency meals and fluid, for example, soft, puréed diets and thickened drinks.
- Prepare for eating, for example:
  - Ensure the patient is positioned comfortably and as upright as possible. Where patients cannot sit upright in a chair they should be positioned as upright as possible to reduce the risk of choking and make eating easier.
  - Give patients an opportunity to wash their hands at a basin, use hand wipes or offer a bowl of water.
  - Remove food and utensils from packaging.
  - Push straws into cartons or pour drinks into glasses.
  - Cut up food.

**Offering nutritious snacks between meals can be particularly useful for those patients who struggle with large meals**

- Clean and correctly position dentures before meals.
- Reach food trays or drinking vessels.
- Obtain specialised equipment such as non-slip mats, plate guards or adapted cutlery that may promote and prolong independence.

Nurses should be aware that patients tire; they may manage to eat independently earlier in the day or manage a first course unaided but require assistance with an evening meal or pudding. Meal sizes should be tailored accordingly.

Nursing staff can also promote good nutritional care by ensuring that certain initiatives and standards are in place, such as:
- Protected mealtimes (Hospital Caterers Association 2004). This provides an environment where unnecessary interruptions and ward-based activities, such as drug rounds or bedside cleaning, are limited to those that are essential or relevant to mealtimes so that patients are supported to eat.
- Red trays (Bradley and Rees 2003). These are used to indicate that a patient requires assistance to eat. The red tray remains in the food trolley until all other trays have been delivered and nursing staff have time to offer the appropriate level of support to the patient, thus ensuring the patient receives a warm meal. Where red trays are unavailable, red serviettes are equally effective.
- Trained volunteers or relatives to assist patients to eat their meals.
- Food intake charts. To record the amount of food the patient has eaten rather than the amount of food that was originally on the plate. Three to four days of measurable information recorded on a food chart provides sufficient information to gain an indication of a patient’s nutritional intake.
- Following the recommendations of the Better Hospital Food programme (NHS Estates 2001), most hospitals should have some, if not all, of the following available for patients to access food outside mealtimes:
  - Light refreshments available at ward level.
  - Snack boxes providing sandwiches or cheese and crackers, fruit, yoghurt and a drink.
  - Light bite hot meals, for example, cottage pie.
- Audit tools such as the Essence of Care food and nutrition benchmark (DH 2001b) to monitor standards and focus action plans.
Resources provided by the RCN’s (2007) Nutrition Now campaign to educate colleagues on the importance of nutrition and hydration as part of patient care and guide them on how best to improve nutrition for patients. Where these measures alone cannot improve nutritional requirements, oral nutritional support may need to be considered.

Oral supplements
NICE (2006) recommends that oral nutritional support should be considered to improve nutritional intake for people who can swallow safely and are malnourished or at risk of malnutrition. The European Society for Parenteral and Enteral Nutrition (Volkert et al 2006) recommends the use of oral nutritional support in frail, malnourished older patients to increase energy, protein and micronutrient intake, to maintain or improve nutritional status and to improve survival. Milne et al (2002) showed that oral supplementation can produce a small but consistent weight gain in older people, improving mortality and shortening hospital stay. Results from another meta-analysis of patients over the age of 65 years with hip fractures showed that oral supplementation had a positive outcome on mortality and long-term complications (Avenell and Handoll 2000).

Choosing the most appropriate nutritional supplement for the patient is important to improve concordance. Patients who have been offered supplements in the past may have negative memories of the taste and refuse to drink them. It is important to recognise that the taste and presentation of supplements have changed and that nurses’ approach to presenting nutritional supplements to patients is important because their opinion will often influence the patient’s decision.

Some supplements commonly used in secondary care include milk, juice, fat or yoghurt based; milk or fruit-based puddings; soups; and powder-based drinks made fresh as required. It may be necessary to try a number of different flavours or types of supplement before finding one that suits the patient. It is also important to remember that all sweet supplement drinks will be more appealing when served cold. For those patients who do not like or are unable to tolerate the ready to drink options, there are other types of supplements available which are made with fresh milk, which may be more palatable. Milk or fruit-based puddings are useful for patients who have swallowing difficulties or are unable to manage unthickened fluids. Build-up soups are useful to keep on the ward for those patients who prefer savoury foods.

Nutritional supplements may be contraindicated for some patients, for example, for those with renal disease. If there is any uncertainty about the appropriateness of nutritional supplements for patients, advice should be sought from the dietitian.

Giving sip feeds within an hour of a mealtime may result in patients feeling too full to cope with eating their meal. As sip feeds are prescribed to help increase nutritional intake, poor timing will be to the patient’s detriment. They are therefore best offered between meals.

Other issues
Dementia Malnutrition is a common feature in dementia as patients may develop swallowing problems and an indifference to food (Hurley and Volicer 2002). This increases the risk of aspiration and a reduction in nutritional intake. A lack of essential nutrients, weight loss and the onset of dehydration can compound dementia symptoms, with patients becoming more confused and agitated (Clarke 2009). Reducing distractions and sensory stimuli can improve the eating experience (Eberhardie 2009) as patients may find it difficult to resume eating once their focus on a meal is lost. To maximise nutritional intake consideration may need to be given to making meals more energy dense or increasing the use of finger foods, particularly if the person has a tendency to wander. The use of picture menu cards has been found to stimulate an interest in food (Clarke 2009).

Dysphagia This is characterised by difficulty chewing or swallowing foods and/or liquids, coughing or choking when eating, food sticking in the throat or chest, and/or difficulty swallowing.
saliva. Patients with dysphagia may have an increased risk of aspiration during eating or drinking, which can make ingesting sufficient fluid and nutrients a challenge. To minimise the risk of aspiration it may be necessary to encourage patients to take repeated swallows and clear their throat gently after every few mouthfuls. This ensures that any food residue is cleared from the throat. They may also require a modified consistency diet, that is, soft or pureed, to make it easier to chew or swallow.

Assessment by a speech and language therapist will clarify which of these strategies is appropriate. This may be sufficient for some patients but for those with continuing severe dysphagia it may be necessary to consider alternative methods of providing nutrition, for example via an enteral feeding tube, but the decision to move to providing nutrition support will depend on their medical condition and prognosis.

Artificial nutrition support

Where appropriate the use of artificial nutrition support may be considered when oral intake and dietary supplementation are inadequate or unsustainable. If short-term nutrition support is required nasogastric tube feeding would usually be the first option while a gastrostomy may be considered for longer periods, that is, more than six weeks. Involvement of the dietitian is essential to calculate the patient’s nutritional requirements and ensure that the patient requiring nutrition support receives the appropriate level of nutrition and fluid and nursing staff have a clear feeding regimen to follow. Some patients may have all of their nutritional requirements met via this route or for others it may be used to supplement oral nutritional intake.

Conclusion

Providing good nutritional care for vulnerable older adults often requires a co-ordinated, multidisciplinary approach but nurses are ideally placed to identify those patients at risk of malnutrition on admission to hospital and after changes in health status while inpatients.

By recognising the vulnerability of older adults in acute settings and gaining a greater understanding of their specific needs, nurses can develop appropriate strategies and interventions to provide good nutritional care. Numerous standards and guidelines have been published recommending action to improve the nutritional care of older patients. To be effective they require nurses to make the necessary changes at ward level so that patients receive appropriate and timely nutritional care.

Find out more

You can visit the RCN’s Nutrition Now campaign website to download practical tools to improve nutritional care in your clinical area: www.rcn.org.uk/newsevents/campaigns/nutritionnow

References


