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Treating malnutrition in hospitals: dietitians in the driving seat?

Abstract

Although the problem of malnutrition in hospitals is not new,^{1,2} it is still a serious concern in Australian hospitals today. The population is ageing and patients are admitted with multiple medical problems placing them at increased risk of malnutrition. Malnutrition prevalence rates in Australian hospitals have ranged from 6-53%.³⁻¹³ The wide variation is due to different study settings; the time between admission and assessment, and the assessment tool used. Malnutrition is a considerable problem that increases with age. Patients over 80 years have a higher odds risk of being malnourished compared with those between 61-80 years.⁹ Chronically ill patients, many of whom are elderly, will be in and out of hospital regularly. Adequate flagging of these patients on admission is required, as is appropriate follow up at discharge. Patients with a reduced energy intake the month before hospitalisation have been shown to have a reduced nutritional status compared to other patients.¹⁴ Further examination of malnutrition in medical patients has highlighted a second group of patients, who while not malnourished on admission, are at high risk of becoming so.¹⁵ These patients need to be identified early and treated effectively to minimise a further decline in nutritional status.¹⁶

Keywords

malnutrition, hospital, nutrition screening, nutrition assessment, evidence based practice guidelines, nutrition support

Disciplines

Arts and Humanities | Dietetics and Clinical Nutrition | Life Sciences | Medicine and Health Sciences | Social and Behavioral Sciences

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LEADING ARTICLE

Treating malnutrition in hospitals: Dietitians in the driving seat?

Introduction

Although the problem of malnutrition in hospitals is not new,^{1,2} it is still a serious concern in Australian hospitals today. The population is ageing and patients are admitted with multiple medical problems placing them at increased risk of malnutrition. Malnutrition prevalence rates in Australian hospitals have ranged from 6-53%.³⁻¹³ The wide variation is due to different study settings; the time between admission and assessment, and the assessment tool used.

Malnutrition is a considerable problem that increases with age. Patients over 80 years have a higher odds risk of being malnourished compared with those between 61-80 years.⁹ Chronically ill patients, many of whom are elderly, will be in and out of hospital regularly. Adequate flagging of these patients on admission is required, as is appropriate follow up at discharge. Patients with a reduced energy intake the month before hospitalisation have been shown to have a reduced nutritional status compared to other patients.¹⁴ Further examination of malnutrition in medical patients has highlighted a second group of patients, who while not malnourished on admission, are at high risk of becoming so.¹⁵ These patients need to be identified early and treated effectively to minimise a further decline in nutritional status.¹⁶

Systematic and timely nutrition screening

Unfortunately nutrition screening is not routine practice in Australian hospitals, although it is used extensively in some. Nutrition screening is important for the timely identification of patients who are 'at risk' and to prioritise those patients requiring referral to a dietitian for nutritional assessment and nutrition support.^{17,18} Routine nutritional screening, using a validated tool, should be initiated for each patient soon after admission.¹⁹ A systematic approach to screening is required at each hospital so that both responsibility and authority are held by a particular position, and systems based approaches can be implemented. This would also assist in prioritising the important role of medical nutrition therapy.

Nutritional status can further decline throughout the hospital stay.^{9,16,20} Reasons for this decline may include poor appetite; medical condition; the variety of food options available; difficulty with manipulating cutlery and accessing food; lack of feeding assistance; food packaging; lack

of recognition of malnutrition and referral for treatment.^{6,13,21} Weekly screening is therefore important for those not initially found to be 'at risk'.¹⁹

Dietitians driving nutrition assessment and intervention

Nutrition assessment is a thorough process of determining and evaluating the nutritional status of an individual via measurable and validated methods.²² There are a number of nutrition assessment tools in use today. Unfortunately there is no gold standard assessment tool and so it is important to use a tool that has been validated for use in the patient group of interest.¹⁹ Subjective Global Assessment (SGA), Patient Generated Subjective Global Assessment (PG-SGA) and the Mini Nutrition Assessment (MNA) are three methods often used by Australian dietitians to determine the nutritional status of patients.³⁻¹³

Dietitians, as the nutrition experts are well aware of the importance of adequate recognition of malnutrition; nutrition during hospitalisation and the role of '*food as medicine*'. However, a recent study found less awareness in other hospital staff, reporting issues such as a lack of knowledge and training regarding nutritional status and assessment, communication issues, failure to recognise food and nutrition as a key part of care and no consistent team approach.²³ Other issues may include: the amount of available staff, time pressures and the priority of some other tasks, such as medication rounds, which need to be signed off.^{21,24}

Several recent Australian studies have indicated poor recognition of malnutrition in hospitals. A prevalence rate of 36% was reported when the SGA was applied to determine nutritional status of patients in two acute care Sydney hospitals. The length of stay of older, malnourished patients was significantly longer (17 days vs 11 days, $P < 0.0005$), mortality at 12 months follow up significantly greater ($P < 0.0005$) and only 36% of the malnourished patients had already been referred to a dietitian.⁴ A study at another Sydney hospital reported a prevalence rate of 42.3% when using the SGA. The medical records indicated that 15.3% of the patients had been referred for dietetic intervention, and only one malnourished patient had been documented as malnourished. This lack of documentation regarding malnutrition and resultant coding resulted in a shortfall of \$125 311 for the hospital as the diagnostic related group (DRG) incorporated malnutrition for just one patient.⁶

A study of 777 patients at another Sydney hospital, reported that 51% of patients were malnourished. The average LOS for the malnourished patients was significantly longer at 30 days, vs 17 days for well nourished patients. As with other studies, a large proportion of patients

identified as being malnourished (43%) had not been referred on to a dietitian.¹⁰ A recent Victorian study reported 30% of elderly patients (using the MNA) to be malnourished on admission to hospital, with a further 61% 'at risk'. Patients were not often referred to dietitians, reflecting the suboptimal recognition of malnutrition by doctors and nurses. Symptoms such as a reduced appetite and recent weight loss were not viewed as the important alarm bells that they would be to dietitians.¹³

A team approach to nutritional care

Back in 1996, a report in the MJA stated "*Despite a high prevalence of malnutrition among hospitalised patients, recognition, treatment and documentation of malnutrition is often poor.*"²⁵

The lack of a team approach to nutritional care is as an opportunity for further nutrition policy development and intervention improvements.^{26,27} Further researchers have also highlighted the need to document malnutrition in order to obtain the appropriate financial reimbursements for the hospital which assists in aiding nutrition support, as well as advocating for the essential role of dietetics as part of medical treatment. A clear model has been outlined for screening and assessing patients in hospital, documenting their nutritional status and promoting nutritional support. The model clearly involves doctors, nurses and dietitians.²⁸

The BAPEN Report discussed the need for across discipline working so that hospital food can be used as part of patients' treatment. It is suggested that missed meals should be reported in the same fashion as missed medications.²⁹ Improving nutrition and food service provision means a change of attitude and routines, not just for nurses and doctors, but also for hospital management. Implementation of food policy that secures nutritional care and support is essential.³⁰ Patients often stay longer than the 'average' figures reported. A recent study from Brisbane reported ~ 50% of bed days as occupied by those staying ≥ 14 days or more, and approximately 34% being occupied by those staying ≥ 28 days.³¹ This makes it all the more important that patients are screened and assessed appropriately; follow up screening is managed and that food service provision is adequate. In this fiscal environment it is increasingly apparent that further cost benefit studies are needed to provide evidence for the role of 'food as medicine', especially as many such studies are now dated.³²

Evidence Based Practice Guidelines

While it is important to demonstrate the prevalence rates of malnutrition and problems with recognition, it is also important that dietitians, as the nutrition experts, lead the strategic charge forward with action, because malnutrition can be reversed, even in older patients.³³ As leading

dietitians in this area have noted, malnutrition is a significant issue and “*Action must be taken to increase the recognition, prevention and appropriate treatment of malnutrition especially in higher-risk groups*”.⁹

In June 2009, The Dietitians Association of Australia (DAA) released endorsed Evidence Based Practice Guidelines for Nutritional Management of Malnutrition in Adult Patients across the Continuum of Care.¹⁹ They are timely and provide a valuable, evidence based framework to standardise practice, which are based on a systematic review of the literature, stakeholder consultation and critique of the strength of the evidence. Six key outcomes are highlighted that relate to: improved access to patient centred protocols; correct diagnosis of malnutrition; an improved patient experience; dietetics advocacy in addressing malnutrition, appropriate food services and environments for eating; and building capacity for the healthcare workforce to appreciate the causes, indicators and treatments for malnutrition. The section on nutrition goals and practice tips aligns well with the ‘food as medicine’ position. It promotes advocacy for food service systems that support adequacy; such as food fortification, protected mealtimes, feeding assistance; nourishing snacks and staff education to support these programs.

The guidelines highlight the need to avoid missed funding opportunities when malnutrition coding is not completed consistently. Changes were made to the criteria for diagnosis of malnutrition in July 2008. In acute, clinical settings, medical records coders are now able to assign an appropriate code for malnutrition if adequately documented by a dietitian. It is critical that dietitians ensure that their documentation will meet the diagnostic criteria for malnutrition. Liaison with clinical coders is encouraged to standardised practice and the concept of a malnutrition sticker is suggested. In a number of Australian states, correct coding for malnutrition may increase the case complexity, which may alter the Diagnostic Related Group (DRG) and increase the valuable casemix funding that the hospital receives.

The guidelines also emphasise the need for adequate training; discuss the use of validated screening and assessment tools; documentation of malnutrition; appropriate treatment goals and options, as well as communication. Interestingly, the review

highlighted a gap in the evidence base relating to the influence of nutrition education on malnutrition for health care professionals; a future research opportunity.

In this issue of *Nutrition & Dietetics*, Gout et al provides a timely insight into a range of key issues surrounding the identification of malnutrition in an acute care Melbourne hospital. The authors discuss a lack of training and the perceived complacency by other staff towards malnutrition and emphasise the need to take action on this important issue; the need for collaboration and correct coding of malnutrition as a diagnosis.

A useful case study is provided that estimates a loss of \$27, 617 to the hospital due to inadequate coding for malnutrition. Those who were malnourished; but who were not identified prior to the study, or were not documented and coded as such, were later coded that way. This resulted in a number of patients changing DRG; which when extrapolated over the year suggests that \$1,850,540 in financial reimbursements were missed out on. This summary further emphasises the need to get to know and practice the new evidence based guidelines, and to communicate with others, including medical coders, hospital management, doctors, nurses and allied health teams.

Conclusion

For many reasons, malnutrition in hospitals is still not well recognised, with implications for patient outcomes and health dollars. Early detection and appropriate treatment is essential. A standard method of medical record documentation is also required to facilitate appropriate hospital reimbursement which may continually improve models of nutritional care, particularly with the future demands of an ageing population. Dietitians are in an ideal position to embrace the new guidelines. Collaboration with, and training of others will assist in the bid to implement systems to better identify 'at risk' and malnourished patients so that essential medical treatment in the form of nutrition support can be prescribed.

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