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The high impact actions for nursing and midwifery 1: keeping nourished – getting better

Malnutrition is often unrecognised and its consequences can be devastating. Ensuring patients receive adequate nutrition and hydration is fundamental

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Approximately one in four patients in NHS hospitals are either malnourished or at risk of malnutrition and as much as 70% of malnutrition in acute hospital admissions is unrecognised and unmanaged. Although most of those who are malnourished live in the community, malnutrition and dehydration are key challenges for NHS organisations. Well hydrated and nourished patients get better more quickly, have a shorter length of stay and a more positive experience of care. Ensuring patients receive all of the nutrients they need is vital to the delivery of good care. This article, the second in our series on the high impact actions for nursing and midwifery, looks at how nurses can reduce malnutrition in their patients.

INTRODUCTION

Malnutrition is a cause and a consequence of disease, leading to worse health and clinical outcomes in all social and NHS care settings. However, it often goes unrecognised and untreated in the UK (Brotherton et al, 2010), and annual spending on disease related malnutrition is estimated to be more than £13bn (British Association for Parenteral and Enteral Nutrition, 2009). Approximately one in four patients in NHS hospitals are either malnourished or at risk of malnutrition and as much as 70% of malnutrition in acute hospital admissions is unrecognised and unmanaged (National Institute for Health and Clinical Excellence, 2006a).

The length of stay for malnourished patients is, on average, 1.4 days longer than

those who are better nourished (NICE, 2006b), they succumb to infection more often, visit their GP more frequently (NICE, 2006a) and require longer term and more intensive nursing care.

WHAT CAN NURSES DO?

To introduce good nutrition and hydration practices, nurses must know which patients are at risk, but only a third of patients are screened for malnutrition on admission to hospital (NICE, 2006a). They may arrive in a relatively healthy nutritional state but this may change, so regular measurement is vital, particularly for long stay patients.

Once patients are identified as being at risk, appropriate interventions should be introduced and monitored. While dietitians should calculate nutritional requirements for individual patients, nurses are responsible for day to day nutritional care, so it is vital they work together to ensure patients get the right amount of nutrition and hydration.

Patients who are malnourished or at risk of becoming so may need fortified foods and/or oral nutritional supplements to ensure they receive adequate nutrition. This may involve dietitians working with nursing and catering staff to develop a programme of food fortification. While oral supplements can improve nutritional intake, they must be used appropriately to minimise waste, taking account of patients' preferences on flavours.

The Essential Collection (See box, above) includes four case studies from different settings, which have succeeded in addressing the issue of malnutrition.

CASE STUDY 1: APPROPRIATE USE OF NUTRITIONAL SUPPLEMENTS

Salford's community nutritional support dietitians set up a screening policy and ensured a consistent dietetic approach across acute and community services. The team also worked with Salford Royal Foundation Trust to stop sip feeds being routinely added to TTOs (drugs to take home) unless the patient was under the care of a dietitian.

THE ESSENTIAL COLLECTION



The Essential Collection, plus literature reviews for each high impact action, can be downloaded from the NHS Institute website. This also contains an opportunity estimator so that you can calculate potential savings, and a range of tools and resources.

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The medicines management team identified the 10 GP practices prescribing the greatest number of supplements and another three requested assistance. In total, 512 patients were identified as having supplements on repeat prescriptions. Those unknown to the dietetic service (79%) were invited to a clinic for review or, if confined to the house, offered a home visit. If patients opted out of the dietetic service their prescriptions were discontinued.

The team also provided training on the new screening policy, which advocates use of the Malnutrition Universal Screening Tool (MUST) for GPs and nursing homes in and around Salford.

Impact of the initiative

The project has improved access to dietetic expertise for a wide range of healthcare professionals, including nursing home staff and GPs. The number of sip feeds prescribed decreased by 39.8% in the participating GP practices and the proportion of patients known to the dietetic service increased by 58%. There was a 30% reduction in supplements on repeat prescription, while the use of "other/not known" as the recorded reason for supplement prescription reduced from 52% to 19%.

Patients were enabled to meet dietitians and discuss alternatives to sip feeds, with an average of 2.6 contacts per patient through

the project. Many patients were receiving inappropriate supplements and all but two had their regimen changed.

Referrals to the community dietetic service increased by 349% and nursing home staff and GPs have much improved access to dietetic expertise. Training sessions have made nursing home staff more informed and more confident in assessments. The overall cost of supplement prescriptions was reduced for 124 patients (91.2% of cases).

In the first five months of the project, expenditure on nutritional supplements reduced by £63,010.

CASE STUDY 2: MULTIDISCIPLINARY WARD ROUNDS

Staff at Lancashire Teaching Hospitals Foundation Trust cut the use of total parenteral nutrition (TPN) and improved patient care through a specialist nutritional nursing service and daily ward round. The trust set up a nutritional nursing team, led by a consultant nurse working with two specialist nurses, to ensure this group of patients get the most appropriate artificial feeding device for their condition and full support for their nutritional requirements.

Along with a pharmacist and dietitian, the team carries out a daily ward round focusing on TPN patients, which is joined twice a week by a consultant gastroenterologist, a biochemist and a microbiologist.

A central referral system was set up for the nutritional nursing team. Inpatients are assessed within 24 hours and the team holds a rapid referral, nurse led clinic for patients in the community with nutritional devices.

Patients with a nasogastric (NG) tube are now routinely discharged with a nasal bridge to reduce the need to attend the clinic to have it refitted after accidental removal. An education and training programme was developed, focusing on prevention of central line infections.

WHERE ARE THE BEST SOURCES OF INFORMATION?

- 10 Key Characteristics of Good Nutritional Care Toolkit: tinyurl.com/npsa-nutrition
- Nutrition Action Plan: tinyurl.com/DH-nutrition
- British Association for Parenteral and Enteral Nutrition: www.bapen.org.uk
- Malnutrition Universal Screening Tool: www.bapen.org.uk/musttoolkit.html
- The Productive Series Meals module: tinyurl.com/productive-modules-meals
- Royal College of Nursing Nutrition Now website: tinyurl.com/rcn-nutrition

Impact of the initiative

The multidisciplinary approach enables early recognition of problems and fewer complications, and ensures patients receive optimal nutrition through the safest and most appropriate route. Patients receive expert care and feel more supported at home, so they can be discharged earlier.

The expert ward round takes over nutritional care of patients requiring TPN, regardless of specialty, and the nutritional team responds to referrals within 24 hours of admission, providing an expert assessment of nutritional needs. The team provides training on wards for NG tube insertion so staff feel more supported and more capable.

CASE STUDY 3: NUTRITION IN COMMUNITY HOSPITALS

NHS County Durham and Darlington developed a programme using standardised food fortification so that supplements became a last resort. Staff were also trained in how to fortify foods and use MUST, which is used on admission. The trust worked with Age Concern (now part of Age UK) to collect patient experiences of hospital food and used these to redesign food provision. Staff worked with food suppliers and contractors to ensure menus met patient tastes; installation of freezers, microwaves, toasters and fridges means staff can now provide hot meals at any time and mealtimes have been protected. Patients needing extra nourishment are identified and supported, while paying more attention to mealtimes and food intake means they are more likely to be well nourished generally.

Staff used patient experiences as a driver to make the changes and still collect them to monitor the situation. Since a new menu was introduced, based on patient feedback, no negative comments have been received. Staff have a clear role at mealtimes, have developed a closer relationship with the dietitian and are able to confidently interact with family members who may be concerned about patients' food intake.

The initiative has reduced costs in several ways: food waste has been reduced through more appropriate menus that patients enjoy and by enabling a 24 hour turnaround on food orders, rather than 2-3 weeks – this means orders can be reduced when wards are not full. Substituting supplements with food fortification is up to 89% cheaper.

CASE STUDY 4: WATER WORKS

Hereford Hospitals Trust introduced an early warning tool that measures patients' urine output every hour, and redesigned the

fluid balance chart so fluid intake and output could be calculated every 12 hours instead of every 24. Fluid balance is also reviewed in those moved from wards to the intensive treatment unit to see if poorly managed fluid balance contributed to their deterioration.

Staff developed a "forget me not" form to record hourly visits to patients in side rooms, which are undertaken to check they have all they need, including visits to the toilet and drinks within reach. Adopting an "all hands on deck" approach to mealtimes means staff and volunteers are available to help patients eat, while better hydration awareness has been encouraged by using red lidded jugs to identify patients who need help drinking.

Impact of the initiative

Better documentation and screening of patients at risk of dehydration means it can be prevented or addressed through earlier intervention, while staff awareness of the importance of eating and drinking has increased. Patients receive more support at mealtimes; the forget me not forms have reduced patient isolation and reassure patients that they have not been forgotten.

Staff have a better understanding of their responsibilities with regard to nutrition and hydration, as well as clear processes and documentation. They now feel empowered to challenge others who may be interrupting protected mealtimes, while clear guidelines mean that junior staff can immediately step up care for high risk patients without waiting for authorisation.

The standard operating plan at mealtimes has saved 7.5 hours per month per ward, and while it is difficult to show in cost terms how the work has reduced the severity of dehydration, there are potential savings in reduced length of stay and need for critical care stays. Return on investment calculations on the core work show that every £1 spent has generated £15.74 in benefits annually. ●

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