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Conference on 'Malnutrition matters'

Symposium 9: Competent to care Are all doctors competent in nutrition?

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> Optimising nutrition is known to improve outcome in a variety of specialities from elderly care to orthopaedics. The National Institute for Health and Clinical Excellence guidelines of 2006 have provided standards to positively influence the profile of nutrition within the National Health Service. However, what role do doctors have in this process? Clearly, not all doctors are competent in nutrition. In a recent US survey only 14% of resident physicians reported feeling adequately trained to provide nutrition counselling. A lack of knowledge has also been demonstrated by general practitioners (GP). The Intercollegiate Group on Nutrition is working to improve nutritional knowledge in British medical graduates. In addition, nutritional care is now a core competency assessed in the UK Foundation Programme curriculum, which can only be a positive step. The assessment process may even influence some of the supervising consultants. What about those doctors currently practising in the UK? Recently, a questionnaire study was undertaken to look at healthcare professionals' knowledge of the benefits and risks of percutaneous endoscopic gastrostomy (PEG) feeding. Important gaps in knowledge were found that were positively correlated with whether respondents had received relevant education. Referral for a PEG was considered to be appropriate for patients with advanced dementia by 31% of the GP compared with 10% of the consultants. Only 4% of these GP had received any training in this ethically-sensitive area at a time when they may be asked to countersign consent forms for patients who lack competence. So, what is the way forward? Positive steps are being taken in the undergraduate curriculum and Foundation Programme. Perhaps it is the responsibility of those doctors with the skills and opportunities to promote good nutritional knowledge in those doctors already practising in the UK.

> > **Nutrition: Knowledge: Training: Curricula**

It is now well recognised that providing good nutrition will improve patient outcome, whether providing advice about hyperlipidaemia to a well-nourished patient or identifying and treating malnourished patients admitted with a fractured neck of femur. Although sometimes seen as a subspecialty of gastroenterology, clinical nutrition should be seen as a cornerstone of good medical care. Improving diet and nutrition also represent key public health targets and patients often turn to their doctors for advice. Are doctors sufficiently competent in nutrition to provide the appropriate clinical care and advice their patients need and are they being trained appropriately?

It has been recognised that many doctors do not feel adequately trained. In 2003 the Council of Europe recognised that insufficient education in relation to nutrition is a barrier to proper nutritional care and stated a need for increased nutritional knowledge⁽¹⁾.

What is known about doctors' competence?

In the UK nutrition knowledge may be improving but there is clearly a long way to go. In the late 1990s doctors' knowledge on nutrition was found to be worse than that of

Abbreviation: PEG, percutaneous endoscopic gastrostomy.

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medical students and on a level with that of nurses, scoring an average of seven of a possible twenty on a multiplechoice paper covering aspects of nutritional assessment and requirements and enteral and parenteral nutrition⁽²⁾.

On the specific area of knowledge of the indications for and outcome of percutaneous endoscopic gastrostomy (PEG) feeding there does seem to have been some improvement. In 1998 it was reported that 34% of hospital consultants in South Wales considered that patients with dementia rejecting food should be referred for PEG compared with 92% for patients with reversible neurological dysphagia or stroke and only 28% had attended a formal education programme on this area⁽³⁾. A recent study undertaken in the West Midlands has shown that only 10% of hospital consultants would consider referring a patient with advanced dementia for a PEG and a slightly higher percentage of them (38) had received teaching (S Thomas; unpublished results). The same West Midlands study has, however, revealed important gaps in the knowledge of junior doctors and medical students.

Outside the UK recent studies have investigated doctors' self-perceived nutritional proficiency. A survey conducted in 2002 shows that only 22% of family physicians in Washington State (USA) report adequate nutritional training⁽⁴⁾. More recently, a survey of a US cohort of internal medicine interns has shown that only 14% feel they have had adequate training to provide nutritional counselling, although 94% of them feel they should discuss nutrition with patients⁽⁵⁾.

Results from Europe appear somewhat better; 39% of Danish doctors report that their education in clinical nutrition has been insufficient⁽⁶⁾. This study also addressed what doctors perceive as barriers to providing adequate nutritional input. Although for 54% the most-commonlystated reason is lack of knowledge, of particular concern is the finding that 50% also report low interest. Similar results were found in a pan-Scandinavian study in which the majority of both doctors and nurses state lack of knowledge as the commonest cause for poor nutritional practice⁽⁷⁾.

Does better education correlate to better knowledge?

The pan-Scandinavian study has also investigated whether doctors' and nurses' self-reported education is correlated with nutritional knowledge by including a series of questions on the outcomes of optimising nutrition⁽⁷⁾. The study has revealed an association between better self-perceived education and higher levels of knowledge. The study in the West Midlands has also demonstrated that when respondents have attended nutritional teaching they are more likely to answer questions correctly (S Thomas, unpublished results). This finding supports the need for improved teaching on nutrition, but how can this improvement be best achieved and where should teaching be targeted?

There is clearly a need to concentrate efforts at medical school level, but since many doctors have clearly slipped through the net at university level and since knowledge is not static, postgraduate education must also be targeted. In the light of the recent Mental Capacity Act 2005⁽⁸⁾, which requires two senior doctors to countersign a consent form

for a PEG insertion for an adult who lacks capacity, it is vital that both doctors are up to date with the evidence and can advise the family and make appropriate decisions.

Is better knowledge associated with better practice?

Results from Scandinavia show that where doctors have better self-perceived nutritional knowledge there is also increased prevalence of nutrition screening and assessment of nutritional intake in patients, with Denmark scoring better than Sweden and Norway⁽⁹⁾. This finding reinforces the premise that not only is the doctors' knowledge improving, but also it should lead to better outcomes for their patients.

What are the potential barriers to improving teaching?

Potential barriers to improving teaching have been identified as⁽¹⁰⁾:

lack of knowledge in educators and lack of innovative teaching techniques;

time constraints; curricula are normally full and doctors are very busy;

access and ease of use of educational resources;

lack of nutrition champions;

credibility and recognition of nutrition as a key topic; costs for both university and postgraduate teaching.

What do doctors need to know?

So, what do doctors really need to know about nutrition to be good doctors? They clearly need to be able to provide good clinical care and advise their patients appropriately. The first step needs to be raising the profile of nutrition in education, so that doctors appreciate why good nutrition is so important. It is evident that there is insufficient time in medical schools' already busy curricula to prepare newlyqualified doctors for all eventualities and specialities. However, they must be prepared like pluripotential stem cells at an appropriate level for their postgraduate training.

The foundation training must be targeted by engaging with the programme directors to keep up the momentum and instil in the junior doctors that nutrition is key to good clinical care. It is then vital that the medical Royal Colleges appreciate that good nutritional care can be as key for a malnourished patient with a fractured neck of femur as it is for a patient with Crohn's disease and that doctors must be convinced to recognise the importance of nutrition.

Work is being done by the Intercollegiate Group on Nutrition, which involves interested clinicians from a range of specialties and has now started working with representatives from all the UK medical schools to support 'joined-up' nutrition education. They are working to lobby support from the General Medical Council (the regulator of the medical profession in the UK) and to optimise the profile of nutrition in the new version of Tomorrow's *Doctors* (last published in $2003^{(11)}$, a new version is due to

be published in 2009). Work is also underway to provide a toolkit to make it easier for undergraduate deans to try to enhance nutrition teaching without major input at a local level, including examples of methods of curricular delivery and assessment.

Work being done in the USA has shown that without major time or financial input, nutrition education can be comprehensively integrated into medical training⁽¹²⁾. Key principles include: (1) vertical integration across preclinical and clinical years and into postgraduate education; (2) the use of adult active teaching methods; (3) identification of nutrition mentors who act as role models and routinely practise and promote nutrition in patient care; (4) the need to demonstrate relevance of nutrition to the practice of medicine^(12,13).

What is being done to improve nutrition education in the UK?

It is a really positive step that the new Foundation Programme training curriculum has recently introduced nutrition care as one of the core competencies for Foundation trainees⁽¹⁴⁾. By F2 level doctors are expected to be able to take an adequate nutritional history, perform a basic nutrition screen, identify major nutritional abnormalities, prepare a nutrition care plan where appropriate, describe options for nutrition support and refer appropriately to a dietitian or nutrition team. It is to be hoped that as well as improving the nutritional knowledge of trainees, the assessment process may even positively influence the supervising consultants. The postgraduate surgical syllabus also includes details of what every surgeon⁽¹⁵⁾ and gastro-intestinal surgeon⁽¹⁶⁾ should know.

Work is being done nationally to provide a nutrition curriculum, but does it mirror what doctors and patients want to know? It is probable that most undergraduate curricula, appropriately, will concentrate on detection and management of malnourished and obese patients and methods of nutrition support. However, a survey of US family physicians reports that two of the top three topics patients ask their general practitioners about most frequently are the use of herbs, botanicals and complementary medicines and the use of vitamin and mineral supplements⁽¹⁷⁾. Is a similar finding to be expected in Europe and should patients be involved in curricula developments?

There are also some exciting new e-learning sites being developed. One recently developed by BAPEN covers some of the core competency issues of malnutrition and nutrition support including ethical and legal issues⁽¹⁸⁾, where doctors can complete modules that can be added to their portfolios to demonstrate competency. Another site has also been developed by National Health Service Education Scotland⁽¹⁹⁾.

What needs to be done now?

It is vital that those doctors who are in a position to do so should promote the profile of nutrition locally and nationally. Organisations such as the medical Royal Colleges, and BAPEN, should be working to provide appropriate resources that are easy to use and accessible. These resources should be widely publicised and preferably web based. Some attention should be given to linking the curriculum to what patients and doctors need to know. Nutrition can be an exciting and rewarding area and there is a need to engage students and doctors to recognise how vital good nutrition is for their patients and to create the nutrition champions of the future.

The members of nutrition support teams, or in the absence of such a team anyone interested, should be used. It has been shown that both doctors and nurses who have greater access to ward dietitians are better at identifying malnourished patients and understand the importance of good nutrition⁽²⁰⁾.

Since assessment appears to drive learning, it is also vital to continue to strive to include nutritional competencies in both undergraduate and postgraduate training, including providing questions for inclusion in exams and improving methods of clinical on-the-job assessment.

Doctors should recruit a key individual in their hospital or practice to target postgraduate education and use 'grand rounds' to involve trainees, consultants and possibly even local general practitioners, the latter two groups being the most difficult to target for education. In the authors' hospital the appropriateness of PEG referrals has been audited and the audit presented using illustrated cases of good and poor practice at the medical staff round. Feedback indicates that this approach has helped clinicians appreciate the relevance of good nutrition and, in addition, has improved the referral process.

Conclusions

There is clearly a long way to go before there can be confidence that all doctors are competent and this task is almost certainly an impossible one. However, some improvements have been made over the past 10 years, with work by many individuals and organisations. Work needs to be continued and should be targeted at both undergraduate and postgraduate level. Teaching needs to be vertically integrated and champions are needed to take on the challenges of improving nutritional knowledge and thus care for patients.

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