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## SPECIAL REPORT

# Practices in relation to nutritional care and support—report from the Council of Europe

ANNE MARIE BECK,\* ULLA NILSSON BALKNÄS,<sup>†</sup> MARIA ERMELINDA CAMILO,<sup>‡</sup> PETER FÜRST,<sup>§</sup> MARIA GABRIELLA GENTILE,<sup>||</sup> KAIJA HASUNEN,<sup>¶</sup> LIZ JONES,\*\* CORA JONKERS-SCHUIITEMA,<sup>††</sup> ULRICH KELLER,<sup>‡‡</sup> JEAN-CLAUDE MELCHIOR,<sup>§§</sup> BENT EGBERG MIKKELSEN,\* MARUSA PAVCIC,<sup>|||</sup> PETER SCHAUDER,<sup>¶¶</sup> LAURI SIVONEN,\*\*\* ORLA ZINCK,<sup>†††</sup> HENRIETTE ØIEN<sup>†††</sup>, LARS OVESEN\* (ad hoc group on Nutrition Programmes in Hospitals, Council of Europe)

\*Danish Veterinary and Food Administration, Soeborg, Denmark, <sup>†</sup>University of Göteborg, Göteborg, Sweden, <sup>‡</sup>Centre of Nutrition of the University of Lisbon, Lisboa, Portugal, <sup>§</sup>Institute of Nutrition Sciences, Bonn, Germany, <sup>||</sup>Niguarda Hospital, Milano, Italy, <sup>¶</sup>Ministry of Social Affairs and Health, FIN-00023 Government, Finland, \*\*NHS Estates, LS16AE, UK, <sup>††</sup>Academic Medical Centre, Amsterdam, Netherlands, <sup>‡‡</sup>University Hospital, Basel, Switzerland, <sup>§§</sup>University Hospital Raymond Poincaré, Garches, France, <sup>|||</sup>University Medical Centre Ljubljana, Ljubljana-Slovenia, <sup>¶¶</sup>Medizinische Universitätsklinik, Göttingen, Germany, \*\*\*Council of Europe, Strasbourg Cedex, France, <sup>†††</sup>Danish Catering Centre, WHO Collaborating Centre for nutrition in mass catering, Herlev, Denmark and <sup>†††</sup>Norwegian Agency for Health and Social Affairs, Oslo, Norway (Correspondence to: LO, Danish Veterinary and Food Administration, Moerkhoej Bygade 19, DK-2860 Soeborg, Denmark)

**Abstract**—Disease-related undernutrition is significant in European hospitals but is seldom treated. In 1999, the Council of Europe decided to collect information regarding *Nutrition programmes in hospitals* and for this purpose a network consisting of national experts from 12 of the Partial Agreement member states was established. The aim was to review the current practice in Europe regarding hospital food provision, to highlight deficiencies and to issue recommendations to improve the nutritional care and support of hospitalised patients. The data collection regarding the nutritional care providers and their practices of nutritional care and support showed that the use of nutritional risk screening and assessment, and of nutritional support and counselling was sparse and inconsistent, and that the responsibilities in these contexts were unclear. Besides, the educational level with regard to nutritional care and support was limited at all levels. All patients have the right to expect that their nutritional needs will be fulfilled during a hospitalisation. Optimal supply of food is a prerequisite for an optimal effect of the specific treatment offered to patients. Hence, the responsibilities of staff categories and the hospital management with respect to procuring nutritional care and support should be clearly assigned. Also, a general improvement in the educational level of all staff groups is needed. © 2002 Elsevier Science Ltd. All rights reserved.

**Key words:** nutritional support; hospital food; responsibilities; nutritional education

## Introduction

Although there is growing awareness that undernutrition, in association with disease, is a significant problem in affluent countries, with a considerable economic bearing, it is not widely recognised, acknowledged and accepted. Therefore, the Council of Europe (the Committee of Experts on Nutrition, Food Safety and Consumer Health of the Partial Agreement in the Social and Public Health Field) decided to collect information regarding *Nutrition programmes in hospitals* and a European network was established in 1999. This network consisted of national experts from the Partial Agreement member states and was chaired by Denmark.

The specific aims of the network were:

- To review the current practice in Europe regarding hospital food provision to patients prone to develop,

or suffering from, disease-related undernutrition and highlight deficiencies in the current food service systems.

- To issue recommendations, which ensure that assessment of nutritional status and requirements, hospital food, and nutritional support and monitoring are regarded as important and necessary components of patient care.
- To consider how national authorities, food service and health-care personnel and hospital managers, might work together to improve the nutritional care and support of hospitalised patients.

The current practice in Europe was reviewed on the basis of the answers to the 'Revised questionnaire for national contributions to the report on nutrition programmes in hospitals' (1) and the opinions from the delegates from, respectively, Denmark, Finland, France, Germany, Italy, Netherlands, Norway, Portugal, Slovenia, Sweden, Switzerland and United Kingdom, and extended by means of a search on the database MEDLINE.

Five common factors seem to be the major barriers for proper food service, and nutritional care and support in hospitals (1, 2):

1. Lack of clearly defined responsibilities in planning and managing nutritional care.
2. Lack of sufficient education about nutrition among all staff groups.
3. Lack of influence and knowledge of the patients.
4. Lack of co-operation between different staff groups.
5. Lack of involvement from the hospital management.

The problems identified with regard to undernutrition in hospitals, the role of the nutritional care providers, food service practices, and hospital food and health economics have been used to issue recommendations for how to improve the situation (1, 2).

The purpose of this paper is to present more detailed results from the answers to the '*Revised questionnaire for national contributions to the report on nutrition programmes in hospitals*' and the MEDLINE search, specifically in relation to items (1) and (2) regarding the nutritional care providers and their practices of nutritional care and support and educational level.

## Results

### *The practices of nutritional care and support*

#### *Hospital food*

In all the countries, the most commonly produced hospital menu is the 'general menu'. The recommendations regarding the protein content in this menu lie between 15 and 20E%. However, the general menu in Finland, France, Germany, Italy, Portugal, Slovenia, Sweden, and Switzerland is recommended to have a maximal energy content from fat of about 30E%, whereas the Danish, Dutch and Norwegian recommendations opt for an energy dense menu with a higher fat content of 35–40E%. Besides, the recipes developed in England to the National Health Service-menu have a high fat content. In most countries, a menu rich in energy and protein is available, but apparently the use of energy and protein-dense menus is not very widespread.

Despite a recommended meal pattern of six meals per day in some of the countries, it appears that European patients in general are served only three meals per day. Meal times are often inflexible or ill adapted to patients' habits. There can be long gaps between some meals, e.g. 12 h between evening meal and breakfast, and narrow gaps between others.

#### *Nutritional risk screening and assessment*

In practice, routine nutritional risk screening and assessment is generally not performed at admission or during hospitalisation. The most common reasons given are lack of time, instructions and knowledge. Less

frequent reasons are lack of interest (mainly from the physicians) and unimportance.

When nutritional risk screening and assessment are performed, body weight, recent weight loss and body mass index (BMI) are used most frequently as screening tools (as also officially recommended in Denmark, Finland, Norway and Sweden). Besides, some countries use laboratory tests.

#### *Nutritional support*

The use of nutritional support for undernourished patients and nutritionally at-risk patients is sparse, inconsistent and often performed only in special patients or patients who are severely undernourished.

Common barriers against nutritional support are lack of knowledge and guidelines, and the costs of sip feedings and artificial nutritional support. A few countries also mention the resistance from and inconvenience to the patients.

When nutritional support is initiated the majority of the countries use energy and protein dense menus, texture-modified menus and in-between meals as the first step of nutritional support. Next step is sip feedings followed by enteral and parenteral nutrition. Apparently, the last option is only initiated when there is a lack of gut function.

#### *Nutritional support teams and nutritional steering committees*

In the majority of the countries, Nutrition Steering Committees (NSCs) are lacking in most hospitals—except in the large hospitals. About half of the countries have no data regarding the prevalence of Nutritional Support Teams (NSTs) and Nutritional Support Units. In the rest, the Nutritional Support Units are apparently almost non-existing, while the prevalence of NSTs average between 10 and 50%.

#### *Nutritional counselling*

The prevalence of nutritional counselling varies. The barrier most commonly stated is lack of nutrition expertise, i.e. general and clinical dieticians. When nutritional counselling is given, the methods used are both verbal and written dietary advice and mainly performed by dieticians, nurses and sometimes physicians.

#### *Responsibilities*

Denmark, Finland, Norway, Sweden and United Kingdom have official recommendations regarding the responsibilities, duties and tasks of different ward and food service staffs with respect to nutritional care and support, and food service. Besides, Finland, Norway and Sweden also place some responsibility at the political/management level. Still, responsibilities seem to be unclear in many wards (3).

### Nutritional education at all levels

In the majority of the countries, the physicians' pre- and postgraduate education only contains few lessons addressing nutrition-related topics. This is also the case in the education of nurses, and generally the nurses find it difficult to identify risk patients, to set-up nutrition plans and monitor the effect of the nutritional support.

With regard to food service staff, nutrition is not taught on all courses and what is taught may be insufficient. Also, the management lacks nutrition education. Very few countries have an education of the administrative dietician, which is targeted at hospital food service management. Often cooks are in charge of the production with an educational background emphasised on menus for healthy people, which is usually not appropriate for undernourished or at-risk patients with poor appetites who require energy and protein-dense food.

Changes in modern health care have introduced new grades of staff in the wards, e.g. part-time care assistants employed by the hour or ward housekeepers usually of domestic orderly grade. Common to these staff members is their lack of nutritional knowledge. In practice, this means that the staff members who have the closest contact with the patient in relation to food are the ones who know least of all about nutrition.

Clinical and general dietitians seem to receive the most up-to-date training. However, their educational level and responsibility are in practice very varied. In some countries, the clinical dietitians obtain a master degree, and work with specialised care, while in others the general dietitians only have limited access to patient data, and are mainly occupied in the kitchens producing medically indicated diets.

### Discussion

The costs of identifying nutritionally at-risk patients are low. So is the use of energy and protein-dense menus for nutritional support. Finally, early and adequate nutritional support is associated with cost-benefit (26). Still, the practice of nutritional care and support is limited in the European countries. There are many explanations as to why nutrition-related practices are not done; lack of time, staff, knowledge, guidelines, defined responsibilities and interest. *None* of the European countries put the blame solely on the quality of the food.

The general hospital menu in the majority of the European hospitals has a low nutrient density. However, if a menu is energy dense over-consumption is more likely to occur (4). This could be useful among patients with low appetite. Hence, studies among patients have shown that eating an energy-dense menu increases the energy intake and the protein intake—and reduces the wastage of food (5–11). Besides, availability of in-between meals also seems to increase total food

consumption. In one study, it was found that offering patients a choice of cake or one-quarter cheese sandwich at mid-afternoon and bedtime increased total energy intake (5). In another study, the anthropometrical parameters were stabilised in anorectic cancer patients given small volume, energy and protein-dense foods during a 2-year period (12).

Food intake is infrequently recorded in the European hospitals. As an author comments: *'Patients are asked about their bowel habits almost every day and this is diligently recorded. Why not their food intake?'* (13). However, it is important to assess the food intake of the patients as part of the nutritional risk screening and monitoring of nutritional status. It is also important to learn, by studies, which types of food different patient categories can tolerate in order to determine appropriate, target group-specific menus (14). Finally, training in how to monitor food intake seems to be a key element in improving dietary intake (7, 14, 15).

No countries take the severity of the disease into consideration when assessing the patients' nutritional risk/status. This is in spite of the recognition that it is the combination of undernutrition and severity of disease that leads to the indication for nutritional support, and that severe undernutrition or severe stress metabolism by their own are indications for nutritional support (14). Still, the majority use laboratory tests such as s-albumin, which could be considered as an indirect measurement of severity of illness (16).

What seems to be important is that hospitals have a clearly formulated description of responsibilities and tasks of each personnel group involved in the nutritional care and support of the patient and the food service. NSTs and NSC could be an aid in this context. However, even though studies from United Kingdom and Switzerland indicate that the setting up of NSTs has increased somewhat (17, 18), the rare occurrence stands in contrast to the number of studies, which have documented their benefits with regard to securing the nutrient requirements of the patients and saving money (7, 19–23).

With regard to the education, teaching has lagged behind nutritional research, which has forged ahead, increasing the gap between knowledge and practice. This means that it might be difficult for individual physicians and nurses, who use nutritional support techniques only occasionally (see e.g. (17)), to provide optimal nutritional support according to the principles of best-documented practice (24, 25).

Food service staff may not be aware of the importance of providing highly nutritious food to ill patients. One result of this is the lack of a powerful voice for food service systems, unlike clinical services, when it comes to financial control and the allocation of budgets.

Finally, the role played by the clinical and general dietitians in hospital nutrition management varies widely throughout Europe, probably caused by several factors, including education, clinical awareness of the

benefits of nutritional support and access to adequate financial resources. Besides, there is insufficient availability of general and clinical dieticians in many hospitals.

## Conclusion

In European hospitals it is common that patients go without food for several days. It has been amply demonstrated that this starvation has human, functional, clinical and financial implications. The money spent treating nutrition-related complications is enormous as is the monetary value of hospital food wasted (26).

A major cause of the failure in nutritional care of hospitalised patients can be linked to lack of appropriate education and training. Also, different health-care professionals disagree about who should be responsible for the nutritional care and support of the patients. Finally, the composition and frequency of hospital food served is inappropriate for the majority of patients with reduced appetite.

Hence, the responsibilities of staff categories and the hospital management with respect to procuring nutritional care and support should be clearly assigned. This means that standards of practice for assessing and monitoring nutritional risk/status of the patient should be developed at a national level, and the responsibility of each task clearly assigned. The responsibility of the hospital with regard to the nutritional care and support of the patient should *not* be limited to the hospital stay (1, 2).

Also, a general improvement in the educational level of all staff groups is needed. Specifically, a continuing education programme on general nutrition and techniques of nutritional support for all staff involved in the nutritional care of patients should be available with focus on the nutritional training of the non-clinical staff members, and the definitions of their area of responsibility (1, 2).

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