EHMA
European Health Management Association

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European Hospital and Healthcare Federation

UNDER-NUTRITION:

Removing barriers to efficient patient nutrition within both the hospital and home-care setting

Managerial and financial incentives and strategies to ensure good nutritional care

INTRODUCTION

"THE MESSAGE COULD NOT BE CLEARER: MALNUTRITION IS HIGHLY PREVALENT AND LEADS TO POOR CLINICAL OUTCOMES. SOLUTIONS ARE AVAILABLE AND EFFECTIVE NUTRITIONAL SUPPORT IMPROVES CLINICAL OUTCOMES AND IS COST-EFFECTIVE. THE TIME TO ACT IS NOW."

PROFESSOR CLAUDE PICHARD

Under-nutrition is the forgotten facet of poor nutrition. Across Europe, policy makers strive to address growing levels of obesity while health promotion campaigns focus on reducing calorific intake and improving nutritional habits. But the high cost of malnutrition to society and to individual lives often goes unrecognised.

The prevalence of under-nutrition is high. Estimates vary, as methods of detection are not standardized, but up to 40% of patients of all ages are undernourished upon admission to hospital. For surgery patients, complication rates in those who are malnourished are 2 - 3 times higher than in patients who are well-nourished. Under-nutrition can delay recovery, impair wound healing and leave the patient more vulnerable to pneumonia and hospital borne infections.

People suffering from under-nutrition are more likely to visit their GP; they are more vulnerable to infection and may face a range of associated health problems from deterioration of musculature and bone density to impaired organ function and dental problems.

All this translates into huge costs for the healthcare system. A recent UK Study estimated that disease-related malnutrition cost the UK up to £7.4 billion, 50% of which was spent in community settings. (Jones et al, 2005; Elia et al, 2005).

In November 2012, EHMA and the European Hospital and Healthcare Federation (HOPE) brought together leading European nutrition experts to identify some of the key barriers to good patient nutrition and to look at potential strategies to ensure good nutrition. The workshop laid out the challenge to healthcare providers across Europe and gave insights into how nutrition might be managed more effectively. While the workshop identified clinical practice as a vital element in the prevention of undernutrition it also highlighted the need for effective management and financial systems to ensure positive health outcomes.

THE WORKSHOP

Attendees were invited from across Europe and included clinicians, managers and nutrition experts. The format of the day included two key note speakers and then round-table discussion. The workshop particularly focused on the importance of ensuring good nutrition for patients receiving clinical care, whether in hospital or home care settings. It was also recognized that our ageing populations have a particular impact on healthcare and that older people were particularly vulnerable to under-nutrition.

The workshop began with two presentations. Frank de Man, Director of the European Nutrition for Health Alliance (ENHA), focused on ENHA's work on improving nutritional care across Europe. He described the importance of actively promoting the implementation of nutrition risk screening across Europe; the need for appropriate reimbursement policies; the challenge of raising public awareness of the dangers of malnutrition and the need to integrate nutrition in medical education curriculums. The second presentation by Dr. Gabriele Luft, Nutritionist and Senior Manager Medical Affairs at Baxter Munich, gave an overview of clinical nutrition with definitions of oral, enteral and parenteral nutrition as well as reimbursement aspects of parenteral nutrition.

The group then moved into round table discussions. First, they identified the barriers to under-nutrition prevention and treatment at the clinical, managerial and financial level. During the second part of the workshop, the group of experts determined priority areas for action, focusing on finance, policy, management and clinical and home settings.

UNDERNUTRITION: WHY IT MATTERS

The definition of malnutrition accepted by the European Society for Clinical Nutrition and Metabolism (ESPEN) is "A state of nutrition in which a deficiency, excess (or imbalance) of energy, protein, and other nutrients causes measurable adverse effects on tissue/ body form (body shape, size and composition) and function, and clinical outcome" (Elia, 2000). The term malnutrition includes both overnutrition (overweight and obesity), under-nutrition (underweight) and specific nutrients' imbalance. The definition of under-nutrition pragmatically includes at least one of the following measures: the body mass index (BMI), recent weight loss or serum albumin (Margetts and al., 2003).

Obesity has become a major health issue in European societies and obesity prevention messages are heavily reported in the media. However, at the other end of the spectrum, under-nutrition constitutes a major public health concern. This is particularly true in hospitals, nursing homes and care homes, among minorities and the elderly (Ljungqvist et al., 2010).

According to Ljungqvist and de Man (2009) 33 million people are at risk of under-nutrition in Europe.

Furthermore, a quarter of patients in hospitals are at risk of under-nutrition or already malnourished. The figure worsens in long-term care where an estimated 90% of residents are at risk of under-nutrition as well as 13-30% of people living at home (Elias and Russell, 2009).

Under-nutrition has negative effects on treatment outcomes by increasing morbidity and mortality. In a study from Sorensen et al. (2008) on the implementation of nutritional risk screening and clinical outcome evaluation, "at-risk" patients compared to "not at-risk" patients had significantly higher rates of morbidity and complication (12% vs 1%, 30.6% vs 11.3% respectively).

Under-nutrition is estimated to cost 170 billion euro each year in Europe. In times of economic crisis and budget constraints, implementing cost-effective nutritional interventions is key. Indeed, appropriate nutritional interventions in hospitals, the community and in care homes are both a life-saving and a cost saving tool (Ljungqvist and de Man, 2009; EHNA, 2010; MNI, 2012).

BARRIERS TO EFFECTIVE NUTRITION MANAGEMENT

Barriers to the prevention of under-nutrition and its treatment are numerous. These include deficient clinical support, poor management and a lack of financial systems and mechanisms to manage the cost of providing adequate nutrition and re-feeding.

Contributors to the workshop discussion pointed out that there was clear research evidence that showed to cost of under-nourishment to both the patient and the healthcare system. But the lack of training in nutrition and health promotion for physicians, nurses and care givers was identified as one of the main barriers to good nutrition management and support. There were also a range of factors that contributed to poor nutrition management in hospital settings. These included:

- Lack of time, staff shortage and poor cross-disciplinary collaboration, leading to poor malnutrition detection and follow-up (Glanz, 1997; Crogan et al., 2001).
- Low food quality, inappropriate meal time structure (no snacks between meals) coupled with un-necessarily restrictive diets.
- Lack of knowledge about the patient - their likes and dislikes or individual needs and a lack of opportunity for patients to influence and be a part of their own nutrition management.
- Lack of dietary advice or counselling to patients to help them understand their nutritional need
- Lack of clear management systems and office support to define responsibility for nutrition management and planning and poor provision of Nutritional Support Teams.

It was also recognized that the needs of patients being cared for at home were also under-recognised. There needed to be clearer protocols for managing nutrition at home, access to advice and support and the financial systems in place to fund the provision of nutrition for patients living at home.

A major concern, backed up by research, was the limited involvement and interest of hospital managers and policy makers in nutrition (Glanz, 1997; Crogan et al., 2001; Kondrup, 2009). It was also noted that adequate managing of nutritional support depends on the structure of health care financing. Both the financial resources and the reimbursement systems of enteral and parenteral nutrition were noted to be particularly problematic. There is also a lack of systematic reimbursement for both enteral and parenteral home nutritional support, which coupled with lack of dietetic and nursing counselling decreases patients' compliance to their treatment. The consequence is an increased rate of health complications and hospital readmissions which increase healthcare costs (Council of Europe, 2008).

VISION: REDUCING COSTS, IMPROVING LIVES

Through preventive medicine, social justice and fair equity-efficiency trade-off, under-nutrition related cost can be reduced.

Establishing a clear nutrition pathway

Nutritional interventions should encompass a broad range of actions.

- Effective Screening: nutritional care starts with systematic screening to identify at-risk patients and nutritional intervention planning to ensure that adequate nutrition support is provided at the right time.
- Providing appetizing and nutritious food as well as oral nutritional supplements (ONS) to help people eat and drink, when oral nutrition is possible, is essential.
- All Patients should have access to both enteral and parenteral nutrition as needed
- For Patients identified as needing nutritional support, care plans should be put in place to ensure that nutritional treatment continues after hospital discharge.
- A clear reimbursement framework is needed that enables collaboration and coordination of nutritional care support between hospitals, home care and nursing homes.
- Reimbursement of nutritional treatments and dietary counselling should be guaranteed throughout the treatment period. Furthermore, allocation of integrative financing process with diagnosis related group (DRG) would enable better cost-management (Council of Europe, 2008; Elia, 2000; EHNA, 2010; MNI, 2012).

A multi-disciplinary approach

To tackle under-nutrition, a multidisciplinary approach involving kitchen staff, care givers, health managers, patients, families and policy makers is important.

- Awareness of under-nutrition issues needs to be raised among all stakeholders. Furthermore, nutritional education should be part of the curriculum not only of dieticians but also physicians, nurses and care givers (Council of Europe, 2008; Elia, 2000).
- The implementation of nutritional support teams (NSTs) at hospitals, home care and nursing home with clear and harmonized quality standards and evidence-based nutritional care practices should be systematic. Dieticians should be given a central role in the prevention and treatment of malnutrition and a leading role with NSTs. Indeed, a clear definition of responsibilities within NSTs as well as at the managerial and policy level is indispensable to prevent and treat malnutrition (Council of Europe, 2008).

POLICY IMPLICATIONS

High level political support is needed to tackle under-nutrition in the EU. It is a significant problem across all EU countries in vulnerable groups. This requires policy action from the national to the organizational level.

- A policy framework should be put in place to tackle patient nutrition, nationally to organisationally.
- Careful attention needs to be given to ensuring that nutritional support is supported by appropriate financial frameworks in the hospital setting.
- Urgent attention needs to be given to the reimbursement of community based nutritional support in many countries.
- Policy makers might consider requiring all healthcare settings to develop nutrition care plans for vulnerable patients with appropriate regulatory monitoring in place to support delivery of care as well as care plan.
- Under-nutrition needs to be recognized as a distinct pathology and nutritional support as an integral part of every care pathway.
- Nutritional screening should be offered to all older and vulnerable patients both in hospital and in care homes.
- Robust systems for the follow up of nutritional screening need to be put in place to ensure that patients identified with malnutrition receive the appropriate treatment care and support for adequate nutrition.
- For older persons living independently who may be at similar risk, stimulate research and pilot projects in the EU to study the potential benefits of screening and follow-up in the community.

CONCLUSION

Under-nutrition: Removing barriers to efficient patient nutrition within both the hospital and home-care setting highlights the priorities that health providers across Europe should share to overcome the barriers and deliver on the vision for effective nutrition management and improving healthcare outcomes.

These priorities are clear.

- Greater awareness of under-nourishment and its adverse affects on wellbeing and patient health
- Quality standards for nutrition and patient care that can be shared across disciplines and a new curriculum for professional training
- Systematic screening for and treatment of under-nutrition
- Introduction of Nutritional Support Teams with a clear definition of responsibilities.
- Introduction of nutrition to every health-related profession's curriculum
- Creation of integrative financing process with diagnosis related group (DRG)
- Reimbursement of nutrition treatments in both hospital and home care settings.

Our population is aging. As we grow older and live longer, more of us will need access to healthcare services. Increasingly as more services are delivered at home and in the community it is imperative that our financial and policy frameworks adapt to support new models of care. Over-coming under-nutrition is key to saving cost and improving patients' lives.

APPENDICES

Best Practice in Nutrition Management: 3 Case Studies

1. Dutch multidisciplinary nutrition plan and screening

Key to the success of the Dutch approach to managing under-nutrition are the following steps:

- The foundation in 2005 of a multi-disciplinary Steering Group, led by key stakeholders and partners including the Ministry of Health
- Annual recording of care incidents and problems by Maastricht University provides up-to-date prevalence data raising awareness of problems resulting from under-nutrition.
- Screening and treatment of undernourishment has become part of the mandatory quality indicators of the health care inspectorate ;
- The creation of a toolkit for hospitals, nursing homes and homecare with validated quick and easy screening tools and a treatment plan (this is available on the website with free downloadable examples of best practice).
- Multidisciplinary teams across health and social care settings are developing projects to tackle malnourishment. These include many different training programmes and workshops for staff.
- A part-time team with professional coordinator (lobby and communication) and two main project leaders (knowledge of malnutrition and implementation).

The results of the performance indicator on malnutrition screening in hospitals from 2007-2010 give an overview of factors positively associated with the screening results. The data are among the first ones on systematic screening of malnutrition. Although many countries are working on implementation programs, nationwide mandatory screening is still rare. The Dutch data therefore present unique information. Data is also available on community-dwelling older individuals.

Information: *www.fightmalnutrition.eu and info@fightmalnutrition.eu*

2. Belgium homecare funding model covering both product and services

Countries like Belgium have developed the National Food and Health Plan. This plan outlines the need for an efficient transfer of information between hospital and homecare organisations and involved the general practitioner and nutritional specialist, after having detected the persons at risk or already undernourished. A coordinated approach like this is required to secure the continuation of nutritional care as well as the funding of related products and services in the home care setting.

To have good results, problems must be tackled in all settings.

APPENDICES

There was a marked improvement in patient health, including the consideration of parenteral feeding.

This experiment will now be completed with the introduction of the NUBEL tool. This can be linked to a patient management tool and screens for possible under-nutrition. As a result of this experiment, this approach will be cascaded to all the 102 general hospitals in Belgium.

In nursing homes in Flanders there will be mandatory recording of 15 quantitative indicators of best practice, including the ongoing monitoring of the weight of the residents.

White Yellow Cross, the largest providers of home care in Belgium will be shortly launching an experiment in West Flanders aimed at detecting under-nutrition as early as possible in close collaboration with local GP's .

All these steps are closely monitored and the results will help other EU Countries to implement this systematic screening for under-nutrition in older people (+75).

3. French DRG system with financial incentive to capture under-nutrition by using severity

The initial idea of a French patient classification system dates back to the early 1980s, when the Government decided to introduce global budgets at the hospital level to replace the previously existing poorly regulated per diem system. It was planned to adjust the budgets allocated to hospitals by measuring their clinical activity through the GHMs (Groupes Homogènes de Malades, i.e. the French Diagnoses Related Groups). The initial French GHM classification (tested between 1986 and 1990) was inspired directly from the third DRG version of the United States Health Care Financing Administration (HCFA-DRG) but the GHM system was later modified to include parts of the All-Patient DRG system. The first GHM version was introduced in public hospitals between 1990 and 1993.

Classification of patients into GHMs is based on administrative and clinical information, both of which are available from the standard patient discharge summary (RSS). Clinical data are reported by physicians and are transmitted to the medical information units (DIMs) of hospitals, where data are processed and checked before a specialized software programme uses the information to select the appropriate GHM.

Eleven versions have been implemented since then. The current version (11) has seen a major change: the number of GHMs increased almost threefold through the introduction of four levels of case severity applied to most base-GHMs. Information on length of stay, secondary diagnoses and old age is now used in a more systematic way in order to improve cost homogeneity of GHMs, especially of medical GHMs. It is then easier to capture under-nutrition by using severity.

APPENDICES

HOPE-EHMA WORKSHOP 14 NOVEMBER 2012 IMPROVING PATIENT NUTRITION - EFFECTIVE MANAGEMENT AND FINANCING STRATEGIES			
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