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A look at the need for malnutrition management in an institutional care setting

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Погляд на необхідність боротьби з недоїданням в установах інституційного догляду
Вища школа охорони здоров'я та соціальної роботи Св. Алжбети, м. Братислава, Словаччина

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Взгляд на необходимость борьбы с недоеданием в учреждениях институционального ухода
Высшая школа здравоохранения и социальной работы Св. Елизаветы, г. Братислава, Словакия

Introduction

Malnutrition is a serious global health problem, far from being related only to developing countries. In developed European countries, up to a third of all patients suffers from various forms of malnutrition [1]. In total, over 30 million people are malnourished in Europe. The Council of Europe emphasizes the malnutrition in the elderly.

Although the age over 70 itself is a risk factor for malnutrition development, the old-age changes do not directly cause it. However, they contribute to its development, especially when they cumulate with other unfavourable factors. A combination of malnutrition and increasing age increases mortality [2].

In relation to nutritional disorders and mortality risk, BMI (body mass index) values are assessed differently in the elderly and in younger adults. Satisfying BMI, which reflects a good nutritional status of an elderly over 70 years and is associated with a lower mortality rate, ranges from 24 to 29 kg/m^2, BMI less than 22 kg/m^2 in women and less than 23.5 kg/m^2 in men is associated with higher mortality [3]. Thereby, in the elderly, overweight is not strictly considered an adverse factor; in case of a disease with increased metabolic demands, weight loss and inadequate dietary intake, its presence may rather be seen as an advantage [4].

Social and psychological causes such as loneliness, lack of financial resources, anxiety, depression and dementia are also important factors in the development of malnutrition. Other causes are impairments of vision, gait, mobility of the upper limbs and of swallowing [5].

Malnutrition in domiciliary and nursing facilities has been recognized as a situation caused by various factors and serious consequences at both, individual and social levels. The deteriorating nutritional status of an elderly in an institutional care setting has a very negative effect on the quality of their life. On the other hand, the prevention of malnutrition can have a very positive effect on the health and well-being of older people.

Malnutrition can be defined as a deteriorating state of nutrition that is caused by insufficient intake of energy and nutrients necessary for the proper functioning of the body. In the elderly, it is a phenomenon accompanying most health problems and it is being overlooked at the expense of the treatment of the main disease [1].

Risk groups for the development of malnutrition include in particular: patients with oncological, inflammatory, chronic respiratory diseases, critically ill patients and geriatric patients, as well as long-term hospitalized patients [6]. Proper nutrition improves the tolerability of treatment and leads to faster recovery of the patient after overcoming of the disease. Patients' insufficient nutrition leads to a greater number of complications during the treatment of their diseases, loss of muscle mass, which prevents their effective rehabilitation, impairs physical fitness and their quality of life. For all that, the effectiveness of often a costly treatment is devalued, which is closely related to the extension of hospitalization and increased demands on hospital as well as on outpatient health care [5].

Core

In addition to SGA (Subjective Global Assessment), the most widely used questionnaires for assessing nutrition in the elderly include: NRS2002 (Nutritional Risk Screening), MUST (Malnutrition Universal Screening Tool), SNA (Simplified Nutritional Assessment Questionnaire), MNA (Mini Nutritional Assessment) and MNA-SF (MNA-Short Form – Short form of questionnaire focused on quality of life). BMI is part of the NRS2002, MUST, MNA, MNA-SF questionnaires [7,8].

While in Slovakia a nutritional state assessment of a patient is not part of their health evaluation upon admission to a medical facility, in the United Kingdom, USA, the Netherlands and Denmark, nutritional screening is a mandatory part of every patient's initial examination and it is a requirement for accreditation issuing. Due to its application in the screening and malnutrition risk evaluation, the Mini Nutritional Assessment (MNA) should be integrated into a comprehensive geriatric assessment. In a cohort of more than 10,000 individuals, the prevalence of malnutrition (assessed by

MNA) was found in 1% to 5% of the elderly and outpatients living in the community, in 20% of hospitalized elderly patients, and in 37% of institutionalized elderly patients [9].

Nursing management is the process of managing the provision of nursing care by the method of the nursing process, which is managed by a nurse in an institutional or social facility. Self-management is the process of nursing management by a nurse who is a self-manager and maintains the nursing documentation [10].

Managerial functions in the field of malnutrition are used by a nurse in assessing deficits in patients´ needs. In the first phase, through an interview with the patient/client, the nurse obtains relevant information, using all forms and methods of quality assessment of the health status of the elderly, so as to define current and potential nursing diagnoses. The second phase deals with nursing diagnoses, the list of which is governed by the Decree of the Ministry of Health of the Slovak Republic no. 306/2005 Coll., effective from 15 July 2005. The content of the decree defines the basic concepts and consistent terminology. In the third phase, the nurse plans a process of comprehensive and individualized nursing care while respecting the rights of the patient / client. In the plan itself, the nurse records nursing interventions that lead to complete elimination of the deficits in patient's needs. When planning and implementing nursing care, the nurse follows the Decree of the Ministry of Health of the Slovak Republic no. 528/2004 Coll. This decree determines the scope of nursing practice provided by the nurse independently and in cooperation with the doctor. It entered into force on 15 October 2004, as amended [10].

Most patients receive food according to standard diets of the diet system when admitted to an institutional care or social facility. In case of need for diet change, this can be done by doctor or eventually by the department head nurse.

In at-risk patients, a record of food intake and nutritional supplements should be recorded upon admission, a record of protein intake should not be missing. It is important to document these information, but above all to evaluate them and respond to them with appropriate measures. We must not forget about education, which can significantly affect the compliance. In patients suffering from eating disorders, it is necessary to determine the cause of this problem and react flexibly, e.g. by adjusting the diet, its consistency or by giving them a choice of diet.

Enteral nutrition is recommended by a gastroenterologist, internist or attending physician. The need to introduce a nasogastric (NGS) and nasoenteral tube is solved by the attending physician together with the head nurse in case of long-term insufficient oral intake [1]. Also the introduction of percutaneous endoscopic gastrostomy (PEG) is indicated for patients with dysphagia, with long-term introduction of NGS and with other disorders or mechanical obstacles. The procedure is planned and agreed upon in advance, it is performed in a specialized endoscopic workplace, where the patient / client is hospitalized for observation after the introduction of PEG. The provider of institutional and social care has the obligation to provide regular availability of nutrition appropriate for patient's age and health status.

The risks resulting from insufficient energy and nutritional intake are comparable to poorly provided medical treatment [11]. By modernizing the diet system, with searching for nutritionally problematic patients and finding a solution for them, it is possible to achieve the optimization of patients' nutrition. Subsequently, there will be a reduction in infectious complications, in patient mortality and in the number of rehospitalizations, and last but not least, a reduction in the financial costs for patient's treatment will be achieved [12].

The treatment of the elderly must be comprehensive and requires the cooperation of a doctor and nurse with the family, caregiver, social worker and other professionals according to the current health status of the elderly. The cooperation of a multidisciplinary team with the patient and their relatives is an integral part of the treatment process. It plays a huge role especially in times of illness such as in malnutrition. For most elderly, effective cooperation between health professionals, social workers, and family members can improve their health status or improve their quality of life [13]. It includes screening and active dispensary of geriatric patients with malnutrition, optimization of the geriatric hospital regime and coordination of community services. Long-term nutritional support, the use of physiotherapy, supportive aids and occupational therapy measures, a protection of dignity, applying individual measures according to the specific situation and problems of the elderly are all important [14].

A nurse is an important member of the team at all levels of the care for the elderly. They participate in the prevention, diagnosis and treatment of the elderly with malnutrition. The services are performed independently, based on doctor's indication and in cooperation with other team members: physiotherapist, nutrition assistant, nutritional therapist, occupational therapist, medical assistant, social worker, psychotherapist [15].

Nutritional support is considered to be a treatment with all the attributes of pharmacotherapy and the non-administration or incorrect administration of it is a non lege artis procedure [11]. It is an integral part of comprehensive preventive healthcare and nursing care.

The organization of medical nutrition is guided by the Bulletin of the Ministry of Health of the Slovak Republic from 2009 – Professional guideline of the Ministry of Health of the Slovak Republic, which amends and completes the professional guideline of the Ministry of Health of the Slovak Republic no. 13168/2006 OZS of the organization of clinical nutrition [16]. It emphasizes the importance of proper nutrition in the treatment of diseases and its impact on the effectiveness of the therapy and the prognosis. The bulletin also defines the forms of malnutrition treatment and sets out the criteria under which a patient is entitled to a nutritional care. According to the guidelines, enteral or parenteral nutrition is indicated in patients who cannot or must not be fed naturally. Sipping – the drinking of oral nutritional supplements is also a suitable way. It is indicated in patients in whom it is not possible to fully saturate the nutritional and energy requirements of the organism by normal oral food intake [6].

A multidisciplinary approach – between patients and healthcare professionals, the public, society and politics – is essential to successfully tackle malnutrition at several levels.

Awareness of patients and carers is important, it can be obtained through providing relevant information and appropriate training. Policy makers should create legal frameworks to confront malnutrition as a public health concern. Malnutrition in nursing homes is a serious problem and a successful solution lies in the multidisciplinary approach.

Conclusions

Early diagnosis of malnutrition is a prerequisite for determining the appropriate nutritional strategy for its handling [17]. Adequate nutritional status of the elderly plays an essential role in maintaining good health status and in promoting quality life. The elderly form a group of people whose nutritional status is often unsatisfactory. Obesity occurs in 50% of people aged 65-74 years and in 22% of people aged 75 and over. Malnutrition occurs in 15% of 65-74 year olds and in 45% of 75 year olds and over.

Especially in retirement homes, malnutrition is a specific problem, where up to 85% of the population is endangered by its occurrence [5]. The proportion of malnourished people among the elderly placed in residential facilities ranges between 15-60%, depending on the methods used and the characteristics of the monitored individuals. Malnutrition in the elderly living in institutional care for a long time ranges from 25 to 60%.

Despite the high incidence of malnutrition in the elderly, the recognition and subsequent monitoring of malnutrition is still insufficient. The role of a professional nurse is to identify and diagnose nursing problems and decide on the method of nursing interventions that lead to their solution. Also, health education can effectively improve patients' understanding of the disease and thus ensure that the patient plays a key role in improving his or her own therapy [18]. There is a limited number of professionals specifically focusing on nutrition in facilities providing social care.

An erudite nurse should be a person suitable as an assessor in the search for high-risk patients [19]. Regular assessment of the nutritional status of the elderly living in social care facilities should be a routine activity that will enable the identification of early signs of nutritional disorders and the implementation of preventive measures [20].

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Malnutrition is a serious global health problem, far from being related only to developing countries. Malnutrition can be defined as a deteriorating state of nutrition that is caused by insufficient intake of energy and nutrients necessary for the proper functioning of the body. In the elderly, it is a phenomenon accompanying most health problems and it is being overlooked at the expense of the treatment of the main disease. Risk groups for the development of malnutrition include in particular: patients with oncological, inflammatory, chronic respiratory diseases, critically ill patients and geriatric patients, as well as long-term hospitalized patients. The Mini Nutritional Assessment (MNA) should be integrated into a comprehensive geriatric assessment. A nurse is an important member of the team at all levels of the care for the elderly. They participate in the prevention, diagnosis and treatment of the elderly with malnutrition. Regular assessment of the nutritional status of the elderly living in social care facilities should be a routine activity that will enable the identification of early signs of nutritional disorders and the implementation of preventive measures.

Key words: malnutrition, mini nutritional assessment, risk groups, nurces.

Недоїдання – серйозна глобальна проблема охорони здоров'я, що стосується далеко не тільки країн, що розвиваються. Недоїдання можна визначити як погіршення стану харчування, викликане недостатнім споживанням енергії і поживних речовин, необхідних для правильного функціонування організму. У літніх людей це явище супроводжує більшість проблем зі здоров'ям, і йому не приділяють належної уваги на шкоду лікування основного захворювання. У групи ризику розвитку недостатності харчування входять, зокрема: пацієнти з онкологічними, запальними, хронічні респіраторні захворювання, тяжкохворі і геріатричних пацієнти, а також пацієнти, які перебувають в тривалій госпіталізації. Міні-оцінка харчування (MNA) повинна бути інтегрована в комплексну геріатричну оцінку. Медсестра – важливий член команди на всіх рівнях догляду за літніми людьми. Вони беруть участь в профілактиці, діагностиці та лікуванні людей похилого віку з недоїданням. Регулярна оцінка стану харчування літніх людей, які проживають в установах соціальної допомоги, повинна бути звичайною справою, що дозволяє виявити ранні ознаки порушень харчування і вжити профілактичних заходів.

Ключові слова: недоїдання, міні-оцінка харчування, групи ризику, медсестри.

Недоедание – серьезная глобальная проблема здравоохранения, касающаяся далеко не только развивающихся стран. Недоедание можно определить как ухудшение состояния питания, вызванное недостаточным потреблением энергии и питательных веществ, необходимых для правильного функционирования организма. У пожилых людей это явление сопровождает большинство проблем со здоровьем, и ему не уделяют должного внимания в ущерб лечению основного заболевания. В группы риска развития недостаточности питания входят, в частности: пациенты с онкологическими, воспалительными, хроническими респираторными заболеваниями, тяжелобольные и гериатрические пациенты, а также пациенты, находящиеся в длительной госпитализации. Мини-оценка питания (MNA) должна быть интегрирована в комплексную гериатрическую оценку. Медсестра – важный член команды на всех уровнях ухода за пожилыми людьми. Они участвуют в профилактике, диагностике и лечении пожилых людей с недоеданием. Регулярная оценка состояния питания пожилых людей, проживающих в учреждениях социальной помощи, должна быть обычным делом, позволяющим выявить ранние признаки нарушений питания и принять профилактические меры.

Ключевые слова: недоедание, мини-оценка питания, группы риска, медсестры.

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