

Comment

This edition of "Postępy Nauk Medycznych" ("Progress in Medicine") presents various issues which are primarily related to malnutrition. Patients staying in hospitals are one of the groups of people in Poland currently endangered by the occurrence of malnutrition. The problem of hospital malnutrition was presented in the introductory article to this issue, which was written by Professor M. Jarosz et al. Underweight was found in over 4% of patients admitted to hospitals, and more frequently, i.e. in more than half of them, a risk of vitamin malnutrition has been recorded. In addition malnutrition symptoms also tend to develop commonly or become intensified during a stay in hospital. The nutritional status has a significant effect on the efficacy of treatment, the occurrence of complications, the length of hospital stay and on costs of treatment. For this reason the evaluation of the nutritional status of persons being admitted to a hospital is of such importance, and so is the appropriate diet adopted on this basis.

The first original paper (written by K. Wolnicka, PhD, et al.) proved that dietary habits of underweight children are in many cases inappropriate. A considerable part of the children do not regularly have breakfast before leaving the house in the morning, or get a meal of proper nutritional value at school. Their diets are often characterised by a deficiency of energy, fat, as well as of some minerals (potassium, calcium) and vitamins (folate, vitamin D). The recorded irregularities could lead to underweight occurrence in this group.

Nutritional deficiencies have also been taken up in the two subsequent papers. The first one (written by Professor J. Charzewska et al.) outlines this problem in Warsaw youth. The deficiencies of some nutrients (calcium, vitamin D, potassium, magnesium and folate) may be found in diets of 74-98% of adolescents. In the past few years a disturbing increase trend was noted in the frequency of reported cases of deficiencies in energy, protein, carbohydrates, the majority of minerals and vitamins in the diets of teenagers. What is more, underweight is being recorded increasingly frequently among girls.

The authors of the second of the analysed papers (Z. Chojnowska, MSc., et al.) discuss nutritional insufficiencies in preschool children from all over Poland. The content of some minerals (potassium, calcium, iron) and vitamin D are deficient in the diets of over a half of children. It is particularly alarming that every fourth child seems to have underweight, which indicates chronic energy malnutrition.

The problem of inadequate nutrition is also taken up by the paper written by Professor W. Sekuła and M. Ołtarzewski, MSc. The authors present results of the household budget surveys referring to food consumption by the lowest income households. It turns out that diets of members of those households cover only 80% of the estimated energy requirement. This arises from consuming fewer food products than the average level for Poland, especially with respect to such products as beef, veal, the highest quality meat products, butter, confectionery and fruit. The low energy intake points to a great likelihood of malnutrition occurrence in this group.

The authors (Professor M. Jarosz et al.) of the last original paper once again take up the issue of hospital malnutrition, as they focus on its interrelations with the incidence of hospital-acquired pneumonia. The paper presents results of research which suggests that malnutrition occurs far more frequently in patients with hospital-acquired pneumonia, and consequently the period of their required hospitalisation is longer, and what is more, the percentage of deaths is higher as compared to patients in which this disease does not develop during their stay in hospital. The observed dependency between malnutrition and the occurrence of hospital-acquired pneumonia proves that malnutrition may be a crucial factor related to the risk of development of that disease. This indicates the need of introducing the evaluation of the nutritional status during admittance to hospital, which has also been mentioned in the introductory paper.

The first review paper, written by Professor M. Jarosz and E. Rychlik, PhD, present the current situation concerning the occurrence of malnutrition in Poland and in other countries. Underweight, which points to the risk of protein-energy malnutrition in Poland, occurs in ca. 1% of men, 3% of women and ca. 13% of children and youth. A factor of considerable importance is iron deficiency, especially among small children and pregnant women. The diet of the Poles poses a risk of possible deficiencies of other minerals (apart from iron, as well as calcium and iodine) and vitamins (vitamin D, folate, vitamin C), which has also been confirmed by results of original papers discussed before. A similar situation may be also found in other European countries. On the other hand, in most cases of malnutrition, both protein-energy type and the one connected with deficiencies of minerals and vitamins, occurs in many Asian and African countries.

The number of undernourished persons in the world is estimated to be 925 million. Concurrently each year 1.3 billion tons of food products (that is approximately one third of global food production) are either lost or wasted, mainly in industrialised countries. Attention is drawn to this fact by E. Konecka-Matyjek, PhD, et al. A chance for a change of this situation is brought about by a resolution adopted by the European Parliament issued at the beginning of 2012, the objective of which is adoption of a strategy towards more efficient food chain

in the EU. Reducing the wastage of food products is an important first step in combating hunger worldwide and acting towards an improvement of the nutritional status of the population.

Taking into account the scale of malnutrition the World Health Organisation (WHO) draws particular attention among others to a group of women in the childbearing age, who are seriously at risk of disadvantageous nutritional deficiencies. The problem of malnutrition in this group is taken up by the paper of R. Wierzejska, PhD. and Professor M. Jarosz. In Poland study of pregnant women indicates the lack of adaptation of nutrients intake to their requirements. There is also a risk of the occurrence of nutritional deficiencies before becoming pregnant. Dietary habits of women in the pre-conception stage and during pregnancy are vital determinant factors of the health state of the child, not only in the period following birth, but also in further life stages. The scientific documentation of those dependencies has recently become a basis for an initiative for health 'programming' by nutritional improvement in the key period of development of a human being.

Papers published in this edition of "Postępy Nauk Medycznych" ("Progress in Medicine") suggest that malnutrition in Poland may be a crucial problem which could potentially lead to severe health related consequences. When taking up measures related with counteracting this problem particular attention shall be paid to the most vulnerable with regards to the risk of malnutrition, and the consequent complications, which comprise in the first place small children, women in the childbearing age, including pregnant, as well as patients staying in hospital.

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