The role of education in diabetes mellitus type 2 management

Maria Polikandrioti

Type 2 diabetes mellitus is a progressive disorder caused by a combination of insulin resistance and beta cell dysfunction. It is associated with an increased and premature risk of cardiovascular disease as well as specific microvascular complications such as retinopathy, nephropathy and neuropathy. 

During the last decades, the interest of health professionals towards the importance of education regarding self management of type 2 diabetes has been rapidly increased. The ultimate goal of educating patients with diabetes mellitus type 2 is to accomplish changes of the human behavior through acquisition of knowledge and understanding of the disease.

Although education alone is not a cure for the disease, the type 2 diabetes patient is not able to achieve metabolic regulation, if does not know the basic principles of nutrition, physical activity, care of the lower extremities, as well as specific skills related to the administration of subcutaneous injection of insulin, control of blood sugar levels, and other necessary parameters. The teaching of the technique of injection of insulin by the patient and a family member is the most important part of the educational program. Initially, the technique of injection is taught and then the calculation of the required units of insulin, the selection of sites, and the way of handling the equipment in order to prevent contamination and injuries. Afterwards, basic principles regarding diet, maintenance of body weight, resting, and prevention of hypoglycemia or deregulation of blood sugar are taught.

The design of the educational program should be focused on each patient’s needs individually (patient-centred approach). It is crucial that the design of the educational program includes other factors such as the priorities, the feelings, the expectations of the patient, and the changes in lifestyle following the disease. Moreover, the education of type 2 diabetes patients should be constant because there is a tendency for knowledge to decline over time and consequently the long-term maintenance of the beneficial effect of the intervention.

Given that the patients themselves are responsible on a daily basis for regulating the blood sugar levels (self-monitoring of blood glucose, SMBG), encouragement and support are main aspects of the educational program. However, very often, due to the successful regulation of blood sugar levels with medication, such as anti-diabetic tablets or subcutaneous insulin injections, the patients do not comply to the instructions received from health professionals or refuse to comply with the long-term instructions from the educational program and the practical application of the knowledge acquired (low compliance). In such cases, enhancement of self-esteem and evaluating patients’ needs is a key point for the acceptance and adaptation to the disease.

The patients with type 2 diabetes are invited to be aware about the information provided, and to incorporate long-term education in their lifestyle, with emphasis on behavioral changes. In addition, the state should realize the financial benefits from the information provided to patients with type 2 diabetes and support such interventional programs.

Bibliography

1. Hjelm K., Mufunda E., Nambozi G., Kemp J. Preparing Nurses to face the
4. Tessier DM., Lassmann-Vague VJ. Diabetes and education in the elderly. Diabetes Metab. 2007;33 Suppl 1:S75-8