0P-0148

THE PHYSICAL ACTIVITY AND QUALITY OF LIFE
EDUCATION IN ELDERLY PATIENTS WITH DIABETES

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Introduction:

Physical activity plays an essential role in better management of diabetes and improves self-esteem and the quality of life. To this end, this research aimed at analysing the impact of structured education of elderly type 2 diabetes patients about regular physical activity so as to improve their management of diabetes and the quality of life and reduce the risk of depression.

Methods:

The research in the Division of endocrinology, diabetes and metabolic diseases at the University Medical Centre Ljubljana was conducted in the period 2015–2016. The sample consisted of 42 diabetes 2 patients aged over 65 years. They were randomly divided into research and control group. The participants were monitored for 8 weeks. Both groups were subject to the analysis of the metabolic treatment outcome (hemoglobin A1c, lipid profile, blood pressure), ITM calculation and body composition (skeletal muscles, visceral fat and body fat), subjective assessment of physical activity, smoking and drinking alcohol, assessment of the quality of life and the risk of depression using validated questionnaires.

Results:

There was no statistically significant increase in aerobic and anaerobic physical activity after 8 weeks in the research group (aged 65 ± 3.34 years). The control group (aged 67 ± 3.73 years) did not show any changes in the quantity of anaerobic or aerobic physical activity. Cardiovascular disease risk factors also failed to improve (body weight, body composition, blood pressure, HbA1c). There was no effect on the quality of life and the risk of depression in both groups (p>0.05 for everyone).

Conclusion:

The new programme of structured education developed in line with established international guidelines for elderly diabetes 2 patients failed to increase their physical activity. To this end, there were not improvements in terms of parameters of cardiovascular risk factors and the quality of life. The key question that remains to be answered in further scientific research is how to motivate elderly diabetes 2 patients to engage in regular physical activity.

Diary - Diabetes and physical activity

The benefits of physical activity:

- Lower blood glucose levels,
 - Lower blood pressure,
 - Lower body fat,
 - It helps regulate body weight,
 - It improves self-confidence and well-being,
- It improves your mood, sleep and increases your energy levels,
 - It helps reduce stress, anxiety and fatigue,
 - It improves the quality of life.

Physical activity recommendations

Increase the amount of physical activity per day	Reduce the time you spend sitting down	Take breaks from sitting if it lasts more than 90 minutes - stand up and exercise. Do some exercises.
1. Aerobic physical activity - exercises for fitness
Swimming, aerobics, cycling, dancing, running, basketball, stair climbing, nordic walking, race walking, uphill race walking, yoga, gym gymnastics, vacuum cleaning, laundry washing, hockey, grass mowing, gardening, golf, etc.	Five times per week for 30 minutes - a total of 150 minutes per week.
2. Anaerobic physical activity - exercises for strength
Weightlifting, exercises with elastic bands, machine exercises, stair climbing, etc.	At least twice a week.

Scale of physical activity intensity

Sitting (0)		Moderate physical activity (3 to 5)			Intense physical activity (6 to 9)			Maximum strain (10)		
0	1	2	3	4	5	6	7	8	9	10

What do you think about physical activity?

Physical activity diary

Days	Description	Morning	Afternoon	Evening
MON	Type of physical activity			
	How long -minutes			
	When-time			
	How-intensity			
TUE	Type of physical activity			
	How long -minutes			
	When-time			
	How-intensity			

1. Aerobic physical activity

2. Anaerobic physical activity

GUIDELINES FOR THE DEVELOPMENT OF A NEW MODEL FOR THE PROGRAMME ON THE PHYSICAL ACTIVITY OF ELDERLY PEOPLE

Based on the results of the research we concluded that it is necessary to develop a new model for the programme on the physical activity of elderly patients with type 2 diabetes. In elderly patients with diabetes interventions represent a way of preserving the quality of life, reducing the occurrence of depression and preventing the aggravation of the disease. One of the fundamental modern sociopedagogical discourses is the **hermeneutic understanding of one's position in society**, where their self-presentation and life orientation should be taken into account. The goal is to obtain an account of one's life situation and development opportunities that is as accurate and reliable as possible, in order to develop suitable sociopedagogical measures and interventions aimed at helping the individual or the group. **The empowerment of the individual is an important concept within social pedagogy.**