

physiological state - heart, blood vessels, muscles, spine, etc. In this way, work becomes a therapeutic and relaxing means to strengthen your mental and physical health.<sup>8</sup>

3. Activities accordingly to the age of the person (e.g. preventive Rehabilitation care).<sup>9</sup>

According to Malíková, the activity of occupational therapy in retirement home should be deliberately designed to combine as many stimuli, methods and activities as possible. Therefore, during the selected activity, e.g. during manual work, the ergo therapist plays favorite music or sounds from music therapy, and with the help of aroma lamps clients inhale the relaxation oil. To keep clients focused, the activity alternates with some element of relaxation.<sup>10</sup> According to Skorodenský and Guľašová, changes in one area of life (e.g. psychological area) will affect functioning in other areas (biological area...)<sup>11</sup>

#### Conclusion

Moving seniors from the family environment to a retirement home is a big problem for everyone. They must cope with its health, loss of cognitive functions, loss of social contacts, loss of home environment. This period is called the adaptation period. The intervention of the occupational therapist during this period is very important. First of all, it should help the senior to prevent maladaptation syndrome and then engage him in meaningful activities to make the senior feel useful.

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<https://www.wfot.org/about-occupational-therapy>

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## Physiotherapy as a part of a complex non-pharmacological treatment of obesity in medical spa environment

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In European countries, medical spas belong under health care. Implementing spa treatment positively influences patients' health, as proved by evidence from history as well as by modern scientific knowledge. The results of researches carried out by universities and research institutes also demonstrate the reasonability of treatments based on the use of natural healing resources. It is about types of treatment of both - chronic and post-acute conditions - as well as about treatment aimed at lifestyle diseases and their prevention.

<sup>8</sup> UHÁL, M.: *Práca, jej znaky a dôvody práce v sociálnej náuke Cirkvi*, Katolícka univerzita v Ružomberku, Teologická fakulta, Košice 2006, s. 127-128.

<sup>9</sup> JELÍNKOVÁ, J., KRIVOŠÍKOVÁ, M., ŠAJTAROVÁ, L.: *Ergoterapie*, Praha – Portal 2009, s. 65-66.

<sup>10</sup> MALÍKOVÁ, E.: *Péče o seniory v pobytových sociálních zařízeních*, 2011, s. 126.

<sup>11</sup> SKORODENSKÝ, M., GULAŠOVÁ, M. (2012) *Základy klinickej psychológie*. Prešov, Filozofická fakulta Prešovskej univerzity v Prešove, s. 46.

In most cases, obesity is a multifactorial determined disease, in which the interaction of environmental factors and genetic predispositions leads to a positive energy balance that results in excessive accumulation of adipose tissue (Belovičová, M., Belovičová, L., 2015). Worldwide, obesity has reached epidemic proportions, and its high incidence is no longer a reality only in economically developed countries, but also in many less developed countries (Barkasi, D., 2018).

In Slovakia, up to two-thirds of the adult population is either overweight or obese. In developed countries, obesity is the third most common chronic disease, but in Europe it ranks absolutely at the top (Popovičová, M., Snopek, P., 2017). Obesity not only affects the quality of life of an individual, but it also becomes a significant burden on healthcare systems around the world.

Due to the absence of possibility to undergo medical spa treatment for the diagnosis of obesity in adults in Slovakia, in 2012, together with my co-workers I (Belovičová M et al.) created a specialized 2-week spa stay for the diagnosis of obesity in Bardejov Spa for self-payers. In the lecture I present specific results for years 2012-2017.

I focused on the issue of benefits of non-pharmacological treatment of obesity in spa environment. I wanted to find out if the non-pharmacological treatment of obesity affects the positive values of total cholesterol (TC), triacylglycerols (TAGs), HDL cholesterol (high density lipoprotein), LDL cholesterol (low density lipoprotein), uric acid (UA) and glycaemia (especially in patients with impaired glucose tolerance and type 2 diabetes mellitus) and whether these changes reach statistical significance (Belovičová, M., Matula, P., 2017).

During this stay clients gained new knowledge regarding proper diet and physical activity while being under medical supervision. During the stay they underwent testing for early detection of cardiovascular and liver diseases. The clients also underwent an ultrasound scan of the abdominal cavity. They were given an opportunity to undergo examination on Fibroscan 502 touch device, which uses a painless non-invasive method (transient elastography - TE) to measure stiffness of the liver tissue (liver stiffness).

We developed an intense exercise program aimed at body weight reduction that was adjusted according to current state of particular client's physical mobility. In general, for the treatment of obesity aerobic activity is recommended.

Exercise plays an important role in physical activity of obese patients, especially in the early stages of physiotherapy. Exercise is performed in slow pace, using rhythmical and oscillating movements. While conventional exercise for fitness improvement requires a movement rate of approximately 66 movements per minute, in the exercise for obese it should be 52-54 movements per minute (Chudá, D., 2017).

Kinesiotherapy should take 60-90 minutes a day (it can be divided into 2 sessions per day), heart rate should not exceed 110-120 pulses. In severely obese patients and in patients with cardiovascular problems, we determine the optimal training pulse rate by a simple formula: 60-70% out of the maximum pulse rate, which is calculated according to the formula:  $210 - (\text{minus}) \text{ age}$ .

Swimming or cycling are suitable physical activities for severely obese patients, as these types of sports do not put any extra pressure on weight-bearing joints. Walking is the most effective physical activity as well as the easiest one to do.

An usual practice within the physical activity were gym exercise under supervision of a physiotherapist, group exercise, Nordic walking, swimming in a pool, exercise in water, sauna bathing (in case of no contraindications).

During the stay, clients underwent treatment focused on weight reduction (massages, mineral bath, lymphatic drainage, dry carbonic bag), three times a day they had a drinking cure with lukewarm hypotonic mineral water (healing spring Klára 200-300 ml three times a day, 30 minutes before meal).

For the purpose of precise compliance with the reduction diet, the clients had a reserved separate dining room during their stay. The clients took regular lectures with doctor, nurse, nutrition assistant, rehabilitation therapist, clinical psychologist. Through education, we disclosed the patients their improper eating and exercise habits, boosted their motivation to change their lifestyle. In education we applied the principles of cognitive behavioral therapy.

Of course, obesity treatment can also be carried out in thermal spa facilities, where the targeted treatment of locomotive organs diseases is ideally combined with the possibility of applying physical therapy in the comprehensive treatment of obesity. However, potential contraindications should always be taken into account when applying a hyperthermic mineral water bath, mud wraps and paraffin. Performing mentioned procedures results in an increased temperature of skin and subcutaneous tissue, which improves blood circulation and stimulates the metabolism.

Balneotherapy is becoming increasingly popular in countries with tradition of the use of thermal water for therapeutic purposes. Obesity, arterial hypertension are public health problem. A number of studies support the effectiveness of using both, thermal and mineral water in cardiac rehabilitation and in the treatment of obesity (Masiero, S., Vittandini, F., Ferroni, C. et al., 2018).

Treating obesity in medical spa environment is more effective and safer than obesity pharmacotherapy. Balneotherapy is an effective lifestyle change program that is accompanied by body weight reduction with long-lasting effect (Belovičová, M., 2019). A healthy lifestyle can be defined as a lifestyle or behavior of an individual that creates conditions for improving the way of life which allow clients in thermal spas to improve their quality of life (Popovičová, M., 2018, Kimáková, T., 2019). Medical spa treatment also allows group intervention and mutual patients' motivation.

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## **Self-development and psychohygiene in education of nurses and social workers (we learn them to care not only about the client?)**

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The aim of the paper is to point out the need of education in the field of psychohygiene among students in helping professions. The place of health psychology in the training of future professionals is increasing in the context of primary prevention. Neglect of psychohygiene is related to reduced quality of life, job satisfaction and psychological safety at work. The correlation of deficiencies in the above components with burnout is significant. Professional personality requirements are subject to change in society and require high professional standards, professional competence, human and moral qualities (paraf. Barkasi a kol, 2017).

### Characteristics of psychohygiene

Psychohygiene is a set of conditions necessary to ensure mental health, well-being and performance. They are all means (principles, guidelines) by which we can achieve mental health. There are some generally applicable principles that should be followed, but each individual has their own specific knowledge that they should know. Duffková a kol. (2008) it perceives it as an individual's lifestyle. It is a consistent way of life of an individual whose parts are interrelated and interrelated, based on a unified foundation and a common core that overlaps with all essential activities. She explains it as a cultural dimension, especially leisure, habits, qualities and interpersonal relationships. It is essential that students have the opportunity to acquire knowledge and skills about these principles during their professional formation. The basic principles of psychohygiene include:

Lifestyle. It implies not only adequate eating, but also sufficient and good sleep, avoiding addictive substances.

A suitable regime and composition of work activities, hobby activities and rest. It focuses on adherence to biorhythms, knowledge of its performance curve, correct time - management.

Functional partnerships, family, friendships and time for them are closely related to social support. Social support is relationship support in the environment in which one lives; increases stress resistance and the desire to survive life losses and crises.

Self-knowledge as a component of psychohygiene focuses on positive self-acceptance and worldview with established values and goals of life.

Work relationships and their building imply activity as opposed to passive reactivity in situations. Communication skills should promote reciprocity and teamwork. Mental safety at work is „an individual's awareness that if he / she makes a mistake in his / her job, he / she will not be punished for it, his / her interpersonal relationships will not change, he / she can ask colleagues for advice, help and feedback without being perceived as incompetent“ (Vévodová, 2017).

In the education of social workers in Slovakia, there is a space for grasping a part of the above mentioned attributes by means of social-psychological training. Thematically it is engaged in self-knowledge, communication and counseling process. There is no space for lifestyle, time management, support for functional relationships. The situation is worse in the preparation of nurses in our country. There is no socio-psychological training completely. It is not permitted to confuse patient-oriented training of communication with psychohygiene. As reported by Fulloková, Gajdošová (2010), teaching the subject of communication in Slovakia is unsatisfactory in the medical field. The reason is also the fact that it does not build on the fundamentals of psychohygiene and self-knowledge of the student, which leads to a formal theoretical grasp of the issue, resp. focusing only on the nurse - patient level without benefit for other nurse relationships. The subject of psychology of health, which nurses received, does not have enough hours to provide more than a theoretical overview and initial information about the above attributes of psychohygiene. Education in helping professions requires an increased focus on self-development and self-knowledge. Without having learned the basics of psychohygiene during studies, the risk of students burnout is very high. Prevention in the education process has several benefits. For students, these are prevention of mental disorders, better and more stable work performance, functioning social relationships, and subjective satisfaction. Improved working climate for the employer, inhibition of turnover and incapacity for work, stabilization of the work team. And last but not least, the benefit for the educational institution is the awareness of the education of professionals ready to take care not only of the client but also of themselves.