

# THE ROLE OF PHYSICAL THERAPY IN DECISION MAKING PROBLEMS OF OBESITY AS A CHALLENGE FOR THE PUBLIC HEALTH SYSTEM OF UKRAINE

Myronyuk Ivan, Dub Mariana

## Introduction

Obesity has now become an epidemic and is one of the most serious public health problems. The modern conditions of the everyday life being characterized by intensive rapid scientific-technical progress, which stimulates a sedentary lifestyle, social-economic instability, constant psychological stresses and at the same time irrational nutrition with increase of the refined products determine increasingly the growth of obesity among the population of various age groups in all countries worldwide (Blaak, EE., 2010, JURM, 2019).

Nowadays, the quarter of population of economically developed countries has the body weight being 15% higher the norm. According to the WHO report, 39% of the world population over 18 years of age are overweight, and about 13% are obese. According to WHO experts' forecasts, there will be more than 300 million people diagnosed with obesity by 2025 (Sygit, A. et al., 2012). The fact alerts that there is a "rejuvenation" of this pathology type (Sturgiss, EA. et al., 2016).

The obesity has become a key problem of the modern society, as due to the hypodynamia, diet violation and over-nutrition, it entails functional disorders of different body systems, contributes to occurrence of many clinical complication, development of type II diabetes, problems of musculoskeletal system, digestive system, respiratory system, mental disorders that negatively affect health, reducing the quality of life, human performance, leads to early disability, premature aging, shortening life expectancy (Ovdii, MO., 2014).

The adverse health situation of the population in terms of obesity, its wide distribution, close connection with lifestyle and high mortality from consequences implies improving not only the system of population protection, but also the use of physical therapy to both improve and preserve health, and prevent the development of obesity and related diseases in the environment.

The **aim of the study** is to determine the role and place of physical therapy in solving the problem of obesity in the health system.

## **Research methods**

Content-analysis and system data analysis of scientific researches, legal and regulatory documents of Ukraine on the issues of obesity combating by means of physical therapy in the context of public health system.

## **Research result**

"Health-2020" is a basis of new European strategy of health care aiming at "sufficient improvement of health and raise the well-being of the population, shorten health inequalities, strengthen public health care and ensure availability of health care system oriented upon the human need and which are characterized by high quality of care and keeping the principles of the universal covering of population, social justice and sustainability (Zdorovia-2020, 2012).

One of the health care strategies is physical therapy recognized by WHO as a "key" in achieving health XXI (WHO, 2011). As an integral part of the process of obese people's health restoring, physical therapy is a complex and long-term process and can be successful only if it is carried out in a comprehensive manner, through the use of physical exercises, increasing the intensity of physical training and limiting the energy value of food. Physical exercise and activity are important to prevent re-gaining body weight after previous successful weight loss and are important factors in maintaining weight loss after any weight loss (Oranskaya, KG., et al., 2015).

Physical therapy should become the basis of state policy, which will be aimed at optimal and timely recovery of life activity of obese people with their full resocialization (Blaak, EE, 2010). The main objectives of physical therapy for obesity are to improve overall health, increase energy consumption, reduce excess weight and strengthen the trunk muscles, improve overall metabolism, normalize fat and carbohydrate metabolism, restore and maintain physical and professional performance, and prevent complications.

Now in Ukraine, rehabilitation assistance to the population with obesity is implemented on the level of a family outpatient clinic, polyclinic, multi-specialty hospital, or sanatorium. The main forms of training are kinesotherapy, therapeutic walking, physical exercises in the water environment, therapeutic massage, physiotherapy, mechanical therapy, labour therapy (Koliadych, OI, 2010). The system of physical therapy activity should take into account: the clinical picture, disease state, intensity of symptoms, presence of concomitant diseases, disease duration and patients' wishes.

Nowadays, there is a need to create and develop new rehabilitation approaches in Ukraine in order to the fight against obesity and its consequences using modern and innovative methods and tools. Rehabilitation of overweight and obese patients, inherited from the Soviet times, is adapted mainly only for

sanatorium-and-spa treatment. Improving the system of physical therapy services provision to the obese population will ensure an increase in their quality of life and achieve maximum medical and social effectiveness (Zakon Ukrainy, 2017).

Creation of appropriate rehabilitation institutions should take into account a number of factors, in particular, the specifics of the rehabilitation process arrangement in the country as a whole, in a particular region and among the target population, the level of demand and supply in the market, opportunities to improve the efficiency and quality of rehabilitation services, which, in turn, increases the satisfaction and quality of life, the competitiveness of the rehabilitation center in the market (Yeroshkina, TV. et al., 2010, Lissner, V. et al., 2013, Rossner, S., 2011).

The quality of physical therapy for obesity and its effectiveness at all stages depend on

the peculiarities of rehabilitation aid arrangement. In the scientific research (Hertsyk, AM., 2016) it is noted that physical therapy is an open social system consisting of the following elements (subsystems) as the patient, specialist in physical rehabilitation and the goal of physical rehabilitation. The system under study belongs to the composition of the healthcare metasystem that forms its environment.

In the fight against obesity, it is important to introduce a multidisciplinary rehabilitation approach to form rehabilitation goals, develop individual programs, the necessary volume of interventions and evaluate their effectiveness. The development of individual programs by narrow-profile specialists for weight loss is more successful than weight loss programs based on the recommendations of a family doctor or independent efforts of the patient, because it is important not only to get rid of excess weight, but also to keep the result at the proper level.

The public health system of today embodies the main systemic measures in the field of health aiming at preserving both the population and individual health of the population in Ukraine. The optimal strategy for solving the obesity problem in the system of health protection and promotion in the field of public health, based on the doctrine of "risk factors", aimed at preventing the occurrence of obesity by creating needs for a healthy lifestyle and increasing the level of physical activity.

According to WHO health experts (WHO, 2011), creating an enabling environment that allows people to consciously change their habits will give society the opportunity to make healthy choices. At the social level, it is important to prevent the development of obesity by developing a behavior strategy that would include having a contract with individuals regarding behavior, setting real goals, modifying and monitoring food consumption, controlling environmental triggers that can trigger the eating process, keeping food diaries and activity

records, social support, cognitive restructuring, and the like (Sygit, K. et al., 2012).

Physical activity at the work places has to be one of the efficient means of obesity prevention as well as infrastructure development and formation of moder and attractive sports construction in the place of residence, in the places of mass recreation of citizens, ensuring access to the forms of active motion including walking, bike riding and ensuring their safety. Physical activity for obese population, first of all, should be economically accessible and easy reachable, especially for low-income individuals having no opportunities to visit fitness centers for body weight reduction, maintain and promote health. Organizing support groups for those who want to reduce their body weight, conducting seminars for both obese people and their relatives, will help to increase their awareness, the usefulness of health care and promote a healthy lifestyle.

The effectiveness of physical therapy in solving the obesity problems in the system of preserving health in modern life depends not only on the quality of services provided, clinical course and functional state, but also on the personal qualities of the patient, compliance with those measures being not personally controlled by a healthcare specialist in the framework of treatment or rehabilitation in a specialized institution, and that is, on the level of attachment (consent) to treatment or rehabilitation (rehabilitation compliance) (UJRM, 2019).

Thus, taking into account the above, the solution of problems related to obesity by means of physical therapy should become one of the strategic directions of scientific research in the system of preserving public health in Ukraine.

## **Conclusion**

1. Obesity is an urgent problem of modern society, which, nowadays, has reached the level of global scale and requires an immediate solution. Its relevance is determined primarily by its high prevalence, since a quarter of the population of economically developed countries of the world has a body weight that is 15% higher the norm.
2. Development of modern rehabilitation institutions is one of the most pressing issues in addressing obesity as a challenge for modern public health system in Ukraine.
3. Physical aspect of therapy, in order to increase energy consumption and reduce body weight people with obesity provides for the use and conduct of increasing intensity of physical training, which in turn lead to both an increase in the

functional capabilities of the body, and to health strengthening and preservation in modern life.

4. Implementing a strategy to increase physical activity among obese people will allow

achieving targets for attracting the public to physical education and improving health, reducing body weight, reducing morbidity, extending life expectancy and improving its quality.

### **Literature:**

BLAAK, EE. 2010. Prevention and treatment of obesity and related complications. A role for protein. *Int. J. Obesity*. 2010. Vol. 3, N 30. P. 24-27.

HERTSYK, AM. 2016. Vzaiemodiia likaria ta fakhivtsia z fizychnoi reabilitatsii pry porushennia kh diialnosti oporno-rukhevoho aparatu. *Slobozhanskyi naukovosporyvnyi visnyk*. 2016; 4: 32-36.

KOLIADYCH, OI. 2010. Osoblyvosti kompleksno I fizychnoi reabilitatsii pry ozhyrinni I stupenia osibpratsezdatohoviku. *Aktualni problem navchannia ta vykhovannia liudei z osoblyvymy potrebamy*. 2010. № 7 (9). S. 501-508.

LISSNER, S., VISSCHER, A., RISSANEN, BL. 2013. Heitmann. *Obes Facts*. 2013.–No 6.–P. 561-566.

ORANSKAYA, KG., GUREVICH, VA, ORLOV, VA et al. 2015. Obesity and physical fitness among Moscow schoolchildren: 6-years follow-up. *British Journal of Medicine & Medical Research*. 2015. No 5(1). P. 23-31.

OVDII, MO. 2015. Zastosuvannia prohramy dozovano I khodbyta dykhalnykh vpravdlia korektsiin admirnoivahyu osibmolodoho viku: dys. k.med.n.: 14.01.24. Kyiv, 2015. s.139.

ROSSNER, S. 2011. Obesity: The disease of the twenty first century: Abbott European Obesity Symposium «The metabolic challenge of obesity: Impact of weight management on improvement of metabolic risk factors», Prague, Apr., 13, 2011. *Int. J. Obesity*. 2011. Vol. 4, N 26. P. 12-34.

STURGISS, EA, SARGENT, GM, HAESLER, E. et al. 2016. Therapeutic alliance and obesity management in primary care - a cross-sectional pilot using the Working Alliance Inventory. *Clinical Obesity*. 2016; 6(6):3769. DOI:10.1111/cob.12167.

SYGIT, K., KOLLATAJ, M., GOZDZIEWSKA, M. et al., 2012. Lifestyle as an important factor in control of overweight and obesity among schoolchildren from the rural environment *Ann. Agric. Environ. Med.* 2012. No19(3). P. 557-561.

Ukrainian Journal of Physical and Rehabilitation Medicine №1-2 (4). 2019; c. 6-25.

World Health Organization. Obesity and overweight. 2011 [Elektronikresourse]. – Mode of access: <http://www.who.int/mediacentre/factsheets/fs311/en/index.html>.

YEROSHKINA, TV., TATAROVSKYI, OP., POLISHKO, TM., BORYSENKO, SS.2010. Osnovy menedzhmentu I marketynhu v medytsyni: navch. posib. Dnipropetrovsk: *RVV DNU*, 2010. s.120.

ZAKON UKRAJINY«Pro systemureabilitatsii v Ukraini». PROEKT. Rezhymdostupu: <https://novynarnia.com/2017/10/02/zakon-ukrayini-pro-sistemu-reabilitatsiyi-v-ukrayini-proekt/16>.

ZDOROVIA-2020 Osnovy Yevropeiskoi strathii u pidtrymku diivsiiei derzhavy I suspilstva v interesakh zdorovia I blahopoluchchia. Kopenhagen: *YeRBVOOZ*, 2012.

**Author'scontact:**

**Myronyuk Ivan, Doctor of Medicine, Associate Professor**

Professor of the Health Sciences Department,

Dean of Health and Physical Education Faculty of Uzhgorod National University (Ukraine)

E-mail:[ivan.mironyuk@gmail.com](mailto:ivan.mironyuk@gmail.com)

**DubMariana**

**Physical Therapist**

Senior Lecturer at the Health Sciences Department of Uzhgorod National University (Ukraine)

E-mail:[marjana.dub@uzhnu.edu.ua](mailto:marjana.dub@uzhnu.edu.ua)