

**Letter to Editor. Treatment of overweight
and obesity during and after a pandemic.
Let's not wait for the development of complications
– new guidelines for doctors**

Guidelines developed by Experts endorsed by the Polish Association for the Study of Obesity, Polish Psychiatric Association, Polish Society of Hypertension, Scientific Section of Telepsychiatry of the Polish Psychiatric Association, Polish Association of Cardiometabolism, Polish Association of Endocrinology, and The College of Family Physicians in Poland

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In recent years, the approach to the diagnosis and treatment of obesity, which is more and more often considered a psychosomatic disease, has changed. The recent months marked by the COVID-19 pandemic have further proven that focusing on treating obesity complications and looking at the disease solely through the prism of its complications does not bring the intended results [1,2]. The lack of an effective treatment system for obese patients has led to obese patients experiencing inequalities in health, with the result that they are at a very high risk of severe COVID-19 infection and death [3-9]. It was observed that overweight in patients with SARS-CoV-2 infection increased the risk of developing severe pneumonia by 86%, and obesity increased this risk by 142% [10].

The current situation is also conducive to new cases of overweight and obesity developing because eating is one of the readily available ways of coping with stress, and the number of stressors acting is large and includes: adaptation to new functioning conditions; the possibility of infection, disease of relatives, especially the elderly; fear of creating a threat to others; uncertain future in the health and social dimension; social isolation and increasing family conflicts; organizational problems related to remote work and remote learning; limitations in relieving stress outside the home (fear of using fitness clubs, cinemas, theaters and other entertainment venues, and traveling). Moreover, there is a significant deficit of positive stimuli. Therefore, the number of people who eat under the influence of emotions is increasing, as well as those who develop or worsen existing eating disturbances (compulsive eating syndrome, night eating syndrome, food addiction). An additional factor contributing to weight gain is the reduction in physical activity as a result of restrictions and quarantine, as well as the lack of motivation to undertake it due to a low mood [1, 2, 11, 12]. Consequently, in the era of a pandemic, effective obesity treatment has become even more important than before. The developed guidelines are aimed at improving the diagnosis and treatment of obesity, taking into account the use of telemedicine techniques [1, 2].

Expert Guidelines for the diagnosis and treatment of overweight and obesity

1. Both the medical and ethical viewpoints indicate that any physician should view obesity as a chronic disease with a complex etiology that requires treatment. A different approach deprives the patient of autonomy, impedes the possibility of effective and safe treatment, and leads to inequalities in health in this group of patients [1, 2, 13, 14].
2. Contrary to popular belief, obesity is not the patient's fault. Blaming the patient for being ill is unethical and results in failure to engage in effective treatment, which leads to disease progression, development of obesity complications and

disability, deterioration of the quality of life and shortening of its length [1, 2, 13, 14].

3. Patients with obesity should be treated with respect by medical personnel. In the medical center, under no circumstances, should the patient's obesity be a source of shame and self-blame. During the conversation with the patient, the doctor should use appropriate medical vocabulary, show empathy towards him/her and give advice appropriate to his/her situation, as well as implement all possible therapeutic procedures, including pharmacotherapy and psychotherapy [1, 2].
4. Person-centered care should be the standard in the treatment of obese patients [1, 2, 13, 14].
5. In the diagnosis of overweight and obesity, we recommend using the diagnostic criteria proposed in 2016 by the American Endocrine Society, which allow for an earlier diagnosis of obesity than the previously used WHO 1998 criteria. Earlier diagnosis and treatment can significantly translate into preventing the development of complications and improving health [1, 2].

Based on the new criteria, the following are recognized:

- overweight grade 0 – BMI 25.0-29.9 kg/m² and without complications such as: pre-diabetes, type 2 diabetes, dyslipidemia, hypertension, cardiovascular disease, non-alcoholic fatty liver disease, polycystic ovary syndrome, female infertility, male hypogonadism, asthma, sleep apnea syndrome, hypoventilation syndrome, gastroesophageal reflux disease, stress urinary incontinence, osteoarthritis and depression,
 - obesity grade 0 – BMI ≥ 30 kg/m² and without the above-mentioned complications,
 - first-degree obesity – BMI ≥ 25 kg/m² and at least 1 mild or moderate complication,
 - second-degree obesity – BMI ≥ 25 kg/m² and at least 1 severe complication [16].
6. Most of the failures in the treatment of obesity are the result of the erroneous approach that proper nutritional education and the strong will of patients are sufficient to obtain a therapeutic effect. Lack of knowledge and understanding of the role of emotions in food intake and the fact that disturbed secretion of neurotransmitters in the reward system causes the patient to “want to but cannot” is the cause of the lack of therapeutic effects and frustration of both the doctor and the patient, as a result of which both doctors and patients become discouraged from engaging in treatment [1, 2].
 7. We recommend that pharmacotherapy be offered to any overweight or obese patient diagnosed on the basis of the American Endocrine Society criteria, if there are no contraindications to its use. In every case of complications caused by excess body fat in the treatment of which the causative treatment is to achieve weight loss, and

- in every case of eating under the influence of emotions or low mood, especially if accompanied by low self-esteem, simultaneous implementation of lifestyle changes and pharmacotherapy should be considered [1, 2, 16].
8. Drugs that reduce food intake exert a pharmacological effect in the central nervous system because the centers responsible for the feeling of satiety and hunger (hypothalamus) as well as appetite (reward system) are located there. However, this does not constitute a sufficient justification for drugs registered to support obesity treatment to be prescribed only by a psychiatrist, let alone that only a doctor of this specialty may diagnose eating disturbances [1, 2].
 9. Causal treatment of obesity is the basis for the effective treatment of its complications. The archaic view that when choosing pharmacotherapy the complications of obesity should be considered first rather than its causes, should be discarded. The result of this approach is failure in the treatment of obesity. Current knowledge indicates that in the selection of pharmacotherapy of complications, obesity should be taken into account as a cause, and in the selection of pharmacotherapy of obesity, factors causing a positive energy balance should be taken into account, including primarily eating under the influence of emotions. Based on the results of research on the etiology of the disease, efficacy and safety, we recommend the following criteria for selecting pharmacotherapy:
 - A. Due to its mechanism of action, efficacy and safety, the drug considered as a first-line drug should be a combined preparation containing naltrexone and bupropion (Mysimba).
 - B. Liraglutide (Saxenda) at a dose of 3 mg should be considered as a second-line drug when emotional eating and depressed mood are excluded or there are persistent contraindications to the first-line drug.
 - C. The use of polytherapy with a combination product of bupropion and naltrexone and liraglutide should be considered in patients with impaired carbohydrate metabolism with associated emotional eating [1, 2].
 10. Chronic use of pharmacotherapy is recommended to be considered due to the chronic nature of the disease [1, 2, 16].
 11. Telemedicine in the form of medical applications is a new formula of supporting behavioral and pharmacological therapy. These applications can support the physician both in the diagnostic process and in making a therapeutic decision, and increase therapeutic adherence. Visits of the doctor with the patient should be in the form of a video visit enabling the establishment of eye contact, assessment of the patient's facial expressions and pantomimics, as well as establishing contact and a therapeutic relationship [1, 2].
 12. The full version of the guidelines is available on the website of the journals *Nutrition, Obesity & Metabolic Surgery*, published by Termedia and *Arterial Hypertension*, published by Viamedica [1, 2]. The guidelines also include a diagnostic and therapeutic algorithm.

References

1. Olszanecka-Glinianowicz M, Dudek D, Filipiak KJ, Krzystanek M, Markuszewski L, Ruchała M et al. *Treatment of overweight and obesity during and after a pandemic. Let's not wait for the development of complications – new guidelines for doctors*. Nutrition, Obesity & Metabolic Surgery. 2020; 2(7): 1–13.
2. Olszanecka-Glinianowicz M, Dudek D, Filipiak KJ, Krzystanek M, Markuszewski L, Ruchała M et al. *Treatment of overweight and obesity during and after a pandemic. Let's not wait for the development of complications – new guidelines for doctors*. Arterial Hypertension. 2020; 24(3): 93–105.
3. Zheng KI, Gao F, Wang XB, Sun QF, Pan KH, Wang TY et al. *Letter to the Editor: Obesity as a risk factor for greater severity of COVID-19 in patients with metabolic associated fatty liver disease*. Metabolism. 2020; 108: 154244.
4. Muscogiuri G, Pugliese G, Barrea L, Savastano S, Colao A. *Commentary: Obesity: The “Achilles heel” for COVID-19?* Metabolism. 2020; 108: 154251.
5. Moriconi D, Masi S, Rebelos E, Viridis A, Manca ML, De Marco S et al. *Obesity prolongs the hospital stay in patients affected by COVID-19, and may impact on SARS-COV-2 shedding*. Obes. Res. Clin. Pract. 2020; 14(3): 205–209.
6. Petrilli CM, Jones SA, Yang J, Rajagopalan H, O'Donnell L, Chernyak Y et al. *Factors associated with hospital admission and critical illness among 5279 people with coronavirus disease 2019 in New York City: Prospective cohort study*. BMJ. 2020; 369: m1966.
7. Chao JY, Derespina KR, Herold BC, Goldman DL, Aldrich M, Weingarten J et al. *Clinical characteristics and outcomes of hospitalized and critically ill children and adolescents with coronavirus disease 2019 (COVID-19) at a Tertiary Care Medical Center in New York City*. J. Pediatr. 2020; 223: 14–19.e2.
8. Stefan N, Birkenfeld AL, Schulze MB, Ludwig DS. *Obesity and impaired metabolic health in patients with COVID-19*. Nat. Rev. Endocrinol. 2020; 16(7): 341–342.
9. Ryan DH, Ravussin E, Heymsfield S. *COVID 19 and the patient with obesity – the editors speak out*. Obesity (Silver Spring). 2020; 28(5): 847.
10. Tamara A, Tahapary DL. *Obesity as a predictor for a poor prognosis of COVID-19: A systematic review*. Diabetes Metab. Syndr. 2020; 14(4): 655–659.
11. Brooks SK, Webster RK, Smith LE, Woodland L, Wessely S, Greenberg N et al. *The psychological impact of quarantine and how to reduce it: Rapid review of the evidence*. Lancet. 2020; 395(10227): 912–920.
12. Nicholls W, Devonport TJ, Blake M. *The association between emotions and eating behaviour in an obese population with binge eating disorder*. Obes. Rev. 2016; 17(1): 30–42.
13. Olszanecka-Glinianowicz M, Markuszewski L. *Organizacja opieki zdrowotnej nad chorymi na otyłość i zagadnienia etyczne*. In: Olszanecka-Glinianowicz M ed. *Obesitologia kliniczna*. Med. Prakt. 2020 (in print).
14. Craig H, le Roux C, Keogh F, Finucane FM. *How ethical is our current delivery of care to patients with severe and complicated obesity?* Obes. Surg. 2018; 28(7): 2078–2082.
15. ACOG Committee Opinion No. 763: Ethical considerations for the care of patients with obesity. Obstet. Gynecol. 2019; 133(1): e90–e96.
16. Garvey WT, Mechanick JI, Brett EM, Garber AJ, Hurley DL, Jastreboff AM et al.; Reviewers of the AACE/ACE Obesity Clinical Practice Guidelines. *Reviewers of the AACE/ACE Obesity*

Clinical Practice Guidelines. American Association of Clinical Endocrinologist and American College of Endocrinology Comprehensive Clinical Practice Guidelines for Medical Care of Patients with Obesity. Endocr. Pract. 2016; 22(Suppl 3): 1–203.

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