Should be cited as: Psychiatr. Pol. 2013; 47(5): 887–896
ISSN 0033-2674
www.psychiatriapolska.pl

Autoaggressive behaviour with patients suffering from type 1 diabetes treated at the Clinic for Psychiatry and Psychotherapy Developmental Age – description of cases

Sabina Hacia[1], Lena Cichoń[1], Marta Nowak[1], Anna Fuchs[3], Przemysława Jarosz-Chobot[2], Małgorzata Janas-Kozik[1]

[1] Clinic Ward of Psychiatry and Psychotherapy of Developmental Age of the Department of Psychiatry and Psychotherapy, Medical University of Silesia
Head of the Department: Prof. Irena Krupka-Matuszczyk
[2] Department and Clinic of Pediatrics, Pediatric Endocrinology and Diabetology, Medical University of Silesia in Katowice
Head of the Department and the Clinic: Prof. Ewa Małecka-Tendera
[3] Student Scientific Association at the Department of Psychiatry and Psychotherapy, Medical University of Silesia

Summary

Aim. The aim of this study was to observe autoagressive behaviour with patients suffering from type 1 diabetes hospitalized in The Child Psychiatry Department of The Paediatric Centre in Sosnowiec.

Method. Analysis of clinical cases, medical documentation and literature.

Results. Patients suffered from type 1 diabetes. On account of mental disorders they required treatment in a psychiatric ward. In the course of their hospitalization the appearance of various autoagressive behaviour were observed– the sick deliberately gave a dose of insulin improperly, apply an inadequate diet, and also self-mutilated themselves.

Conclusions. Described patients by their own illness (type 1 diabetes) in a self-destructive way coped with negative emotions. Autoagressive behaviour were their way of coping with stress, communicating experienced problems to others, they also helped in reducing inner tension. Through autoagression patients express anger, guilt, shame, loneliness, inner emptiness, a lack of confidence or humiliation. The period of adolescence, female gender and the presence of chronic disease are the factors that could intensify the difficulties described.

Key words: type 1 diabetes, autoagression, diabulimia

Introduction

Type 1 diabetes

Diabetes is a metabolic disease characterized by hyperglycemia resulting from defects in insulin secretion or effect [1].

The research was not sponsored.

Type 1 diabetes of autoimmune origin most often manifests itself in children and adolescents [3]. It is one of the most common chronic diseases of developmental age. In the World and in Poland there is observed the dynamic increase in the incidence of diabetes, which has reached epidemic dimension (UN Resolution 2006) [2, 3].

Type 1 diabetes is caused by B-cell destruction, usually leading to absolute insulin deficiency. Its typical symptoms are polydipsia, polyuria, weight loss, drowsiness, fatigue, and progressive dehydration. The primary method of treatment for type 1 diabetes is insulin therapy conducted by multiple insulin injections or continuous subcutaneous via infusion of personal insulin pump [4]. In the treatment it is sought to make the best balance of diabetes because it is a key element in reducing the risk of developing serious complications.

Problems of people with diabetes

People with diabetes are obliged to regularly monitor blood glucose levels, compliance with proper diet and the use of insulin, which is associated with significant changes in their current lives. This causes a change in the style of their former life, which is associated with an increased incidence of emotional difficulties [5, 6]. Among patients with diabetes there is also observed a high incidence of depressive episodes (especially among youth) [7, 8].

Noticeable is also a tendency for the presence of anxiety symptoms. The occurrence of these disorders may lead to difficulties in the implementation of daily activities and affect the quality of social functioning. Children with diabetes have low self-esteem, lower self-confidence and do not believe in the possibility of achieving their goals. The existing limitations and low self-esteem affects the occurrence of problems in peer relations. The diagnosis of diabetes in a child can also affect the change in the relationship with family structure - children may be overly controlled and sparing by the carers. There are also situations of the experience of the emotional rejection by their parents [6].

The presence of chronic disease, changes in family relationships and comorbidity of the difficulties accompanying the period of adolescence may consequently lead to self-aggressive behaviour. Their etiology is varied and multifactorial [9], and the authors studying the phenomenon of autoaggression are unanimous in defining it only as a freedom in taking behaviour, lack of participation of third parties, and distinguishing between self-aggressive behaviour from suicide (Favazza, Winchel and Stanley, Babiker and Arnold, Kubacka-Jasiecka, Suchańska) [10].

Among patients with type I diabetes, hospitalized in the Clinic for Psychiatry and Psychotherapy Developmental Age the team of treating observed strong self-injurious tendencies, which were implemented by the lack of care for their own health - avoiding the measurement of blood glucose, wrong insulin dosage and improper diet.

Psychological understanding of the behaviour is different depending on the theoretical concept applied. In our study we rely on the understanding of psychodynamic and in this perspective presented by the patient's autoaggressive behaviour is an expression

of directing aggression to internalized objects of significant persons and have the link with difficulties in separation and individuation [11].

Aim

The aim of this study was to present two cases of the patients suffering from type 1 diabetes hospitalized in OKPiPWR Pediatric Centre in Sosnowiec, in which auto-aggressive behaviours were observed.

The method

An analysis of the clinical cases, medical records and literature have been made.

Presentation of the cases

The first case

17-year-old patient, treated for 10 years with type 1 diabetes (4 years used a personal insulin pump), was admitted to the OKPiPWR due to intentionally induced episodes of hyperglycemia by not taking the doses of insulin.

The girl was in the last two years repeatedly hospitalized due to ketoacidosis and decompensated diabetes. The resulting interview revealed that the patient for about two years was slimming down. For about a year she took fasting that was interrupted by episodes of binge eating. She used laxatives and slimming agents. For about two years she did not purposely gave herself some insulin for weight loss (the patient was aware that such action adversely affect her health). She said that she did not provoke vomiting, but with high glucose, they appeared spontaneously by themselves. Within two years she lost about 13 kg of weight. In addition, the patient withdrew from the peer contacts, reported resignation thoughts, depressed mood, anhedonia. On admission BMI of the girl was 17.7 kg/m2.

She was a first-year student of high school. She lived at home with mother and 15-year-old brother. The father left the home after the birth. He did not maintain contact with children.

According to the mother, the development of the patient proceeded normally. In the girl's family no one suffered from type 1 diabetes.

On admission, the patient was in logical contact, oriented versatile, low in the mood. Psychomotor drive was within normal limits. She did not spoke delusional contents. She demonstrated no signs of production. She denied suicidal thoughts. She reported resignation thoughts. She had a distorted body image (considered herself as an overweight person).

Recognition

The patient was diagnosed with a moderate depressive episode. The girl also met diagnostic criteria for bulimia nervosa- she had episodes of ingesting large amounts of

food in a short time, also she tried to counter the fattening effects of food taking periodic fasting, not taking some doses of insulin (Diabulimia) and provoking vomiting.

Diabulimia

Diabulimia is an eating disorder in which patients with type 1 diabetes deliberately give themselves less insulin than they need to lose weight [12]. When a person with type 1 diabetes do not give himself/herself insulin, the excess of glucose circulates in the blood (hyperglycaemia occurs). However, the glucose is not available for cells as energetic material. After crossing the blood concentration of 180 mg/dl glucose is excreted in the urine (glycosuria). Glycosuria is causing significant loss of calories (4.1 calories per gram of glucose excreted). Lack of insulin results in the release of increased amount of free fatty acids to plasma. In case of exceeding the capacity of the liver in fatty acid oxidation it contributes to the development of ketosis (the accumulation in the body β-hydroxybutyric acid and acetoacetic). Continuous excretion of acid in large quantities leads to a loss of the buffering cation and the development of ketoacidosis. In case of the absence of insulin there is also an increased protein catabolism [13].

All these processes lead to weight loss. For many diabetics not giving themselves insulin appears to be an easy way to gain their dream weight, even though such action accelerates the development of complications in diabetes and increased risk of death. People with diabulimia (as the described patient), without giving themsleves insulin, may cause the development of ketoacidosis, which leads to significant weight loss and vomiting. Left untreated, ketoacidosis can lead to coma and even death [14, 15].

Diabulimia may be suspected in patients who have unexplained fluctuations in blood glucose, increased the percentage of glycated haemoglobin, frequent hospitalizations due to the development of ketoacidosis or excessive focus on their weight [14].

The functioning of the patient in the Ward

In the Department the patient was provided with the therapeutic contract– she was granted privileges in the form of walks with her family outside the ward, passes, etc., in case of the absence of symptoms (taking fasting, binge eating, not to provide a dose of insulin, use of laxatives, provoking vomiting) and she lost them when not to tailor the contract arrangements. In addition, the patient had controlled glucose regularly – on an empty stomach (during the night and early morning), before and after meals. In the presence of medical staff she gave a bolus of insulin. Also there was made up the control of insulin pump of the patient in the morning and evening – it was checked if the correct amount of insulin units was given. In the treatment Sertraline was applied. The patient was provided with therapeutic interactions.

The therapeutic report

The patient initially declared her willingness to cooperate. However, in contact strong mechanisms of resistance were seen in her, difficulties in symbolization the

significance of symptoms. In her attitude the patient presented two extremes: from absolute misunderstanding of confrontation attempts and interpretation as well as their denial (through rationalization of behaviour) to the uncritical and devoid of any access of content acceptance. In the patient there were observed defence mechanisms such as: denial, rationalization, acting out.

In the therapeutic report there was apparent countertransference mirror, where the therapist had for a long time difficulty in symbolization meanings of spoken content and presented symptoms. The therapist felt the tendency to use in the process of psychotherapy, rationalization instead of seeking meaning- it was the expression of the patient's inner world and used by her defence mechanisms. At a later stage, the therapist began to make use of her feelings, which enabled the confrontation of the patient with her difficulties. The patient transference experienced the therapist as the maternal object, which was manifested in the tendency to rationalize and crystallization of conversations that are the resistance to change.

Summary

The patient presented a deficit in the symbolization of her difficulties. It resulted in using her own body to relieve arising stress and strong rationalization in her statements. Taking self-injurious behavior she led the unconscious dialogue with the maternal object filled with strong anger and aggression resulting from fear of losing the object. At the same time the absence of the father in her life, experiencing his brother as a „great" man and a better child (without defect which for the girl was her illness) affect the low self-esteem, experiencing jealousy and envy. Using diets and improper insulin dosage were intended to deny the disease, protect against narcissistic hurt and were defense against depressiveness caused by the loss of idealized self-image during adolescence and confronting the limitations resulting from the disease.

The second case

14-year-old patient, hospitalized for psychiatric treatment for the first time, suffering from type I diabetes, was admitted to the Department of Clinical Psychiatry and Psychotherapy Developmental Age because of deteriorating mental status. Before the admission, for a few months she was treated in an outpatient psychiatric treatment, applied sertraline, risperidone and sulpiride (no noticeable effect). Also she benefited from psychological support. In an interview from about 4 months the patient was in a low mood, she had trouble with concentrating attention, difficulty in relationships with peers. Furthermore, abandoned compulsory schooling, committed self-mutilations (she cut the skin around the wrists), reported suicidal thoughts, and did not properly controlled diabetes (she did not keep to blood glucose measurements, and insulin dosing).

The girl was adopted in the period of infancy. Adoptive parents have decided to adopt after several years of trying to have their own child. At the time of the adoption they had been married for several years. The patient did not know her biological parents

and she had no contact with them (according to an adoptive mother she never asked about them, even though she knew from early childhood that she is the adopted). They parted after 2 years of adopting the girl.

On admission, the patient was in logical contact, oriented versatile, low in the mood, irritable. Affect was adapted, the drive was normal. She reported the occurrence of the suicidal thoughts in the past. She stated that she saw the characters walking around the house in a black coat.

Recognition

The patient was diagnosed with a moderate depressive episode. The girl suffered from lowered mood, loss of energy, loss of activity and pleasure feel. She had trouble with concentrating. She often felt tired. The patient also had low self-esteem. There occurred in her thoughts and suicidal tendencies. She deliberately induced hyper- or hypoglycemia (the patient was aware of what are the consequences of improperly controlled diabetes).

The functioning of the patient in the Ward

In the ward the patient had controlled blood glucose levels regularly. Medical personnel checked the capacity of the insulin pump and the appropriate dose of bolus insulin by the girl. In periods of low mood and worse mood the patient did not comply with recommendations for dosage of insulin or diet. Sometimes she also deliberately injected too much insulin in comparison with food supply. Such incident took place in the ward at the beginning of hospitalization, when she gave herself at night 60 units of insulin in suicide attempts.

The patient was initially in opposition to medical and therapeutic recommendations. But after starting pharmacological treatment- fluoxetine and simultaneously use of therapeutic effects, the improvement in both mood and cooperation were achieved (the girl began to control her blood glucose and dose insulin properly).

The therapeutic report

In the initial contact the patient presented low mood, which she tried to hide under the guise of indifference to what was happening to her. There was a strong control of her own emotional reactions, aimed at controlling relations. At the same time the girl's statements were extensive with the obvious need for interest and contact. In functioning among the peer group the patient after the initial withdrawal, acted as a leader, aroused great interest in other children. In the patient there were observed defense mechanisms as: denial, rationalization, projection, acting out, omnipotent control.

In the therapeutic report there was apparent complementary countertransference where the therapist has experienced similar feelings as the adoptive mother, who once had access to the patient's emotional, she felt that she was needed to her, and once she

experienced rejection and lack of access to her experience. In moments of distancing in the relationship behaviour such as acting out intensified in the form of inappropriate dosage of insulin.

Summary

The girl used her disease and self-mutilations as mechanisms of autoaggression that having unconsciously punish the internalized objects of significant people (the birth parents and the adoptive father), experiencing as a hostile, rejecting. In the relationship with the adoptive mother the autoaggressive mechanism was aimed at testing her inner image in the sense of importance by controlling relations and provoking attention. The narcissistic hurt manifested itself in the feeling of being inferior, the need for a strong confirmation of self-esteem by others. "The narcissistic wound" also influenced the experience of her illness, which was unconsciously felt by the girl as something that influenced her „defect". This in turn would lead to think of herself as a child not worthy of love and abandoned by other significant people.

Conclusion

The illustration of clinical cases shows how patients through their own disease coped with emotional difficulties in an autoaggressive way. Insulin, which is an essential medicine to life for people suffering from type 1 diabetes, in the case of described patients was used deliberately to self-destruction. Self-injurious behaviour, despite their adverse impact on the functioning of the organism, in these girls were the way to reduce internal stress and overcoming other negative emotional states [16].

Researchers that take up the issue presented say that those who take on the behaviour described as autoaggressive, communicate by not experiencing problems, suffering and anger. Autoaggression is a pathological way to relieve emotional tension and a method for coping with stress [10].

According to the authors of the literature, the most commonly expressed emotions through autoaggressive behaviour include anger, guilt, shame, loneliness, inner emptiness, frustration, lack of confidence, humiliation, the state of increased tension and stress [17-20].

Presented by the patients difficulties were intensified by being in the period of adolescence, which is the time of changes and experiencing the accompanying them emotional tensions. During this period, depressive disorders are also commonly observed, which also becomes an element that could increase the occurrence of autoaggressive behaviour [21]. Coexistence of type 1 diabetes, being a chronic disease, to a large extent determined the quality of their lives and confronted them with experienced in everyday functioning difficulties, which additionally intensified the emotional difficulties.

Автоагрессивные поведения больных сахарным диабетом 1 типа леченных в Клиническом отделении психиатрии и психотерапии возраста развития – описание наблюдений

Содержание

Вступление. Сахарный диабет относится к метаболическим болезням, характеризующейся гипергликемией, исходящей из дефекта выделения инсулина или действия инсулина.

Задание. П редставление двух наблюдений пациенток, болеющих сахарным диабетом 1 типа, госпиализированных в Клиническом отделении психиатрии и психотерапии возраста развития в Педиатричекском центре г. Сосновца, у которых наблюдалось автоагрессивное поведение.

Метод. Анализ клинических наблюдений, медицинской документации и литературы.

Результаты. Описанные наблюдения – это болеющие сахарным диабетом типа 1 по-поводу психических нарушений требовали лечения в психиатрическом отделении. Во время госпитализации отмечено у них появление различного типа поведений автоагрессии. Больные часто неправильно вводили себе инсулин, не соблюдали диету, а также наносили себе различные повреждения.

Выводы. Описываемые пациентки через собственную болезнь (сахарный диабет типа 1) автодеструктивным способом старались препятствовать негативным эмоциям. Автоагрессивное поведение было у них способом преодления стресса редукции внутреннего напряжения и коммуникации иным людям переживаемыми трудностями. Путем автоагрессии пациентки выражали злобу, чувтво вины, стыд, одиночество, внутреннюю пустоту, отсутствие собственной уверенности или обиду. Период адолесценции и наличие болезни с хроническим течением все это факторы, которые могли причинятся к описываемы трудностям.

Ключевые слова: сахарный диабет типа 1, автоагрессия, диабулимия

Autoaggressives Verhalten bei Patientinnen mit Diabetes vom 1. Typ, die in der Abteilung für Klinische Psychiatrie und Psychotherapie des Entwicklungsalters behandelt wurden – Fallbeschreibung

Zusammenfassung

Einleitung. Diabetes ist eine Stoffwechselstörung, die sich mit Hyperglycämie charakterisiert, die die Folge der defekten Sekretion oder Wirkung von Insulin ist.

Ziel. Das Ziel der Arbeit war die Besprechung von zwei Fällen der Patientinnen, die an Diabetes vom Typ 1 krank waren und die in der Abteilung für Klinische Psychiatrie und Psychotherapie des Entwicklungsalters (OKPiPWR) behandelt wurden, im Zentrum für Pädiatrie in Sosnowiec, und bei denen man autoaggressives Verhalten feststelle.

Methode. Analyse der klinischen Fälle, der medizinischen Dokumentation und Literatur.

Ergebnisse. Die beschriebenen Patientinnen – erkrankt an Diabetes vom Typ 1 – mussten wegen der psychischen Störungen ins Krankenhaus, in die Abteilung für Psychiatrie. Wahrend des Krankenhausaufenthalts beobachtete man bei ihnen unterschiedliche autoaggressive Verhaltensweisen – die Kranken dosierten sich selbst eine unrichtige Menge von Insulin, wendeten unrichtiges Diät an oder Selbstverwundung.

Schlussfolgerungen. Die beschriebenen Patientinnen halfen sich durch ihre Krankheit (Diabetes Typ 1)auf autodestruktive Weise mit den negativen Emotionen. Autoaggressives Verhalten war Coping- Strategie, Reduktion der inneren Spannung und Mitteilung der erlebten Probleme für die anderen. Durch die Autoaggression drückten die Patientinnen Wut, Schuldgefühl, Scham, Einsamkeit, innere Leere, Mangel an Selbstsicherheit oder Erniedrigung. Die Zeit der Adoleszenz und die chronische Krankheit sind Faktoren, die die beschriebenen Probleme intensifizieren konnten.

Schlüsselwörter: Diabetes Typ 1, Autoaggression, Diabulimie

Les comportements auto-agressifs des patientes souffrant du diabète de type 1 , traitées à la Clinique Psychiatrique et de la Psychothérapie de l'Age du Développement de Sosnowiec – descriptions des cas

Résumé

Introduction. Le diabète est une maladie métabolique qui se caractérise par l'hyperglycémie résultant du trouble de sécrétion de l'insuline.

Objectif. Les auteurs décrivent les cas de deux patientes, souffrant du diabète de type 1, traitées à La Clinique Psychiatrique et de la Psychothérapie de l'Age du Développement de Sosnowiec, qui manifestent les comportements auto-agressifs.

Méthode. On analyse les cas cliniques, la documentation médicale et la littérature en question.

Résultats. Les patientes en question souffrent du diabète de type 1 et à cause des troubles mentaux elles exigent aussi la thérapie psychiatrique. Durant leur hospitalisation on observe chez elles les comportements auto-agressifs – elles changent délibérément les doses de l'insuline, elles n'observent pas leur régime diététique, elles s'automutilent.

Conclusions. Ces patientes décrites, souffrant du diabète de type 1, par leurs comportements auto-agressifs font face aux leurs émotions négatives. Par ces comportements auto-agressifs elles essaient de surmonter le stress, de réduire la tension interne, de communiquer leurs problèmes aux autres. Leur auto-agression exprime leur colère, sentiment de culpabilité, honte, solitude, manque de confiance en soi, humiliation. La période de l'adolescence, le sexe féminin et la maladie chronique peuvent intensifier les difficultés décrites.

Mots clés : diabète de type 1, auto-agression, diaboulimie

References

1. Craig M, Hattersley A, Donaghue K. *ISPAD Clinical Practice Consensus Guidelines 2009: Definition, epidemiology, diagnosis and classification*. Pediatric Diabetes. 2009; 10 (Suppl 12): 3–12.
2. Jarosz-Chobot P, Deja G, Polańska J. *Epidemiology of type 1 diabetes among Silesian children aged 0–14 years, 1989–2005*. Acta Diabetol. 2010; 47: 29–33.
3. Jarosz-Chobot P, Polańska J, Szadkowska A, Kretowski A, Bandurska-Stankiewicz E, Ciechanowska M, Deja G, Myśliwiec M, Peczyńska J, Rutkowska J, Sobel-Maruniak A, Fichna P, Chobot A, Rewers M. *Rapid increase in the incidence of type 1 diabetes in Polish children from 1989 to 2004, and predictions for 2010 to 2025*. Diabetology. 2011; 54: 508–515.
4. Szadkowska A., Bodalski J. *Insulin treatment in children and adolescents diagnosed with type 1 diabetes* Overview of pediatric. 2004; 34, 3 / 4: 161–169.
5. Mysliwiec M., Balcerska A. *Chronic somatic and development in the life of the child and his family-diabetes*. Psychiatry in General Medical Practice. 2002; 2, 4: 281–285
6. Kocemba I. *The sweet bitterness of life*. Characters 05.2009 W: WWW.charaktery.eu.pl/charaktery/2009/05/2956.
7. Katon WJ. *Clinical and health services relationships between major depression, depressive symptoms, and general medical illness*. Biol. Psychiatry. 2003; 54: 216–226. W: Duda-Sobczak A, Wierusz-Wysocka B. *Diabetes and Mental Illness*. Polish Psychiatry. 2011; 45(4): 589–598.
8. Szymańska S. *The presence of depressive symptoms in young diabetics and their relationship to the effectiveness of the treatment of diabetes*. Psychiatry and Clinical Psychology. 2007; 7(4): 219–226.
9. Warzocha D., Gmitrowicz A., Pawełczyk T. *The association of self-harm among young people hospitalized psychiatrically with a kind of mental disorders and selected environmental factors*. Polish Psychiatry. 2008; 42(5): 659–669.
10. Chodak, M, L. *Barwinski, self-injury as a form of coping with stress – a review of issues*. Psychiatry and Psychotherapy, 2010, Volume 6, No. 1: pp. 19–30
11. Żechowski C., Namysłowska I. *Cultural and psychological concepts of self-injury*. Polish Psychiatry. 2008; 42(5): 647–657.
12. Hasken J, Plot L, Nydegger T, Temme M. *Diabulimia and the roles of school health personnel*. J Sch Health. 2010 Oct, 80(10): 465–469

13. Granner DK. *Hormony trzustki i żołądkowo-jelitowe*. W: Murray RK, Granner DK, Mayes PA, Rodwell VW. red. Biochemia Harpera, wyd. 5. Warszawa: Wydawnictwo Lekarskie PZWL; 2002. p. 754–776.
14. Shih G. *Diabulimia: what it is and how to treat it*. Diabetes Health. 12th January 2009
15. Larrañaga A, Docet MF, García-Mayor RV. *Disordered eating behaviors in type 1 diabetic Patients*. J World Diabetes. 2011 Nov 15; 2(11): 189–95.
16. Nock MK, Prinstein M J. *A functional approach to the assessment of self-multilative behavio*r. J. Cons. Clin. Psychol. 2004; 72, 5: 885–890.
17. Gratz KL. *Risk factors for and functions of deliberate self-harm, an empirical and coceptual view*. Clin. Psychol. Sci. Pract. 2003; 10: 192–205. W: Fałek O, Pawełczyk T, Pawełczyk A, Rabe- Jabłońska J. *The research of the level of general aggressiveness and its individual subscales in adolescents with autoaggressive behaviour*. Psychiatry and Clinical Psychology. 2011; 11(1): 6–14.
18. Heath NL, Toste JR, Nedecheva T, Charlebois A. *An examination of nonsuicidal self-injury among college students*. J. Ment. Health Couns. 2008; 30: 137–156 W: Fałek O, Pawełczyk T, Pawełczyk A, Rabe-Jabłońska J. *The research of the level of general aggressiveness and its individual subscales in adolescents with autoaggressive behaviour*. Psychiatry and Clinical Psychology. 2011; 11(1): 6–14.
19. Austin L, Kortum J. Self-injury: the secret language of pain for teenagers. Education 2004. 124: 517–527 W: Fałek O, Pawełczyk T, Pawełczyk A, Rabe-Jabłońska J. *Badanie poziomu agresywności ogólnej i poszczególnych jej podskal u młodzieży z zachowaniami autoagresywnymi*. Psychiatria i Psychologia Kliniczna. 2011; 11(1): 6–14.
20. Briere J, Gil E. *Self-mutilation in clinical and general population samples: prevalence, correlates and functions*. Am. J. Orthopsychiatry 1998; 68: 609-620 W: Fałek O, Pawełczyk T, Pawełczyk A, Rabe-Jabłońska J. *Badanie poziomu agresywności ogólnej i poszczególnych jej podskal u młodzieży z zachowaniami autoagresywnymi.* Psychiatria i Psychologia Kliniczna. 2011; 11(1): 6–14.
21. Modrzejewska R., Bomba J. *Porównanie obrazu depresji młodzieńczej w populacji uczniów krakowskich szkół gimnazjalnych na podstawie analizy wyników badań za pomocą inwentarza objawowego IO „B1" w latach 1984 i 2001*. Polish Psychiatry. 2009; 43(2): 175–182.