

Pawłowski, Piotr, Brodowski, Wojciech, Borowik, Joanna, Swora, Aleksandra, Sygacz, Oliwer, Żelazny, Przemysław, Filipczak, Joanna, Dankiewicz, Sara, Bróż, Sebastian, Basta-Arciszewska, Katarzyna. *Diagnosis and treatment of mental disorders – a review of the scientific literature*. *Journal of Education, Health and Sport*. 2022;12(9):572-582. eISSN 2391-8306. DOI <http://dx.doi.org/10.12775/JEHS.2022.12.09.067>  
<https://apcz.umk.pl/JEHS/article/view/39765>  
<https://zenodo.org/record/7062822>

The journal has had 40 points in Ministry of Education and Science of Poland parametric evaluation. Annex to the announcement of the Minister of Education and Science of December 21, 2021. No. 32343. Has a Journal's Unique Identifier: 201159. Scientific disciplines assigned: Physical Culture Sciences (Field of Medical sciences and health sciences); Health Sciences (Field of Medical Sciences and Health Sciences). Punkty Ministerialne z 2019 - aktualny rok 40 punktów. Załącznik do komunikatu Ministra Edukacji i Nauki z dnia 21 grudnia 2021 r. Lp. 32343. Posiada Unikatowy Identyfikator Czasopisma: 201159. Przypisane dyscypliny naukowe: Nauki o kulturze fizycznej (Dziedzina nauk medycznych i nauk o zdrowiu); Nauki o zdrowiu (Dziedzina nauk medycznych i nauk o zdrowiu).

© The Authors 2022.  
This article is published with open access at Licensee Open Journal Systems of Nicolaus Copernicus University in Torun, Poland  
Open Access. This article is distributed under the terms of the Creative Commons Attribution Noncommercial License which permits any noncommercial use, distribution, and reproduction in any medium, provided the original author (s) and source are credited. This is an open access article licensed under the terms of the Creative Commons Attribution Non commercial license Share alike. (<http://creativecommons.org/licenses/by-nc-sa/4.0/>) which permits unrestricted, non commercial use, distribution and reproduction in any medium, provided the work is properly cited.  
The authors declare that there is no conflict of interests regarding the publication of this paper.

Received: 21.08.2022. Revised: 02.09.2022. Accepted: 05.09.2022.

## Diagnosis and treatment of mental disorders – a review of the scientific literature

Piotr Pawłowski<sup>1</sup>, Wojciech Brodowski<sup>2</sup>, Joanna Borowik<sup>3</sup>, Aleksandra Swora<sup>4</sup>, Oliwer Sygacz<sup>5</sup>, Przemysław Żelazny<sup>6</sup>, Joanna Filipczak<sup>7</sup>, Sara Dankiewicz<sup>8</sup>, Sebastian Bróż<sup>9</sup>, Katarzyna Basta-Arciszewska<sup>10</sup>

<sup>1</sup>Student, Faculty of Medicine, Medical University of Lublin

<https://orcid.org/0000-0002-1197-7218> | [pawlowski Piotr56@gmail.com](mailto:pawlowski Piotr56@gmail.com)

<sup>2</sup>Samodzielny Publiczny Zakład Opieki Zdrowotnej MSWiA w Lublinie

<https://orcid.org/0000-0003-0756-387X> | [brodowski.wojciech@gmail.com](mailto:brodowski.wojciech@gmail.com)

<sup>3</sup>Samodzielny Publiczny Szpital Kliniczny nr 1 w Lublinie

<https://orcid.org/0000-0001-8369-6207> | [joanna.borowik@gmail.com](mailto:joanna.borowik@gmail.com)

<sup>4</sup>Samodzielny Publiczny Szpital Kliniczny nr 1 w Lublinie

<https://orcid.org/0000-0002-6171-0386> | [ola.swora@gmail.com](mailto:ola.swora@gmail.com)

<sup>5</sup>Samodzielny Publiczny Szpital Kliniczny nr 4 w Lublinie

<https://orcid.org/0000-0003-3245-945X> | [oliwer.sygacz@gmail.com](mailto:oliwer.sygacz@gmail.com)

<sup>6</sup>Wojskowy Szpital Kliniczny z Polikliniką SPZOZ w Lublinie

<https://orcid.org/0000-0001-6794-9112> | [przemo.zelazny@gmail.com](mailto:przemo.zelazny@gmail.com)

<sup>7</sup>Absolwent Uniwersytetu Medycznego w Lublinie

<https://orcid.org/0000-0002-3512-8368> | [joannafilipczak70@gmail.com](mailto:joannafilipczak70@gmail.com)

<sup>8</sup>Wojewódzki Szpital Specjalistyczny Nr 1 imienia Fryderyka Chopina w Rzeszowie

<https://orcid.org/0000-0002-9208-8462> | [saradankiewicz96@gmail.com](mailto:saradankiewicz96@gmail.com)

<sup>9</sup>Wojewódzki Szpital Specjalistyczny Nr 1 imienia Fryderyka Chopina w Rzeszowie

<https://orcid.org/0000-0002-6191-2535> | [sebastianbroz223@gmail.com](mailto:sebastianbroz223@gmail.com)

<sup>10</sup>Wojewódzki Szpital Specjalistyczny im. Stefana Kardynała Wyszyńskiego Samodzielny Publiczny Zakład Opieki Zdrowotnej w Lublinie

<https://orcid.org/0000-0002-7759-1588> | [kasiabasta01@gmail.com](mailto:kasiabasta01@gmail.com)

*Correspondence: Piotr Pawłowski, [pawlowski Piotr56@gmail.com](mailto:pawlowski Piotr56@gmail.com)*

### Abstract:

**Introduction:** Unambiguous definition of mental disorders is difficult, mainly because of the heterogeneity of this group of diseases and the clarity of the line between pathology and normal. The definition proposed by the World Health Organization (WHO) is widely accepted. In practice, definitions from the legislation of a country are also important.

**Aim of the work:** The purpose of this study is to discuss the basic issues of diagnosis and treatment of mental disorders.

**Material and method:** A method of non-systematic literature review from databases such as scientific Google Scholar, PubMed, CinalHI, Scopus, Arianta, Web of Science was used.

**Results and conclusions:** In the treatment of mental disorders, I use pharmacological and non-pharmacological methods. Psychopharmaceuticals are divided into several groups depending on their mechanism of action. Their selection depends mainly on the diagnosed disease entity and tolerance to treatment. The most widely used group of drugs is the group of non-selective serotonin reuptake inhibitors (SSRIs). Non-pharmacological methods include psychotherapy, electroconvulsive therapy, deep brain stimulation, and psychosurgery.

**Key words:** mental disorders, psychiatry, diagnosis, treatment

## **Introduction**

Defining mental disorders for modern scholars is a major problem of not only biological but also spiritual or ethical nature. The genesis of this issue is socio-cultural conditions and their influence on the perception of the boundary between normality and pathology. This boundary is often fluid, which directly affects the terminology used to describe various types of psychopathologies, mental disorders, and even diseases with a mental basis. This is exacerbated by the continuous development of sciences in neurophysiology, psychology, genetics, and many others. Often, the prevailing philosophical currents and even a country's geopolitical situation also strongly influence the definition of mental disorders [1].

The first historical reference to the emergence of modern psychiatry appeared at the end of the 18th century. Its emergence was associated with the freedom movement, arising from the outbreak of the Great French Revolution. In previous centuries, sick people were treated as insane. They were treated like prisoners, isolated from society in dark cellars, usually "on chains," under the guard of particularly brutal caretakers. During the Middle Ages and the Renaissance, it was claimed that mental disorders were the result of possession by the devil; in the Enlightenment, this trend became increasingly rare. In the 19th century, mental disorders began to be defined explicitly. This was related to the development of pathological anatomy, the aftermath of which was a dispute between "somatics" and "psychics." The former believed that mental illness was the result of anatomical changes occurring in the brain, while the latter sought its causality in the soul,

which is "different from the body," and the said anatomical changes are a secondary consequence of the soul's illness [2].

Over time, depending on the pace of development of medical and social sciences, this definition took on different content. According to the Great Universal Encyclopedia PWN: "any deviation from the state of mental health, the subject of interest and competence of psychiatry; it may consist in a change in the intensity, pace or color of normal activities or in the appearance of distorted or new activities not encountered under ordinary conditions [3].

At the outset of the consideration of mental disorders, it is impossible not to mention the concept of mental health. According to the World Health Organization (WHO), it is well-being in which an individual realizes his or her capabilities and is able to cope with a variety of life situations, is able to participate in social life, and work productively [4]

Polish legislation defines mental health as a personal good of a person, which is the foundation of the proper existence of an individual in social groups, and its protection is one of the basic tasks of the state [5].

### **Aim of work**

The aim of this work is to summarize in a summary study the basic issues of diagnosis and treatment of the most common mental disorders.

### **Material and methods**

The study was based on the method of non-systematic review of available scientific literature. According to the keywords: mental disorders, treatment, diagnosis, epidemiology, psychiatry, scientific databases such as Google Scholar, PubMed, CinalHI, Scopus, Arianta, Web of Science were searched. Both qualitative and quantitative studies and other publications related to the topics described were eligible for analysis. No time limit was imposed.

### **Results**

#### ***Diagnosis of mental disorders***

Diagnosis of psychiatric disorders is a difficult process, which requires specialists to make in-depth observations, based primarily on interdisciplinary knowledge, as well as on their own experience in working with psychiatric patients.

A very important element in the diagnosis of a patient for psychiatric disorders is the establishment of an appropriate therapeutic relationship, based on trust, authenticity, active listening, and cooperation between the patient and the psychiatrist [6].

The diagnostic process for patients with psychiatric symptoms is mainly based on the so-called psychiatric examination, consisting of self-anamnesis (subjective interview) and obtaining information about the patient from the closest people (family, friends, colleagues, etc.), i.e. the physical examination. The psychiatric examination can be conducted in two ways. The first is the observation of the patient in the environment of the examination, while the second is a relevant interview, based on questions referring to the introspection of the person under examination, his experiences, or his reflections on his current health status [7].

During the course of the interview, whether it is a subject or object interview, the clinician is forced to address many aspects relating to almost the entire life of the patient. Among these are: the patient's general emotional state (disorders and expression of emotions), motivation and psychomotor drive, cognitive functions (thinking, perceiving, attention, memory, concentration) and their disorders, as well as childhood memories, relations with parents, the occurrence of traumatic events, coping with schooling during the school years education, peer relations during childhood and adult years, presence in the uniformed services and many others that can affect the subject's stagnant mental state. The temporal aspect of the patient's reported symptoms also becomes equally important, and so, for example, in depression, it is a minimum of two weeks [8].

Often patients diagnosed with a mental disorder are found to have multiple comorbidities taking the form of so-called masked depression, schizophrenia, or another diagnosable illness.

Masked (atypical) depression is difficult to diagnose because of the low severity of symptoms of a typical depressive disorder. The patient's clinical picture then resembles other somatic causes of the pathologies present, for example, angina syndrome, "restless legs" syndrome, anorexia, chronic headache, and anxiety disorders. Schizophrenia, on the other hand, can be misdiagnosed in cases of psychoses of intoxic origin, with a background of psychoactive drug abuse [9,10].

Conversion disorders also pose a major diagnostic difficulty for specialists in neurology and psychiatry. In differential diagnosis, they are confused mainly with somatic dysfunctions such as chronic systemic infections, systemic lupus, myasthenia gravis, multiple sclerosis, myopathies. Diagnosis of conversion disorders should therefore be preceded by

appropriate laboratory tests, imaging tests, especially brain imaging, including the novel QEEG method [11,12].

### ***Treatment of mental disorders***

There are many methods used to treat mental disorders. The literature on many psychiatric disorders divides them into pharmacological methods and non-pharmacological methods.

Pharmacological methods included the use of pharmaceuticals from the psychotropic drug groups, including antidepressants, anxiolytic (anti-anxiety) drugs, and neuroleptic (antipsychotic) drugs [14,15,16].

Non-pharmacological methods, on the other hand, are a diverse group of therapeutic techniques that affect the patient's mental sphere. These include psychotherapy, family therapy, psychoeducation, electroconvulsive therapy, neuromodulation methods, sleep deprivation, light therapy, and psychosurgery [17,18].

Drugs with antidepressant effects are divided into several groups depending on their mechanism of pharmacological action. These include:

#### **1) Drugs that inhibit neurotransmitter reuptake:**

- **tricyclic antidepressants - TCAs:**
  - Dibenzazepine derivatives: desipramine, lofepramine, trimipramine, imipramine, opipramol, clomipramine;
  - Dibenzodiazepine derivatives: dibenzepine;
  - Dibenzothiazepine derivatives: amitriptyline, nortriptyline, nortryptiline;
  - Dibenzoxepine derivatives: doxepin;
  - Dibenzazepine derivatives: amoxapine;
  - Dibenzotiepin derivatives: dotiepin;
  - dihydroanthracene derivatives: melitracene.
- **drugs with a different structure that inhibit the reuptake of norepinephrine and serotonin non-selectively:** milnacipran, venlafaxine;
- **drugs that inhibit the reuptake of norepinephrine and dopamine non-selectively:** bupropion;
- **selective serotonin reuptake inhibitors - selective serotonin reuptake inhibitors (SSRIs):**
  - compounds with a bicyclic structure: citalopram, escitalopram, setraline;
  - amine derivatives: fluoxetine, fluvoxamine;

- piperidine derivatives: paroxetine
- **selective norepinephrine reuptake inhibitors - selective norepinephrine reuptake inhibitor (SNRI): rhaboxetine.**

## 2) Receptor-mediated neurotransmitter reuptake inhibitor drugs:

- **serotonin reuptake inhibitors that block serotonergic receptors - serotonin antagonist and reuptake inhibitors (SARI):** trazodone, nefazodone;
- **norepinephrine reuptake inhibitors that block norepinephrine receptors - norepinephrine antagonist and reuptake inhibitors (NARIs):** maprotiline;
- **serotonin reuptake inhibitors that modulate serotonergic receptor activity:** vortioxetine.

3) **Receptor-mediated drugs:** agomelatine, mianserin, mirtazapine.

4) **Drugs with an atypical mechanism of action:** thiametopine

## 5) Monoamine oxidase inhibitors - MAO

- **Non-selective MAO inhibitors:**
  - hydrazine derivatives: phenelzine, feniprazine, isocarboxazide
  - non-hydrazine derivatives: pargyline, tranylcypromine
- **Selective MAO inhibitors:**
  - selective, irreversible MAOs: clorgyline, selegiline
  - selective, reversible MAO: moclobemide, lazabemide.

6) **Normothymic drugs:** lithium salts, carbamazepine, valproic acid, lamotrigine, clozapine, quetiapine, olanzapine.

The use of the above-mentioned pharmaceuticals is mainly aimed at producing a thymoleptic and thymoregulatory effect. Their use is indicated in cases of depressive disorders of at least medium severity [19].

Neuroleptic (antipsychotic) drugs are mainly used to treat schizophrenia and its productive symptoms in the form of hallucinations, or delusions. In terms of chemical structure, neuroleptics are a diverse group, among them are mainly phenothiazine derivatives, divided into 3 main subgroups, these are:

- 1) **aliphatic subgroup:** chlorpromazine, levopromazine, triflupromazine, promazine, cyamemazine;
- 2) **the subgroup with a piperidine ring:** pipothiazine, thioridazine, thioproperazine, trifluoperazine

### **3) the subgroup with a piperazine ring:** flufenazine, perazine, perphenazine.

Neuroleptic drugs also include thioxanthene derivatives (chlorprotixene, flupentixol, clopenthixol, thiothixene) causing much weaker side effects for patients compared to phenothiazine derivatives. The group causing increased extrapyramidal side effects are butyrophenone derivatives (haloperidol, spiroperidol, benperidol, droperidol, bromperidol, pipamperol, azaperone, fluanizone).

An important group of neuroleptic drugs, due to their strong activating effect on the patient, as well as significantly reduced risk of generating extrapyramidal disorders, are indole derivatives, which include: clozapine, clotiapine, pimozide, fluspirilene, oxypertin, molindone, sulphiride, sultopiride. Atypical drugs, on the other hand, include: amisulpiride, quetiapine, olanzapine, risperidone, ziprasidone, zotepine, aripirazole [20].

Currently, as commonly called "first-line drugs" in the pharmacotherapy of anxiety disorders are antidepressants, belonging to the serotonin reuptake inhibitors (SSRIs). Their use brings satisfactory results for both the patient himself and clinicians [21]. When they are ineffective and do not reduce the discomfort reported by the patient, anxiolytic (anti-anxiety) drugs are included in the therapeutic process. Among them, the following groups of pharmaceuticals and their representatives are distinguished:

#### **1) benzodiazepine derivatives:**

- 1,4 benzodiazepine derivatives: dizepam, clorazepate, clonazepam, bromazepam, lorazepam, chlordiazepoxime, oxazepam, flurazepam, lormetazepam, flunitrazepam, midazolam, prazepam;
- 1,5 benzodiazepine derivatives: clobazepam;
- triazolobenzodiazepines (tricyclic benzodiazepine derivatives): estazolam, triazolam, alprazolam, loprazolam, adinazolam.

#### **2) azaspirone derivatives:** buspirone, ipsapirone, gepirone

#### **3) dimethylmethane derivatives:** hydroxyzine.

Benzodiazepine derivatives as the most used anxiolytics due to their mechanism of cellular action are a homogeneous group, while they differ in the profile of clinical use (in addition to anti-anxiety effects, they also have anticonvulsant or sleep-inducing effects), the half-life ( $T_{1/2}$ ), and the rate of their metabolism in the human body [22].

Psychotherapy is one of the basic non-pharmacological methods used in the treatment of mental disorders. It is defined as a process of supporting a person (client) in improving, or arousing the mechanisms of mental functioning, the purpose of which is to weaken

the occurring symptoms of the disease, and disturbances in the experience of everyday situations that trigger its severity [23].

Psychotherapies in the specialized literature are divided into dual (individual) and group psychotherapy, as well as comprehensive psychotherapy and family psychotherapy [23].

The basis for conducting appropriate, tailored, and responsive psychotherapy to the needs of the patient (client) is the formation of the therapeutic relationship used. It is influenced by many variables, lying both on the side of the patient and the therapist himself, and includes, among others: the type of diagnosed disorder, the severity of the disease, the patient's character traits, his openness, sense of security, trust, as well as the empathy or level of sympathy of the psychotherapist [24].

An important part of the treatment of patients with diagnosed mental disorders is also the formation of organizations of patients with the disease entity, known as self-help groups. These organizations support sufferers in returning to full health. They enable often hindered contacts with the community, and work to counteract stigma, social isolation, as well as a paternalistic approach to people with certain mental disorders. Such groups, providing support to patients positively affect the results of treatment [25].

Among non-pharmacological methods, we can distinguish many alternative methods. Special attention should be paid to electroconvulsive therapy, deep brain stimulation, and psychosurgery.

Electroconvulsive therapy (EW) is an alternative method, used mainly in the treatment of affective disorders, depressive disorders, mania, psychoses, in cases where the applied drug treatment does not bring satisfactory results. This method can be used as a way of maintaining a period of remission of the disease, or in the symptomatic episode itself, in which case a series of 7 - 9 treatments, applied 2 - 3 once a week brings the planned results, in the form of improvement in the patient's mental state [26]. Electroconvulsive therapy is still a controversial treatment method, and has many opponents, mainly coming from anti-psychiatric movements. They question the clonic effectiveness of this method citing the possibility of increased side effects, in the form of profound memory disorders, personality disorders and an increased risk of committing an act of suicide [27].

Deep brain stimulation is a method involving the implantation of a stimulator that stimulates only small, selected areas of the brain, thanks to a specific implant location and the routing of wires under the skin. The essence of this method of treatment is to motivate the central nervous system to form more and more new synaptic connections, excitatory



and inhibitory, with a one-time minimal risk of complications. Indications for deep brain stimulation are mainly drug-resistant depression during bipolar disorder [28].

Psychosurgical methods include any surgical intervention that can help the patient alleviate the symptoms of the disorder, these include ablative procedures such as anterior cingulotomy, anterior capsulotomy, subtotal tractotomy, and limbic leukotomy. Indications for the aforementioned methods vary and mainly include depressive disorders and obsessive-compulsive disorders. The risk of complications with their use is high, resulting in little interest among clinicians in the aspect of their use [29].

## Conclusions

1. Mental disorders are an increasingly serious public health problem today, in recent years there has been an upward trend in the number of diagnosed cases, this trend is expected to be maintained in the future.
2. Diagnosis of mental disorders is difficult, requiring the psychiatrist to have experience and extensive knowledge of psychopathology. It is also important to know the images of diagnosed diseases.
3. Treatment of mental disorders is mainly based on psychopharmacotherapy, non-pharmacological methods such as psychotherapy and electroconvulsive therapy are also used.

## References

1. Pużyński S.: Choroba psychiczna – problemy z definicją oraz miejscem w diagnostyce i regulacjach prawnych. *Psychiatr Pol.* 2007; 41 (3): 299–308.
2. Szumowski W.: Rozwój Nauk Teoretycznych. Specjalizacja. [in:] *Historia Medycyny.* SANMEDIA; Warszawa 1994; s: 357 – 375.
3. *Wielka Encyklopedia Powszechna.* Wydawnictwo Naukowe PWN, Warszawa 2000–2004: [encyklopedia.pwn.pl/haslo/psychiczne-zaburzenia;3964123.html](http://encyklopedia.pwn.pl/haslo/psychiczne-zaburzenia;3964123.html) [accessed on 15.08.2022].
4. World Health Organization: Promoting mental health: concepts, emerging evidence, practice (Summary Report). World Health Organization; Geneva 2004.
5. Dz. U. 1994 Nr 111 poz. 535 Ustawa z dnia 19 sierpnia 1994 r. o ochronie zdrowia psychicznego.
6. Grabski B.: Podstawy badania psychiatrycznego dla studentów, lekarzy, psychologów i psychoterapeutów. *Psychiatr Pol.* 2016; 50(4): 895–896.
7. Bilikiewicz A: Badanie psychiatryczne. [w:] *Psychiatria Tom 1.,* red. Rybakowski J., Pużyński S., Wciórka J., Elsevier Urban & Partners Wrocław 2010, s. 399 – 404.
8. Grabski B.: Uproszczony podział i lista objawów i zaburzeń psychicznych do celów praktycznych, czyli co oceniamy podczas podstawowego badania stanu psychicznego. [in:] *Podstawy badania psychiatrycznego dla studentów, lekarzy, psychologów i*

- psychoterapeutów. Wydawnictwo Uniwersytetu Jagiellońskiego, Kraków 2015; s. 41-42.
9. Krawczyk P.: Depressive disorders at general practitioner's office – diagnostics and pharmacotherapy. *Pediatr Med Rodz* 2014; 10 (2): 174–189.
  10. Urban M.: Zaburzenia psychotyczne związane z przewlekłym przyjmowaniem mefedronu. Opis przypadku. *Psychiatr Pol.* 2011, 45 (3): 431–437.
  11. Wiśniewska M, Gmitrowicz A., Pawełczyk N.: Zastosowanie QEEG w psychiatrii z uwzględnieniem populacji rozwojowej. *Psychiatr Psychol Klin* 2016; 16 (3): 188–193.
  12. Pawełczyk, T., Pawełczyk, A., & Rabe-Jabłońska, J.: Zanim rozpoznasz u pacjenta zaburzenie konwersyjne, dokładnie zbadaj jego stan somatyczny i neurologiczny. Opis przypadku. *Psychiatr. Pol* 2012, 46(3): 483-492.
  13. Wiśniewska M, Gmitrowicz A., Pawełczyk N.: Zastosowanie QEEG w psychiatrii z uwzględnieniem populacji rozwojowej. *Psychiatr Psychol Klin* 2016; 16 (3): 188–193.
  14. Ossowska G., Idziak M.: Leki neuroleptyczne. [in:] *Farmakologia* red. Grażyny Rajtar – Cynke, Wydawnictwo Lekarskie PZWL, Warszawa 2015; s. 107 – 117.
  15. Ossowska G., Zakrocka I: Leki przeciwdepresyjne. [in:] *Farmakologia* red. Grażyny Rajtar – Cynke, Wydawnictwo Lekarskie PZWL, Warszawa 2015; s. 117 – 126.
  16. Ossowska G., Zakrocka I: Leki przeciwłękowe. [in:] *Farmakologia* red. Grażyny Rajtar – Cynke, Wydawnictwo Lekarskie PZWL Warszawa 2015; s. 99 – 107.
  17. Rys T: Inne biologiczne metody leczenia w psychiatrii. [w:] *Psychiatria* red. Marek Jarema, Wydawnictwo Lekarskie PZWL, Warszawa 2016; s. 557 – 573.
  18. Sawicka M.: Leczenie środowiskowe w psychiatrii, praca z rodziną i psychoedukacja. [in:] *Psychiatria* red. Marek Jarema, Wydawnictwo Lekarskie PZWL, Warszawa 2016; s. 611 – 644.
  19. Cegiela U., Janiec W., Pytlik M.: Leki przeciwdepresyjne. [in:] *Kompendium farmakologii* red. Waldemar Janiec, Wydawnictwo Lekarskie PZWL, Warszawa 2015; s. 67 – 70.
  20. Kostkowski W.: Leki neuroleptyczne. [in:] *Farmakologia. Podstawy farmakologii. Podręcznik dla studentów medycyny i lekarzy. Tom 2.* red. Kostkowski W., Hermana S. Z., Wydawnictwo Lekarskie PZWL, Warszawa 2010; s. 108 – 128.
  21. Choy Y, Schneier F. R.: Nowe i najnowsze leki w zaburzeniach lękowych. *Psychiatria po Dyplomie* 2009; 6 (4): 23 – 31.
  22. Czarnecka E., Pietrzak B., Zięba R.: Leki przeciwłękowe (anksjolityczne). (in:) *Farmakodynamika. Podręcznik dla studentów farmacji. Tom 1.* red. Janiec W., Wydawnictwo Lekarskie PZWL, Warszawa 2008; s. 205 – 214.
  23. Sikorski W.: *Psychoterapia – wybrane formy i techniki.* Oficyna Wydawnicza PWSZ w Nysie, Nysa 2005 s. 5 – 7.
  24. Sass-Stańczak K., Czabała J. C.: Relacja terapeutyczna — co na nią wpływa i jak ona wpływa na proces psychoterapii?. *Psychoterapia* 2015; 1 (172): 5-17.
  25. Bronowski P., Chotkowska K., Bednarzak J.: Ruch samopomocowy osób z doświadczeniem choroby psychicznej – Grupa Wsparcia TROP. *Postępy w psychiatrii i neurologii* 2016; 25: 190 – 195.
  26. Merk W. i in.: Skuteczność elektrowstrząsów podtrzymujących w leczeniu lekoopornej depresji psychotycznej – opis przypadku. *Postępy Psychiatrii i Neurologii* 2010; 19 (2): 173–176.
  27. Zyss T.: Kontrowersje i uwagi krytyczne dotyczące terapii elektrowstrząsowej. *Psychiatria* 2010; 7 (1): 38–45.

28. Chrobak A. A. i in.: Głęboka stymulacja mózgu jako metoda leczenia depresji lekoopornej w przebiegu choroby afektywnej dwubiegunowej — przegląd badań neuroobrazowych i eksperymentalnych. *Psychiatria* 2017; 14 (1): 40–46, 2017.
29. Harat M., Rudaś M.: Metody chirurgicznego leczenia wybranych chorób psychiatrycznych. *Neuropsychiatria i Neuropsychologia* 2007; 2 (1): 3–18.