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Sexual disorders in men treated in a psychiatric ward

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Summary

Aim. An attempt to assess the impact of dual diagnosis – mental illness and addiction on the occurrence of sexual dysfunctions, and evaluation of problems with sexual functioning in men treated in a psychiatric ward.

Material and method. 140 psychiatrically hospitalized men (mean age 40.4 ± 12.7 years) with the diagnosis of schizophrenia, affective disorders, anxiety disorders, addiction and double diagnosis (schizophrenia and addiction) took part in the study. The Sexological Questionnaire, developed by Professor Andrzej Kokoszka, and the International Index of Erectile Function IIEF-5 were used in the study.

Results. The occurrence of sexual dysfunctions in the study group was reported in 83.6% of patients. The most common was reduction in sexual needs (53.6%) and orgasm delay (40%). Depending on the research tool used, erectile dysfunction appeared in 38.6% of respondents (according to Kokoszka's Questionnaire) and 61.4% of patients (IIEF-5). Severe erectile dysfunction was more common in the group of patients without a partner (12.4% vs. 0; $p = 0.000$) compared to people in relationships and in the group with anxiety disorders ($p = 0.028$) compared to groups with other mental disorders. In the group of people with dual diagnosis (DD), sexual dysfunctions were observed more frequently in comparison to patients with schizophrenia ($p = 0.034$). Treatment lasting over 5 years was more often associated with sexual dysfunctions ($p = 0.007$). In the DD group, lack of orgasm and excessive sexual needs were more frequent in comparison to people with one diagnosis ($p = 0.0145$; $p = 0.035$).

Conclusions. Sexual dysfunctions are more common in patients with DD in comparison to patients diagnosed with schizophrenia. Lack of a partner and the duration of psychiatric treatment over 5 years is associated with more frequent occurrence of sexual dysfunctions.

Key words: dual diagnosis, psychiatric hospitalization, sexual disorders

Introduction

Sexuality is one of the important aspects of quality of life, and sexual dysfunctions are common in patients suffering from chronic diseases. Sexual disorders are most often the result of co-existence of various biological, psychological and social factors [1–5]. Among the patients treated in psychiatric wards, the most common causes that disrupt sexual functioning are the symptoms of the underlying illness, side effects of pharmacological treatment, difficulties in establishing relationships with a partner, problems in partner relationships related to the existence of the illness and the way of functioning in everyday life, social stigmatization. Numerous studies prove that sexual disorders contribute to the deterioration of cooperation in treatment and reduce the quality of life of people struggling with them [1, 4, 6]. One of the most common sexual dysfunctions in men is erectile dysfunction, which occurs in the general population at an estimated rate of 30% (younger men) to over 50% (men aged 40-70) [7, 8]. However, few studies have analyzed the incidence of sexual disorders in patients during psychiatric hospitalization, and the results of these studies are divergent and range from 17% [6], 38% [9], to 50–76% of patients declaring various sexual dysfunctions [1, 2, 10, 11]. Some studies analyze the sexual functioning of patients during outpatient treatment [5, 12–15].

The most frequently mentioned causes of sexual disorders in psychiatric patients are symptoms of mental disorders and related deterioration of social functioning as well as social isolation, problems with establishing proper relationships with a partner, the use of psychoactive substances, and side effects of pharmacological treatment [1, 5, 6, 16–18].

Patients with dual diagnosis, in which mental illness coexists with addiction (DD) amount to 30–50% of addicted patients and about 8% of psychiatrically hospitalized people. This group cooperates worse in treatment, and often presents a more severe and chronic course of the illness [19, 20]. No studies were found that unequivocally assessed the incidence of sexual dysfunction in the group of patients with dual diagnosis compared to patients with other mental disorders. Literature analysis indicates that people with DD have a higher risk of sexual harassment and abuse, and risky sexual behavior is more common [21–23]. Fagan et al. [24] analyzed a group of 288 patients with various sexual dysfunctions, among whom 30% of men showed symptoms of additional mental disorders; this group also more often had problems related to alcohol use. Observations and studies show that existing sexual dysfunctions can lead to deterioration of quality of life and are the reason for discontinuation and lack of cooperation in treatment [4–6]. Good therapeutic contact and psychoeducation can allow for a better understanding of the need for regular psychiatric treatment, as well as enable adaptation of this treatment to existing problems and needs.

A satisfying sex life plays an important role in the personal and social recovery of patients [25]. Assessment of the incidence of sexual disorders in hospitalized psychiatric patients and the relationship of these dysfunctions with various mental disorders will allow to pay attention to the importance of this problem and affect the way of conducting therapy during hospitalization and further outpatient treatment.

The aim of the study was to assess the impact of mental illness and addiction (dual diagnosis) on the occurrence of sexual disorders and the frequency of these disorders in men hospitalized in a psychiatric ward. The occurrence of sexual disorders between patients with various mental disorders in relation to age, having a partner and duration of treatment was also compared.

Material

161 patients of the Department of Psychiatry in Tarnowskie Gory agreed to participate in the study. The final study included 140 hospitalized men (mean age 40.4 ± 12.7 years) who correctly completed the diagnostic questionnaires on the last day of their stay in the ward. Then the group was divided into men diagnosed with paranoid schizophrenia, unipolar and bipolar disorder, anxiety disorder, alcohol and other psychoactive substance addiction, and patients with dual diagnosis of schizophrenia and alcohol and other psychoactive substance addiction according to ICD-10 criteria. The study was conducted in the period from May 2017 to September 2018, participants received information about the study and an informed consent form for signing.

Criteria for inclusion in the study:

- patients treated in a psychiatric ward;
- cognitive functioning that allows to complete the questionnaire;
- informed consent to participate in the study.

Exclusion criteria for participation in the study:

- patients with symptoms of mental retardation and dementia;
- lack or withdrawal of consent to participate in the study, incorrectly completed diagnostic questionnaires.

The research was approved by the Bioethics Committee of the Silesian Medical University (No. KNW/0022/KB1/12/19).

Methods

For the purpose of the research the following tools were used:

1. The short version of the International Index of Erectile Function (IIEF-5). The IIEF-5 is a shortened version of the sex life assessment scale filled out by the patient. It contains 4 questions assessing the occurrence of erectile dysfunction and 1 question about satisfaction with the undertaken sexual contact. Questions are rated on a scale of 0–5, a rating of 0 indicates no attempts or sexual activity [26].
2. Sexological Questionnaire by Professor Kokoszka. The questionnaire consists of 30 items and is used for self-assessment of the incidence of sexual disorders according to the criteria of the International Classification of Diseases (ICD-10). Part A of the questionnaire contains questions concerning basic sociodemographic data, whereas part B of the questionnaire contains 12 questions about sexual dys-

function, 2 questions related to the occurrence of symptoms of gender dysphoria, 13 questions related to the presence of symptoms of paraphilias, and 3 questions about sexual orientation. Answers were marked on a Likert scale – from "always" through "often" to "never." The questions may cover any period of time determined in a given study [27].

Statistical analysis of data

The analyzes were performed using the R package (version 3.6.2). Tables of variable contingencies on the nominal scale were checked by Fisher's exact test. This test was chosen for consistency as not all tables met the chi-square independence test assumptions. When the level of the variable was compared on an interval scale, then in the case of 3 or more groups, the assumptions of the analysis of variance were first checked (normality – Shapiro-Wilk test, equality – chi-square test, homogeneity of variance – Levene's test). Due to the fact that ANOVA assumptions were not met for any of the comparisons made, the Kruskal-Wallis test was performed each time. If the result of this test was statistically significant, then the effect size (epsilon-square) was calculated and a post-hoc test was performed (Wilcoxon multiple pair comparison test with Holm correction).

Results

Characteristics of the study group

In the study group, 55.7% (78) of the men were in a stable marital relationship or in partnership, and 44.3% (62 patients) did not have a partner. The structure of education was as follows: 18.6% of the group had higher education (>15 years of education), 29.3% had secondary education and 52.1% – vocational and elementary education (8–12 years of education). The group of patients consisted of 23 individuals (mean age 36.3 ± 10.8 years) diagnosed with schizophrenia, 20 individuals (mean age 48.5 ± 10.4) diagnosed with affective disorder (unipolar or bipolar), 14 people (mean age 41.7 ± 14.4 years) diagnosed with anxiety disorders, 53 people (mean age 40.0 ± 11.0) addicted to various psychoactive substances, and 30 individuals (mean age 38.4 ± 14.0) with a dual diagnosis of schizophrenia and addiction.

People who underwent psychiatric treatment for up to 1 year constituted 37.1% of the group, and 49 people (35%) had been undergoing psychiatric treatment for at least 5 years (Table 1).

Table 1. **Sociodemographic data of the studied group of patients according to Kokoszka's Sexological Questionnaire and the type of mental disorders**

	Number of patients	% of the group
Number of respondents	140	
Mean age	40.4 (SD 12.7)	

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Duration of psychiatric treatment up to 1 year	52	37.1
Duration of psychiatric treatment 1–5 years	39	27.9
Duration of psychiatric treatment over 5 years	49	35
Primary education	20	14.3
Vocational education	53	37.9
Secondary education	41	29.3
Higher education	26	18.6
Having a partner	78	55.7
Living with a partner	52	37.1
No partner	62	44.3
Paranoid schizophrenia	23	16.4
Affective disorder	20	14.3
Anxiety disorder	14	10
Addiction	53	37.9
Dual diagnosis schizophrenia-addiction	30	21.4

Analysis of the results of Kokoszka's Sexological Questionnaire

The analysis showed the presence of sexual disorders in 117 people, which constituted 83.6% of the group. The most common dysfunctions included reduced sexual needs (53.6%), delayed orgasm (40%), lack of orgasm (35.7%), premature ejaculation (30.7%), and erectile dysfunction (38.6%). The occurrence of sexual arousal dependent on the presence of specific items was reported by 18 subjects (12.9%), 10 people (7.1%) had sexual interest in children before or during adolescence, 11 patients had the need to experience pain and humiliation during intercourse (7.9%) (Table 2).

Table 2. **Sexual disorders according to Kokoszka's Sexological Questionnaire**

	Number of people n	Percentage of all respondents	Percentage of sexual dysfunction group
Reduced sexual needs	75	53.6	64.1
Erectile dysfunction before intercourse and during contact	54	38.6	46.2
Excessive sex drive	50	35.7	42.7
Premature ejaculation	43	30.7	36.8
No orgasm	50	35.7	42.7
Delayed orgasm	56	40	47.9
Reluctance, fear of intercourse	50	35.7	42.7

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Pain during sexual intercourse	12	8.57	10.3
Desire to live as a woman and to operate your body properly	7	5	5.98
Sexual arousal dependent on the presence of specific items	18	12.86	15.4
The tendency to show your genitals to other people	9	6.43	7.7
Interests in boys or girls before or during puberty	10	7.14	8.5
The need to inflict pain. humiliation during intercourse	8	5.71	6.8
The need to experience pain and humiliation during intercourse	11	7.86	9.4
The need to rub against people	7	5	5.98
The need for sexual contact with animals	2	1.43	1.7
Lust for people of the same sex always or often	5	3.57	4.3

58.6% of the group had 3 or more sexual disorders, only 12.1% had one sexological problem, and 16.4% of the respondents did not show the existence of sexual disorders (Figure 1).

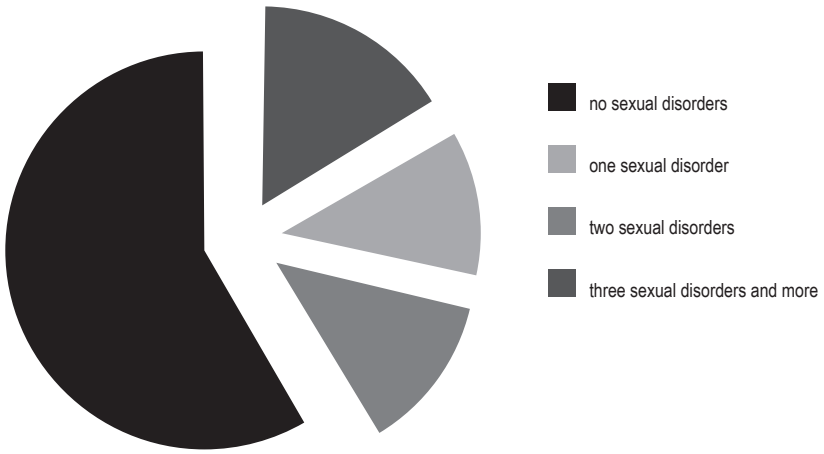

Figure 1. **The study group according to the occurrence of sexual disorders according to Kokoszka's Sexological Questionnaire**

Among the respondents with 3 or more sexual disorders as many as 28% were patients with dual diagnosis, 39% were patients with addiction, 13.4% with schizophrenia and affective disorders, 6% with anxiety disorders.

Analysis of the results of the International Index of Erectile Function IIEF-5

No erectile dysfunction was declared by 51 patients (36.4% of the study group), while 61.4% of the study group (86 people) confirmed different degrees of erectile dysfunction (Figure 2).

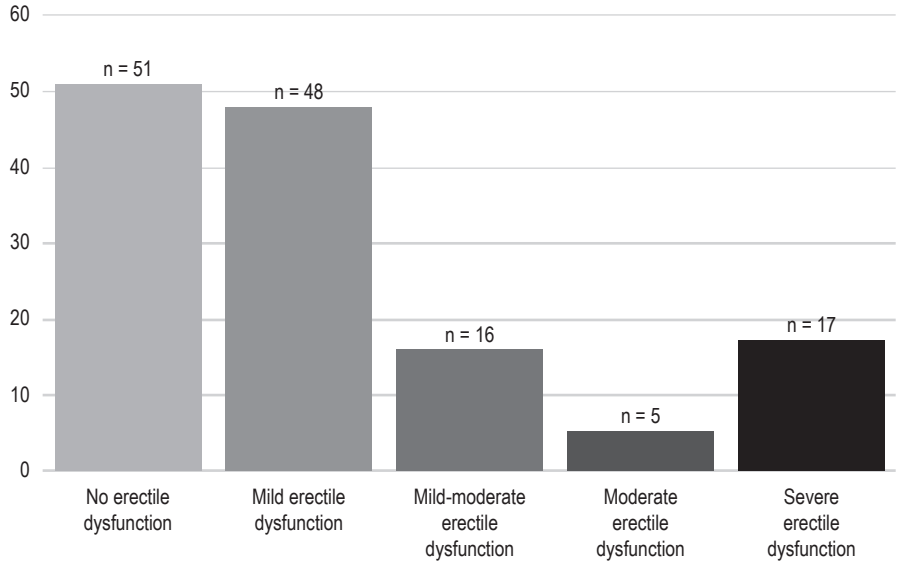

Figure 2. **The prevalence of erectile dysfunction in the study group according to the IIEF questionnaire**

Relationship of sexual disorders with study variables

Severe erectile dysfunctions were more common in patients without a partner compared to those in a relationship (12.4% vs. 0%; $p = 0.000$), similarly no sexual dysfunction was observed more often in the group of patients with a stable partner compared to patients without a spouse or partner (28.5% vs. 8.8%; $p = 0.0028$) (Figure 3).

Decreased sexual needs and erectile dysfunctions were most commonly observed in the group of people with affective disorders (80%; 45%), then in people with double diagnosis (53.3%; 50%) and addicts (52.8%; 37.7 %) compared to people with other disorders, but these differences were not statistically significant (Table 3).

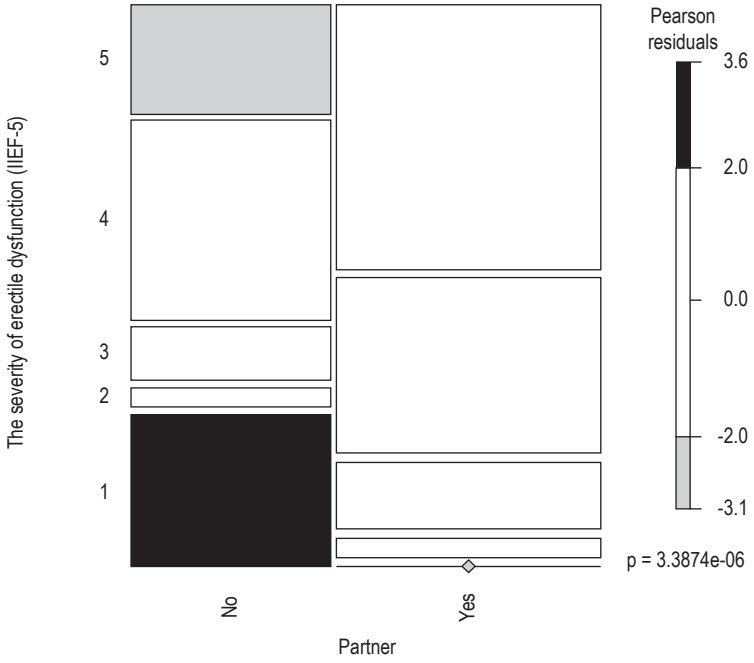

Figure 3. **Erectile dysfunction and having a stable partner**

Table 3. **Mental disorders and the type and frequency of selected sexual dysfunctions according to Kokoszka's Sexological Questionnaire**

	Schizophrenia [% of the group]	Dual diagnosis (schizophrenia and addiction)	Addiction	Affective disorders	Anxiety disorders	Fisher's exact test p
Number of respondents [% of the group]	23 [100]	30 [100]	53 [100]	20 [100]	14 [100]	
Reduced sexual needs	10 [43.48]	16 [53.33]	28 [52.83]	16 [80]	5 [35.71]	0.0741
Erectile dysfunction before or during intercourse	7 [30.43]	15 [50]	20 [37.74]	9 [45]	3 [21.43]	0.3708
Premature ejaculation	6 [26.08]	12 [40]	19 [35.85]	3 [15]	3 [21.43]	0.3074
Delayed orgasm	8 [34.78]	15 [50]	18 [33.96]	9 [45]	6 [42.86]	0.6303
No orgasm	5 [21.74]	18 [60]*	14 [26.42]	9 [45]	4 [28.57]	0.0145

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Excessive sex drive	5 [21.74]	16 [53.33]*	22 [41.51]	5 [25]	2 [14.29]	0.0347
Three or more sexual disorders	11 [47.83]	23 [76.67]	32 [60.38]	11 [55]	5 [35.7]	0.0774

Comparison of patient groups with individual diagnoses showed that more people with dual diagnosis (schizophrenia and addiction) revealed symptoms of sexual dysfunction in Kokoszka's Questionnaire compared to the group with schizophrenia ($p = 0.034$) (Figure 4).

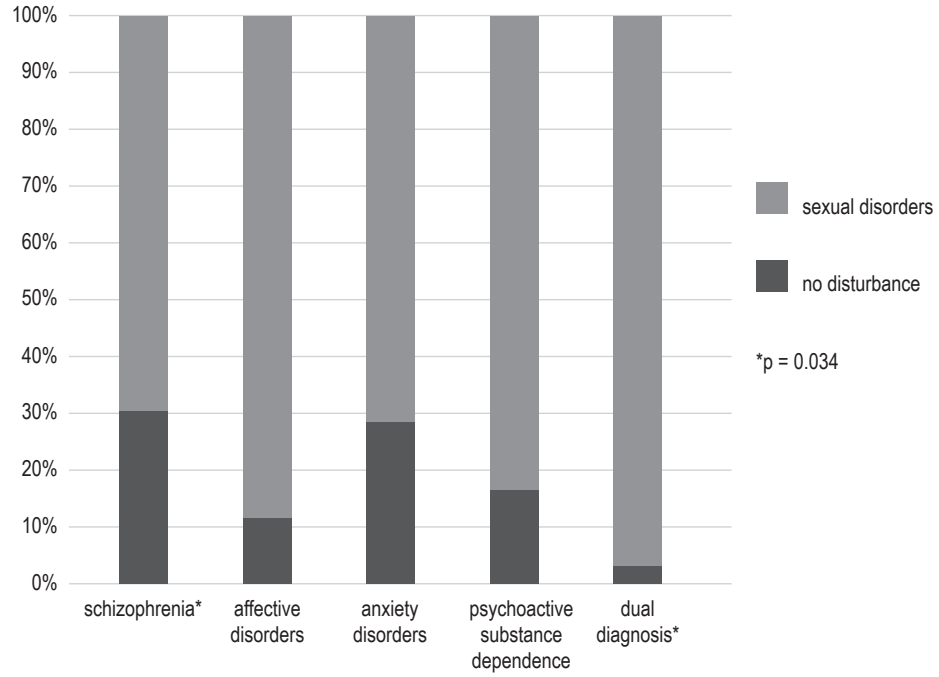

Figure 4. **Occurrence of sexual disorders in patients with various diagnoses according to Kokoszka's Questionnaire**

In the group of people with anxiety disorders, there were significantly more patients with severe erectile dysfunction in the IIEF-5 questionnaire compared to other groups ($p = 0.028$).

Comparison of groups of patients depending on the time of psychiatric treatment showed that the duration of treatment is longer for people who declare the presence of sexual disorders. Patients treated for over 5 years often reveal the symptoms of sexual dysfunction ($p = 0.007$) (Table 4).

Table 4. **Duration of treatment and incidence of sexual dysfunction**

	Psychiatric treatment up to 1 year	Treatment over 5 years
Number of patients with sexual disorders	38	46*
Number of patients without disorders	14	3*

* $p = 0.007$

People with DD declared the absence of orgasm and excessive sexual needs more often than people with only one diagnosis ($p = 0.0145$; $p = 0.035$).

Table 5. **Sociodemographic data and mental disorders**

	Number of patients (% of the group)	Mean age	Duration of treatment 1 year or less	Duration of treatment 2–4 years	Duration of treatment 5–10 years	Having a partner in the last few months	Primary and vocational education	Secondary education	Higher education	p*
Schizophrenia	23 (16.43)	36.26 * (10.8)	5 (3.57)	9 (6.43)	9 (6.43)	8 (5.71)	9 (6.43)	9 (6.43)	5 (3.57)	Kruskal-Wallis test p = 0.0200 effect size: epsilon-square = 0.08
Affective disorder	20 (14.29)	48.45* (10.4)	6 (4.29)	6 (4.29)	8 (5.71)	11 (7.86)	7 (5)	4 (2.86)	9 (6.43)	
Anxiety disorder	14 (10)	41.71 (14.4)	8 (5.71)	2 (1.43)	4 (2.86)	7 (5)	8 (5.71)	2 (1.43)	4 (2.86)	
Addiction	53 (37.86)	39.98 (12.0)	23 (16.43)	14 (10)	16 (11.4)	31 (22.14)	30 (21.43)	16 (11.4)	7 (5)	
Dual diagnosis [schizophrenia and addiction]	30 (21.43)	38.37 (14.0)	10 (7.14)	8 (5.71)	12 (8.57)	21 (15)	19 (13.57)	10 (7.14)	1 (0.71)	

No significant relationship was found between the occurrence of sexual disorders and the age of the subjects.

Discussion

Satisfaction with sex life is an important factor affecting the quality of life. Sexual dysfunction is very common in patients with various mental disorders. 161 people took part in the study, correctly completed questionnaires, which allowed assessment of the results, were obtained from 140 men. The mean age, education and the fact of having a partner in the study group had a similar structure to the groups analyzed by other researchers [1, 5, 12–14, 28, 29]. The subjects were divided into 5 groups depending on the psychiatric diagnosis. In addition to the group with the diagnosis of paranoid schizophrenia, affective disorders, anxiety disorders, and addiction to alcohol or other psychoactive substances, the group of people with dual diagnosis (schizophrenia and addiction) was also distinguished. The creation of a separate group of patients with dual diagnosis among other psychiatric patients is associated with the fact of particularly difficult therapeutic management, much worse cooperation and prognosis among these people [20]. Analysis of diagnoses among the respondents shows that it was dominated by people addicted to alcohol and drugs in various stages of the illness, which has a significant impact on the obtained results. Addicts usually do not require long-term use of psychotropic drugs, which can eliminate one of the important factors affecting the quality of sex life. On the other hand, chronic use of psychoactive substances as well as social degradation and other social effects of addiction can significantly affect the formation of sexual dysfunction [29, 30]. In the study group, 58.6% of patients (82 people) had three or more sexological problems. Among these patients, the majority were people treated for addiction – 32 people, then with a double diagnosis of addiction and schizophrenia – 23 people. Over 76% of patients with dual diagnosis reported the occurrence of 3 or more sexual disorders. This fact may indicate a significant impact of alcohol and other substance abuse on health and sexual functioning among many other etiological factors, which is also noticed by other researchers [29, 30]. The results obtained by the authors of this study indicate the occurrence of sexual dysfunction in 83.6% of people. Similar data is contained in the works of other researchers [1–3, 5, 29, 31]. Research by Kokoszka et al. [15] using the same questionnaire as in this study showed the existence of sexual dysfunction in 90% of men with diagnosis of schizophrenia. However, these patients were treated in the outpatient ward. Perlman et al. [6], who examined data of 3,717 patients hospitalized psychiatrically in 34 wards and hospitals, confirmed the existence of sexual dysfunction in only 17% of respondents, much less than in the general population. They also noticed a significant impact of having a partner and other psychological and social factors on the occurrence of sexual dysfunction. The low frequency of sexual dysfunctions was explained by the low awareness of the problem in the group of single people, by symptoms of the illness and a reluctance to disclose the problem by patients [6]. However, in their report, Ma et al. [1] showed the existence of dysfunction in 59.3% of patients treated in the hospital for schizophrenia. Similar data in the group of schizophrenic patients was

obtained by Souaiby et al. [4], while Ahmadzadeh et al. [9] showed that 38% of 600 psychiatric ward patients with different diagnoses had sexual dysfunctions, however, people who were not married were excluded from the study, which may contribute to the observed discrepancies. No information was found about studies assessing the occurrence of sexual dysfunction in the DD group, although reports by Meade et al. [22, 23] highlighted the risky sexual behavior in this group of patients. Similarly, the existence of sexological problems is indicated by Fagan et al. [24] and greater risk of sexual abuse of patients with dual diagnosis is emphasized by de Waal et al. [21].

In our study, 38.6% of people reported erectile dysfunction before or during intercourse (Kokoszka's Questionnaire), similar results were described in other papers [4, 5, 10]. In contrast, 61.4% of surveyed men showed symptoms of erectile dysfunction in the IIEF-5 questionnaire. The observed differences may be related to the use of the IIEF-5 questionnaire among patients with a long break in contacts with a partner, who could have related their assessment of functioning to their stay in hospital. Moreover the IIEF-5 may be unreliable to persons sexually inactive in recent 4 weeks before the examination [11]. Similar doubts about the results of the IIEF-5 test in sexually inactive people were expressed in Forbes and Westheide reports [11, 32]. The difference in the incidence of dysfunction between Kokoszka's Sexological Questionnaire and the IIEF-5 questionnaire may be related to the different sensitivity of both tests. More detailed questions about the severity and incidence of erectile dysfunction in the IIEF-5 may have caused that the patients declaring lack of erectile dysfunction in Kokoszka's Questionnaire were included in the group classified as mild erectile dysfunction according to the IIEF-5.

The way of interpretation of questions in Kokoszka's Questionnaire that are related to the past should also be considered. There are researches that report a very high percentage of erectile dysfunction (86%, 96%) measured by the IIEF-5 [13, 14]. In the work of Mosaku et al. [14], age, medications used and marital status were indicated as factors significantly affecting the occurrence of erectile dysfunction in the studied group. Ong et al. [13] examined 111 patients with schizophrenia in remission during outpatient treatment (96% of the group had erectile dysfunction) and recorded that 68.5% of people were neither married nor have a partner. In the research of Mosaku et al. [14], it was pointed out that the type of psychiatric diagnosis in the analyzed group of mentally ill patients was not associated with the frequency of observed sexual dysfunctions. In another study it was emphasized that the severity of schizophrenia symptoms (according to the PANSS) was not significantly related to the occurrence of dysfunction [10]. According to Westheide et al. [11], sexual dysfunction is not limited to the acute phase of the illness and is more common in the group of people with mental disorders compared to the general population.

The most common sexual dysfunctions in this study were as follows: reduced sexual needs in 53.6% of people, delayed orgasm in 40% of subjects, erectile dysfunction before or during intercourse (according to Kokoszka's Questionnaire) in 38.6% of patients. Similar results are also reported by other researchers [2, 4, 10]. The study of Olisah et al. [5] showed the existence of desire disorders in 25%, erectile dysfunction in 40% of patients. The differences between our outcomes may be related to the

stable mental state of patients during outpatient treatment. Onga et al. [13] obtained significantly higher values, they noted a decrease in libido in 93% and erectile dysfunction in 95% of patients diagnosed with schizophrenia. It is important to note that in this group 70% of patients were not in a stable relationship. In people diagnosed with schizophrenia, problems with establishing partner and sexual relationships are emphasized, which result from the symptoms of the illness and deteriorating social functioning [13]. In the work of Kokoszka et al. [15] there was a decrease in sexual desire in 71% of men, erectile dysfunction in 45.2%, and delayed ejaculation in 43.3%, and excessive sex drive was declared by 19.4% of patients diagnosed with schizophrenia treated in the outpatient clinic. The differences in the results present in our work, despite the use of the same tool, probably result from the selection of a more diverse group, i.e., analyzing the problems of people hospitalized with different diagnoses, most of whom had had a break of several weeks in sexual activity. According to the available literature, a decline in sexual needs can often be associated with illness symptoms or treatment [1, 4, 33]. A significant part of the group we examined (35%), which in the questionnaire indicated the existence of a problem related to excessive sexual desire, was hospitalized in a closed psychiatric ward for several days to several weeks, without the possibility of establishing sexual contact with a partner. This may explain the existence of an increased sexual need during the course of the study. The number of people describing the occurrence of symptoms of sexual preference disorders is noteworthy – fetishism 12.86%, exhibitionism 6.4%, pedo-efebophilia 7.14%, masochism 7.86%. Other authors [15, 34] reported similarly high incidence of sexual preference disorders in their reports. This phenomenon can be explained by the coexistence of mental illness symptoms, the specific content of psychotic sensations suggesting a paraphilia and the coexistence of addiction and a paraphilia.

In this study, 43.5% of patients suffering from paranoid schizophrenia experienced a decrease in sexual needs and 30.4% experienced erectile dysfunction. Among patients with affective disorders, 80% of patients experienced a decrease in sexual needs and 45% experienced erectile dysfunction. A large proportion of patients with a dual diagnosis of schizophrenia and addiction showed the presence of various sexual disorders compared to patients diagnosed only with schizophrenia. This fact may indicate the impact of addiction on the course of mental illness and the incidence of sexual disorders. In the group of people with an addiction diagnosis 52.8% declared a reduction in sexual needs and 37.7% declared erectile dysfunction. Similar results were obtained in other publications [1, 2, 4, 10, 12].

An analysis of the available literature reveals a discrepancy in research regarding the incidence of sexual dysfunction in patients treated for various mental disorders. Some reports publish data on the lack of correlation between psychiatric diagnosis and the frequency of dysfunctions [14], in others affective and anxiety disorders are illnesses most commonly associated with dysfunctions [2, 6, 9].

The results of the present work indicating a significant impact of having or lacking a partner on the occurrence of sexual disorders in the studied patients are consistent with the work of Martin et al. [35], while Perlman et al. [6] concluded from their studies that married people developed symptoms of dysfunction three times more often. These

authors came to the conclusion that single patients were unaware of the existence of problems. No studies have been found that would assess the impact of the duration of psychiatric treatment on the incidence of sexual dysfunction, the available literature highlights the multitude and variety of etiological factors on sexual dysfunction in this group of patients [1, 2, 5, 18, 31, 35].

The main limitation of our study is the small size of study groups and the lack of assessment of the impact of psychotropic treatment on patients' sexual functioning. In addition, self-assessment scales usually carry the risk of incongruence between the subjective assessment and an objective interpretation of the facts by the physician, therefore the obtained results should be interpreted with caution. However, despite these limitations, an important aspect of our analysis is to raise awareness of the problem of sexual functioning of people with dual diagnosis, and the cited results show greater prevalence of sexual problems in this specific group of patients. Careful planning of treatment in this group of patients is necessary so as not to worsen the already existing sexual disorders, and make every effort to improve their quality of life.

Conclusions

1. Sexual disorders are more common in patients with dual diagnosis compared to patients diagnosed with schizophrenia without co-existing addiction.
2. Lack of a partner and the duration of psychiatric treatment over 5 years are associated with more frequent occurrence of sexual disorders.
3. Examination of sexual function in patients with mental disorders and appropriate treatment adjustment is a very important element of proper psychiatric care and may affect proper cooperation in treatment.

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