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SEXUAL DYSFUNCTIONS IN SCHIZOPHRENIA - A GENERAL OVERVIEW OF RELEVANT CLINICAL SYMPTOMS

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ABSTRACT

Sexuality in schizophrenia has been and still is a taboo subject, difficult to address, both for the patient and the clinician. Poor communication links are a major non-compliance factor, with schizophrenia requiring special attention in terms of therapeutic conduct, which requires a thorough evaluation. By nature of the disease, schizophrenic patients struggle to establish and maintain healthy intimate relationships. They frequently lack the psycho-social abilities required to create and sustain interpersonal connections.

Keywords: schizophrenia, sexual disorders, antipsychotic (AP) treatment, adverse effects

INTRODUCTION

Schizophrenia is a complex, long-term mental health condition characterized by several symptoms that appear in the ever-fluctuating course of the illness, such as illusions, hallucinations, disorganized discourse, and impaired cognitive capacity (Chirita et al., 2012; Kaplan, 1974). Due to inadequate treatment and a poor clinician-patient connection, the disease's early start and chronic course make it one of the most severe psychiatric disorders, with an important burden on patients and their families. As regards the etiology of the disease, the exact cause of schizophrenia is unknown and continues to be a factor of interest to researchers. However, it is acknowledged that a variety of illness phenotypes result from several factors, including genetic predisposition and environmental impacts (Crismon et al., 2014).

One of the many explanations for how schizophrenia first manifests is that it starts during fetal development (Ciubara et al., 2015; Collins & Kellner, 1986). Pregnancy bleeding, obstetric complications, instances of gestational diabetes, if the infant was delivered by emergency cesarean section, perinatal asphyxia, and reduced weight at birth were indicators of the late onset of schizophrenia. The second trimester of pregnancy, which is a crucial period for fetal neurodevelopment, has drawn special attention from academics (Ghadirian et al., 1982). At this crucial stage, infections and excess hormonal levels, predominantly stress hormones lead to a 2-fold increase in the risk of developing the disease over a lifetime (Akhtar & Thomson 1980; Untu et al., 2015).

Symptomatology present in schizophrenia is classified as positive, negative, or cognitive symptoms. Each class of symptoms is vital for the correct diagnosis. Physicians must first correctly identify schizophrenia and differentiate it from other psychotic diseases such as psychotic forms of schizoaffective disorder, severe depressive and bipolar disorders with psychotic symptoms. Characteristic of schizophrenia is the appearance of major psychopathological manifestations, such as hallucinations, delirium, illusions, affective disorders, behavioral disorders, and disorganization of personality (Jentsch & Roth, 1999).

Sexuality in schizophrenia remains at present a difficult topic for the clinician to address because of emotional and social factors, which lead to inappropriate treatment and possible patient noncompliance. By the nature of the disease, schizophrenia patients struggle to establish and maintain healthy intimate relationships. The psycho-social abilities necessary to create and maintain interpersonal connections are frequently lacking in them (Dobri et al., 2020). However, many patients with schizophrenia enjoy a normal sexual life despite the high frequency of sexual dysfunction among this group of patients. Sexual disorders that occur in the schizophrenic population are divided by gender, and there are two different entities (Sadow & Corman, 1983).

Numerous studies have analyzed the sexual life and activity of psychiatric patients resulting in the following conclusions:

Most patients with schizophrenia have decreased thoughts and sexual desire (Ghadirian et al., 1982).

In a controlled study, 51 women diagnosed with schizophrenia had significantly decreased sexual development compared to 101 patients in the control group (Seagraves, 1985).

Compared to 13.4% of the control group, 60% of schizophrenia patients had never had an orgasm. The study also revealed that female patients had a higher prevalence of sexual abuse; sexual abuse happened before the development of the disease, particularly in childhood, and following the emergence of psychotic symptoms (Beck et al., 2009, pp. 30–61).

Male schizophrenic patients men also have considerable sexual dysfunctions. Comparing the sexual function of untreated and treated patients to healthy controls it was discovered that patients without treatment had increased deterioration of sexual desire, while patients treated with neuroleptics had greater sexual desire and sexual thoughts but did not experience erections, orgasms, and sexual satisfaction, as side effects of APs drugs. Both groups were more likely than the control group to have premature ejaculation and to engage in more masturbation (Friedman & Harrison 1984).

Another study consisting of compared 113 male schizophrenic patients and 104 control patients discovered that the preceding group with the psychiatric disorder exhibited less sexual desire, sexual activity, and sexual satisfaction. However, schizophrenia patients have admitted to engaging in sexual activity more frequently than once a week (Lyketsos et al., 1983).

While many authors have noted a decline in sexual function, Akhtar and Thomson indicate a period of hypersexuality and promiscuity at the premature and early outset of the disease in their description of schizophrenia and sexuality (Aizenberg et al., 1995; Ciubara et al., 2015). Men with recent-onset schizophrenia were found to be sexually active, with the majority of their behavior being autoerotic, according to research by Lukoff et al. from 1986 (American Psychiatric Association, 2013, pp. 89–122).

Many patients, both men, and women are affected by the majority of pharmacological treatments for psychiatric disorders which disrupt normal sexual function (Jeste, 2008). Psychiatrists should be ready to alter the treatment plan and take medication therapy into account as a potential cause of sexual dysfunction. Patient compliance may be severely reduced as a result of psychopharmacological treatment's effect on sexuality and may create a barrier of mistrust between the patient and the physician, especially in paranoid patients (Săcuiu et al., 2012).

Sexual dysfunction induced by psychotropic drugs is a major cause of treatment failure. First, neuroleptics possess significant dopamine-blocking activity that may disrupt a normal, healthy erection. Dopamine receptor system stimulation has been proven to increase sexual behavior in animal studies (Stein & Hollander, 1994). According to one study, most patients who received dopamine agonists were able to have erections, and some cases of impotence were likely caused by the central malfunction of dopamine. Human sexual response is hypothesized to be inhibited by dopamine blocking. Second, a lot of antipsychotics have alpha-adrenergic blocking properties that might impair ejaculation and erectile function when they are used as prescribed. The cavernous body and penile erectile tissues' ability to constrict blood vessels is mediated by the adrenergic system, which also plays a role in ejaculation (Lal et al., 1984). Seagraves claimed that drugs that delay or affect male ejaculation may have a role in delaying orgasm or producing anorgasmia in females (Lal et al., 1984).

The increased levels of prolactin in male patients are associated with erectile dysfunction, and adverse effects in female patients being low libido, galactorrhea, irregular menstrual cycles, and deterioration of orgasmic function (Jensvold, 1996; Raboch, 1984; Siever & Davis, 2004).

Cessation of medication usually leads to complete recovery if indeed the sexual dysfunction is an adverse reaction to the medication and not an underlying symptom of the psychiatric disorder. Simple dose reduction may help relieve symptoms. Sexual dysfunction caused by pharmacological side effects might vary from drug to drug and, more importantly, from class to class of neuroleptics. The atypical APs olanzapine, risperidone, and clozapine and the typical APs haloperidol and thioridazine were the most frequently reported for sexual symptoms. Pharmacological studies, on the other hand, point out that aripiprazole, quetiapine, and ziprasidone have modest rates of sexual symptoms. Atypical antipsychotics are less likely than typical antipsychotics to cause sexual adverse effects. The availability of prolactin-sparing antipsychotics should allow psychiatrists to anticipate and deal with the effects of psychopharmaceutical intervention on sexual function. Thioridazine, a traditional antipsychotic, has the highest documented incidence of erectile dysfunction and decreased ejaculatory function, at 33%, whereas clozapine has an exceptionally low reported incidence, at less than 1%. Reduced dosage and the use of an atypical antipsychotic at therapeutic dosages can combat the negative effects of antipsychotic medication (Miller, 1997).

Sex education has a great impact on the rehabilitation of schizophrenic patients. There are very few treatment programs for patients that target their sexuality (Seagraves, 1989).

According to Sadow and Corman, sexual education for psychiatric patients is beneficial because it allows them a secure space to examine their own beliefs and sexual sensations. According to them, sexual education should focus on building intimate skills, educating people about sexual activity, and lowering the prevalence of STDs and unintended pregnancies (Lukoff et al., 1986, Valcea et al., 2016).

Due to the high number of patients receiving neuroleptic medication, the prevalence of sexual dysfunction can be regarded as a substantial psychosocial stressor. Patients with schizophrenia are still sexually active individuals, and due to their condition, deserve recognition and validation. There are certainly good reasons to integrate sexual education instruction into recovery programs, as Lukoff et al. have revealed (Lukoff et al., 1986).

Both male and female schizophrenia patients are having more children at an increased rate. These unwanted and unexpected pregnancies are a result of uneducated psychiatric patients and their ignorance of contraception methods and options (Valcea et al., 2016).

CONCLUSIONS

There is a need for a better clinician-to-patient communication relationship to counteract early side effects of medication, especially side effects related to sexual functioning. This is possible by adopting special programs that encourage patients with schizophrenia to develop healthy sexual relationships and at the same time to overcome some of the social stigma and isolation, known as risk factors for relapse and noncompliance with treatment.

REFERENCES

1. Aizenberg, D., Zemishlany, Z., Dorfman-Etrog, P., & Weizman, A. (1995). Sexual dysfunction in male schizophrenic patients. *The Journal of Clinical Psychiatry*, *56*, 137 -141.
2. Akhtar, S., & Thomson, J. A. (1980). Schizophrenia and sexuality: A review and a report of twelve unusual cases. II. *The Journal of Clinical Psychiatry*, *41*(5), 166-174.
3. American Psychiatric Association. (2013). Schizophrenia and other psychotic disorders. In *Diagnostic and Statistical Manual of Mental Disorders* (5th ed) (pp. 89-122). American Psychiatric Association.
4. Beck, A. T., Rector, N. A., Stolar, N., & Grant, P. (2009). Biological Contributions. In: *Schizophrenia: Cognitive Theory, Research, and Therapy*. Guilford Press.
5. Chirita, R, Sacuiu, I, Burlea, A, & Chirita, V. (2012). The role of nitric oxide inhibitors in the treatment on symptom severity and cognitive deficits in schizophrenia. *International Journal Of Neuropsychopharmacology*, *15*, 113.
6. Ciubară, A., Burlea, Ș. L., Săcuiu, I., Radu, D. A., Untu, I., & Chiriță, R. (2015). Alcohol Addiction–A Psychosocial Perspective. *Procedia-Social And Behavioral Sciences*, *187*, 536-540.
7. Ciubara, A., Cartas, N., Burlea, L. S., Chirita, R., Ciubara, B. A., Untu, I., & Iliescu, D. B. (2015). The Relationship Between Schizophrenia and Criminality. *European Psychiatry*, *30*(S1). [https://doi.org/10.1016/S0924-9338\(15\)30603-9](https://doi.org/10.1016/S0924-9338(15)30603-9)
8. Collins, A. C., & Kellner, R. (1986). Neuroleptics and sexual functioning. *Integrated Care in Psychiatry*, *4*, 96-99.
9. Crismon, L., Argo, T. R., & Buckley, P. F. (2014). Schizophrenia. In J. T. DiPiro, R. L. Talbert, G. C. Yee, L. M. Posey, S. T. Haines, T. D. Nolin, & V. Ellingrod (Eds.), *Pharmacotherapy: a pathophysiologic*

Approach (9th ed.) (pp. 1019–1046). McGraw-Hill.

10. Dobri M. L., Voinea A. I., Moraru C., Nechita P., & Ciubara A. (2020). Psychosis: Between Dreams and Perceptual Reality. *BRAIN. Broad Research in Artificial Intelligence and Neuroscience*, 11(3Sup1), 146-152. DOI:[10.18662/brain/11.3Sup1/130](https://doi.org/10.18662/brain/11.3Sup1/130)
11. Friedman, S., & Harrison, G. (1984). Sexual histories, attitudes, and behavior of schizophrenic and "normal" women. *Archives of Sexual Behavior*, 13, 555-567. <https://doi.org/10.1007/BF01542090>
12. Ghadirian, A. M., Chouinard, G., & Annable, L. (1982). Sexual dysfunction and plasma prolactin levels in neuroleptic-treated schizophrenic outpatients. *Journal of Nervous and Mental Disease*, 170, 463-467. <https://doi.org/10.1097/00005053-198208000-00004>
13. Jensvold, M. F., Plaut, V. C., Rojansky, N., Crenshaw, T., & Halbreich, U. (1996). Sexual side effects of psychotropic drugs in women and men. In M. F. Jensvold, U. Halbreich & J. A. Hamilton (Eds.), *Psychopharmacology and women: Sex, gender and hormones* (pp. 323-368). American Psychiatric Press.
14. Jentsch, J. D., & Roth, R. H. (1999). The neuropsychopharmacology of phencyclidine: from NMDA receptor hypofunction to the dopamine hypothesis of schizophrenia. *Neuropsychopharmacology*, 20(3), 201-225.
15. Jeste, D. V. (2008). *Clinical Handbook of Schizophrenia*. Guilford Press.
16. Kaplan, H. S. (1974). *The new sex therapy*. Random House.
17. Lal, S., Ackman, D., Thavundayil, J. X., Kiely, M. E., & Etienne, P. (1984). Effect of apomorphine, a dopamine receptor agonist, on penile tumescence in normal subjects. *Progress in Neuro-Psychopharmacology and Biological Psychiatry*, 8(4-6), 695-699. [https://doi.org/10.1016/0278-5846\(84\)90040-X](https://doi.org/10.1016/0278-5846(84)90040-X)
18. Lukoff, D., Gioia-Hasick, D., Sullivan, G., Golden, J. S., & Nuechterlein, K. H. (1986). Sex Education and Rehabilitation With Schizophrenic Male Outpatients. *Schizophrenia Bulletin*, 12(4), 669-677. <https://doi.org/10.1093/schbul/12.4.669>
19. Lyketos, G. C., Sakka, P., & Mailis, A. (1983). The sexual adjustment of chronic schizophrenics: A preliminary study. *The British Journal of Psychiatry*, 143, 376-382. DOI: [10.1192/bjp.143.4.376](https://doi.org/10.1192/bjp.143.4.376)
20. Miller, L. J. (1997). Sexuality, reproduction, and family planning in women with schizophrenia. *Schizophrenia Bull*, 23, 623-635. DOI: [10.1093/schbul/23.4.623](https://doi.org/10.1093/schbul/23.4.623)
21. Raboch, J. (1984). Sexual development and life of female schizophrenic patients. *Archives of Sexual Behavior*, 13, 341-349. <https://doi.org/10.1007/BF01541906>
22. Săcuiu, I., Chirita, V., Burlea, A., & Chirita, R. (2012). The effect of the atypical antipsychotics on the cognitive deficit in schizophrenia. In *International Journal Of Neuropsychopharmacology*, 15, 61.
23. Sadow, D., & Corman, A. G. (1983). Teaching a human sexuality course to psychiatric patients: The process, pitfalls, and rewards. *Sexuality and Disability*, 6(1), 47-63. <https://doi.org/10.1007/BF01119849>
24. Segraves, R. T. (1985). Psychiatric drugs and orgasm in the human female. *Journal of Psychosomatic Obstetrics & Gynecology*, 4(2), 125-128. <https://doi.org/10.3109/01674828509085268>
25. Seagraves, R. T. (1989). Effects of psychotropic drugs on human erection and ejaculation. *Archives Of General Psychiatry*, 46, 275 - 284. <https://doi.org/10.1001/archpsyc.1989.01810030081011>
26. Siever, L. J., & Davis, K. L. (2004). The pathophysiology of schizophrenia disorders: perspectives from the spectrum. *American Journal of Psychiatry*, 161(3),398-413. <https://doi.org/10.1176/appi.ajp.161.3.398>
27. Stein, D., & Hollander, E. (1994). Sexual dysfunction associated with the drug treatment of psychiatric disorders. Incidence and treatment. *CNS Drugs*, 2, 78 - 86. DOI:[10.2165/00023210-199402010-00006](https://doi.org/10.2165/00023210-199402010-00006)
28. Untu, I., Chirita, R., Bulgaru-Iliescu, D., Chirila, B. D., Ciubara, A., Burlea, S.L. (2015). Ethical Implications of Bio-Psycho-Social Transformations Entailed by the Aging Process. *Revista de Cercetare si Interventie Sociala*, 48, 216-225. https://www.rcis.ro/images/documente/rcis48_16.pdf
29. Valcea, L., Bulgaru-Iliescu, D., Burlea, S. L., & Ciubara, A. (2016). Patient's rights and communication in the hospital accreditation process. *Revista de Cercetare si Interventie Sociala*, 55, 260-270. https://www.rcis.ro/images/documente/rcis55_17.pdf

