

Assessment of the Prevalence of Erectile Dysfunction in Patients Visiting Psychiatric Outpatient Departments

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Abstract:

Background: Erectile dysfunction (ED) is a common sexual health problem that significantly affects the quality of life of men. Psychiatric disorders and the medications used in their treatment are known to increase the risk of sexual dysfunction, yet ED often remains underreported and inadequately addressed in psychiatric settings.

Aim: To assess the prevalence and severity of erectile dysfunction among patients visiting psychiatric outpatient departments.

Methodology: A hospital-based cross-sectional observational study was conducted among 80 male patients attending the psychiatric outpatient department of Darbhanga Medical College and Hospital, Laheriasarai, Darbhanga, Bihar. Eligible participants aged 18 years and above who had been on psychiatric treatment for at least three months were included. Sociodemographic and clinical data were collected using a structured questionnaire. Erectile dysfunction was assessed using the International Index of Erectile Function (IIEF). Data were analyzed using SPSS version 27.0 with descriptive statistics and Chi-square test.

Results: Erectile dysfunction was present in 55% of participants. Mild ED was most common (25%), followed by mild-to-moderate (15%), moderate (10%), and severe ED (5%). The prevalence of ED increased with advancing age and was frequently observed among patients with depressive and anxiety disorders.

Conclusion: Erectile dysfunction is highly prevalent among psychiatric patients, highlighting the need for routine screening and management of sexual health issues in psychiatric practice.

Keywords: Erectile dysfunction, psychiatric patients, prevalence, sexual dysfunction, IIEF.

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Introduction

Sexual health and sexual function are essential factors which determine a person's complete life experience and their overall health. People achieve psychological contentment through their ability to engage in sexual activities which function as a normal part of their daily life. Erectile function represents the most crucial aspect among different elements which determine male sexual health because it enables partners to experience intimate sexual relations. Erectile dysfunction represents a medical condition which prevents people from achieving or sustaining an erection which becomes necessary for effective sexual activity. The condition impacts sexual performance through its physical effects but also creates deep-reaching effects on mental health and social interactions. Erectile dysfunction affects both the person who suffers from it and their partner because it creates distressing effects which result in lower self-

worth and relationship problems and reduced life satisfaction [1].

Erectile dysfunction has become a widespread health issue which affects men from all age groups. The condition has proven to be present in various populations throughout different cultural environments according to epidemiological research studies [2]. A general community survey which used a cross-sectional design and sampled from the entire national population found that about 22% of men in the United States experienced erectile dysfunction. The studies conducted in other regions of the world show different prevalence rates which prove that erectile dysfunction exists as a worldwide health problem. Research in the United Kingdom found that 32% of the population experienced the condition while studies from Japan and Denmark showed prevalence rates of 26% and 19% respectively [3].

The different rates of sexual health conditions between populations result from their unique combination of demographic characteristics and cultural sexual health practices and medical and psychological health issues.

Despite the fact that erectile dysfunction has always been considered as a condition mainly related to the ageing, there is growing evidence to suggest that it is a condition that may be linked to men in the vast age range [4]. Erectile dysfunction is in most occasions regarded as an extension of systemic illnesses. It is basically seen as a vascular condition since sufficient blood flow to penile tissues is the requirement of initiating and sustaining an erection. Therefore, erectile dysfunction is often linked with other vascular illnesses like diabetes mellitus, hypertension, coronary artery disease, atherosclerosis, and hyperlipidemia [5]. The common pathological process of these conditions is called endothelial dysfunction and this condition disrupts the normal functioning of blood vessels. That is why erectile dysfunction is sometimes regarded as an early sign of cardiovascular and metabolic diseases, and the clinician tends to take the condition as an indication of a vascular issue unless another diagnosis can be given.

Erectile dysfunction can develop from vascular problems but also occurs through various neurological disorders that disrupt the sexual arousal and erection neural pathways [6]. Multiple sclerosis and alcoholic neuropathy and spinal cord injury and Parkinson's disease all lead to erectile dysfunction problems. Any damage or dysfunction that occurs in the central or peripheral nervous system will interrupt the complex neurovascular processes that enable normal erection, resulting in various sexual dysfunction degrees. The erectile dysfunction condition develops from multiple causes which result from vascular and neurological and hormonal and psychological interactions.

Psychiatric conditions represent another important group of factors that can contribute significantly to the development of erectile dysfunction [7]. Sexual functioning disturbances occur frequently with mental health disorders which include anxiety and major depressive disorder. Psychological stress together with emotional disturbances and mood disorders disrupts sexual desire and arousal and performance. Erectile dysfunction develops from various behavioral factors which include alcohol dependence and substance abuse. The etiology of erectile dysfunction includes psychological variables which exist together with these clinical conditions. The following characteristics define obsessive personality traits which include developmental factors that consist of early sexual experiences and childhood sexual trauma and poor body image and low self-esteem and self-confidence. The presence of these factors creates anxiety and negative expectations about sexual activity which leads to erectile difficulties.

The other factor that should be taken into account as far as the prevalence of erectile dysfunction is concerned is the pharmacological treatment. Most of the medications commonly used are reported to have sexual side effects such as erectile dysfunction. The use of antipsychotic drugs, which have been extensively utilized in the treatment of psychiatric diseases, have been specifically attributed to the possibility of inhibiting the process of sexual functioning [8]. Likewise, some antihypertensive drugs also can be the cause of erectile difficulties due to their effects on the vascular or neurological pathways that participate in the erectile response. Consequently, sexual dysfunction is an unwanted side effect of medication in patients who undergo long term treatment of psychiatric or medical illnesses.

Various massive epidemiological investigations have been useful in giving an understanding of the prevalence and severity of erectile dysfunction in diverse populations. A community-based survey of men aged 40 to 70 years, the Massachusetts Male Aging Study (MMAS) is one of the most commonly referred studies [9]. The result of this research showed that the prevalence rates of erectile dysfunction among men are very high, and about 52 percent of the participants identified that they experience some level of erectile challenges. Among these respondents, total erectile dysfunction or total failure to achieve or sustain an erection during sexual stimulation and the lack of nocturnal erections was reported in 10 percent of respondents. Moreover, 17 and 25 percent of the participants reported mild and moderate types of erectile dysfunction respectively. These results indicate the significant burden of erectile dysfunction and underline the importance of increased awareness and clinical concern about the said condition.

Although erectile dysfunction is apparently a prevalent and widespread problem with a high level of influence, it is a comparatively unexplored and under-reported phenomenon in most societies, and especially in the developing world where the cultural aspect and the social stigma might suppress the communication on sexual health. However, there are community-based researches that have tried to evaluate the size of the issue. As an illustration, a survey carried out in Nigeria by Fatusi et al. has indicated a prevalence rate of 43.8% of erectile dysfunction in the general population. In the study, it was also found that the prevalence of the erectile dysfunction also depends on the age with the prevalence between 38.5 years between the ages of 31-40 years to 63.9 years between the ages of 61-70 years. These results agree with the well-known correlation between increasing age and decreasing erectile dysfunction.

Multiple studies conducted in various nations proved that erectile dysfunction occurs at high rates among patients who visit primary care clinics. One study found that age-adjusted prevalence rates for

erectile dysfunction reached 57.4% in Nigeria and 63.6% in Egypt and 80.8% in Pakistan. The findings demonstrate that erectile dysfunction constitutes a major worldwide health problem which impacts men from all cultural and socioeconomic groups.

Psychiatric disorders have been shown to play a particularly important role in the development and persistence of sexual dysfunction. The sexual desire and performance of individuals with depression and anxiety and other mental health disorders experience serious impairment. The antidepressants and antipsychotic medications which doctors prescribe to treat psychiatric disorders have become a major cause of sexual dysfunction in people who suffer from mental health issues. These medications may disturb hormonal equilibrium and neurotransmitter functions and blood vessel operations which leads to erectile problems. Erectile dysfunction occurs more frequently in psychiatric patients than in people without psychiatric disorders.

The relationship between psychiatric disorders and their pharmacological treatment and their impact on sexual functioning requires assessment of erectile dysfunction rates in psychiatric treatment centers. The healthcare system needs to understand the problem's scope because it will assist healthcare providers in detecting affected patients and delivering proper counseling and treatment modifications. The treatment of sexual dysfunction in psychiatric patients leads to improved treatment compliance and better life quality and increased total well-being.

The current research investigates the existence of erectile dysfunction together with its related factors in patients who visit the psychiatric outpatient clinic at a tertiary hospital. The study investigates this psychiatric condition to determine its effect on sexual health among patients who have mental illnesses while emphasizing the necessity of conducting sexual function assessments as part of psychiatric treatment.

Methodology

Study Design: The present study was conducted using a hospital-based cross-sectional observational study design to assess the prevalence of erectile dysfunction among patients attending psychiatric outpatient departments. This design was selected as it allows the assessment of the magnitude of erectile dysfunction among psychiatric patients at a particular point in time and helps in identifying associated demographic and clinical characteristics.

Study Area: The study was conducted at Department of Psychiatry, Darbhanga Medical College and Hospital (DMCH), Laheriasarai, Darbhanga, Bihar, India.

Study Duration: The total duration of the study was 7 months from April 2025 to October 2025

Study Participants: The study participants consisted of male patients attending the psychiatric outpatient department during the study period who met the eligibility criteria and consented to participate in the study.

Inclusion Criteria

- Male patients aged 18 years and above.
- Patients attending the psychiatric outpatient department during the study period.
- Patients diagnosed with psychiatric disorders according to standard clinical diagnostic criteria.
- Patients who had been on psychiatric treatment for at least three months, ensuring relative clinical stability.
- Patients who were willing to provide written informed consent to participate in the study.

Exclusion Criteria

- Patients who were acutely ill or medically unstable at the time of assessment.
- Patients with severe psychotic symptoms or cognitive impairment that could interfere with understanding or completing the questionnaire.
- Patients who had been on treatment for less than three months.
- Patients who refused to participate or did not provide consent.
- Patients with incomplete or improperly filled questionnaires.

Sample Size: The total sample size for the study was 80 participants. Eligible patients attending the psychiatric outpatient department during the study period were recruited consecutively until the required sample size was achieved.

Procedure: Patients attending the psychiatric outpatient department who fulfilled the inclusion criteria were approached and informed about the objectives and purpose of the study. After explaining the study in detail, written informed consent was obtained from those willing to participate.

Sociodemographic information such as age, marital status, educational status, and occupation was collected using a structured sociodemographic questionnaire. Clinical details including psychiatric diagnosis, duration of illness, and treatment history were obtained from patient interviews as well as hospital medical records.

To assess erectile dysfunction, participants were administered the International Index of Erectile Function (IIEF) questionnaire, which is a widely used standardized instrument for evaluating male sexual function. The questionnaire consists of multiple items assessing different domains of sexual functioning, including erectile function, orgasmic function, sexual desire, intercourse satisfaction, and

overall satisfaction. Each item is scored on a Likert scale, and the total score provides an estimate of the presence and severity of erectile dysfunction.

Participants who were able to read and understand the questionnaire completed it independently, while assistance was provided to those who required help in understanding or filling out the questionnaire. All information obtained from the participants was kept strictly confidential and used solely for research purposes. The collected data were carefully checked for completeness and accuracy before being compiled for analysis.

Statistical Analysis: The collected data were entered and analyzed using Statistical Package for Social Sciences (SPSS) version 27.0. Descriptive statistics such as frequency, percentage, mean, and standard deviation were used to summarize the socio-demographic and clinical characteristics of the study participants. The prevalence of erectile dysfunction among psychiatric patients was calculated in percentage form. Inferential statistical tests such as the Chi-square test were applied to examine the association between erectile dysfunction and various demographic and clinical variables wherever appropriate. A p-value of less than 0.05 was considered

statistically significant for determining meaningful associations between variables.

Result

Table 1 presents the socio-demographic characteristics of the study participants (n = 80). The majority of participants belonged to the 31–45 years age group, accounting for 42.5% (n = 34), followed by 18–30 years with 27.5% (n = 22). Participants aged 46–60 years constituted 22.5% (n = 18), while those above 60 years represented the smallest proportion at 7.5% (n = 6). In terms of marital status, most of the participants were married, comprising 62.5% (n = 50), whereas 25% (n = 20) were unmarried and 12.5% (n = 10) were either divorced or widowed. Regarding educational status, the largest proportion had graduate-level education or above (42.5%, n = 34), followed by those with secondary education (37.5%, n = 30) and primary education (20%, n = 16). With respect to occupation, nearly half of the participants were employed (47.5%, n = 38), while 30% (n = 24) were unemployed and 22.5% (n = 18) were self-employed. These findings indicate that most participants were middle-aged, married, relatively well educated, and engaged in some form of employment.

Table 1: Socio-Demographic Characteristics of Study Participants (n = 80)

Variable	Frequency (n)	Percentage (%)
Age Group (years)		
18–30	22	27.5
31–45	34	42.5
46–60	18	22.5
>60	6	7.5
Marital Status		
Married	50	62.5
Unmarried	20	25
Divorced/Widowed	10	12.5
Education Level		
Primary	16	20
Secondary	30	37.5
Graduate and Above	34	42.5
Occupation		
Employed	38	47.5
Unemployed	24	30
Self-employed	18	22.5

Table 2 presents the clinical characteristics of the study participants (n = 80). Among the psychiatric diagnoses, depression was the most common condition, affecting 30 participants (37.5%), followed by anxiety disorders in 18 participants (22.5%). Schizophrenia was reported in 16 participants (20%), while bipolar disorder accounted for 10 participants (12.5%). Other psychiatric conditions were observed in 6 participants (7.5%). Regarding the duration of illness, the majority of participants had been suffering from psychiatric illness for 1–5 years (45%), followed by more than 5 years (30%), while

25% had a duration of illness of less than 1 year. In terms of treatment type, antidepressants were the most frequently prescribed medications, used by 32 participants (40%), followed by antipsychotics in 26 participants (32.5%). Mood stabilizers were used by 12 participants (15%), whereas 10 participants (12.5%) were receiving combination therapy. These findings indicate that depressive disorders and moderate-duration psychiatric illness were most prevalent among the study population, with antidepressants being the most commonly used treatment modality.

Table 2: Clinical Characteristics of Participants (n = 80)		
Clinical Variable	Frequency (n)	Percentage (%)
Psychiatric Diagnosis		
Depression	30	37.5
Anxiety Disorders	18	22.5
Schizophrenia	16	20
Bipolar Disorder	10	12.5
Others	6	7.5
Duration of Illness		
< 1 year	20	25
1–5 years	36	45
>5 years	24	30
Type of Treatment		
Antidepressants	32	40
Antipsychotics	26	32.5
Mood Stabilizers	12	15
Combination Therapy	10	12.5

Table 3 shows the prevalence of erectile dysfunction among the study participants (n = 80). The results indicate that erectile dysfunction was present in 44 participants, accounting for 55% of the total sample, whereas 36 participants (45%) did not report erectile dysfunction. This finding suggests that more than half of the participants visiting the psychiatric outpatient department experienced erectile

dysfunction, highlighting a relatively high prevalence of the condition in this population. The higher proportion of affected individuals indicates that erectile dysfunction may be a common concern among psychiatric patients and emphasizes the importance of routine screening and appropriate management of sexual health issues in this group to improve their overall quality of life.

Table 3: Prevalence of Erectile Dysfunction among Participants (n = 80)		
Erectile Dysfunction Status	Frequency (n)	Percentage (%)
Present	44	55
Absent	36	45

Table 4 shows the severity distribution of erectile dysfunction among the 80 study participants based on the International Index of Erectile Function (IIEF) scores. The findings indicate that a considerable proportion of participants did not experience erectile dysfunction, accounting for 36 individuals (45%). However, more than half of the participants exhibited varying degrees of erectile dysfunction. Mild erectile dysfunction was observed in 20 participants (25%), making it the most common category among those affected. Mild to moderate erectile

dysfunction was reported in 12 participants (15%), while 8 participants (10%) experienced moderate erectile dysfunction. Severe erectile dysfunction was the least common category, affecting only 4 participants (5%). Overall, the results suggest that although a substantial proportion of patients had normal erectile function, a notable number of individuals attending psychiatric outpatient departments experienced different levels of erectile dysfunction, with mild forms being more prevalent than severe cases.

Table 4: Severity of Erectile Dysfunction Based on IIEF Scores (n = 80)		
Severity Category	Frequency (n)	Percentage (%)
No Erectile Dysfunction	36	45
Mild ED	20	25
Mild to Moderate ED	12	15
Moderate ED	8	10
Severe ED	4	5

Table 5 shows the association between age group and erectile dysfunction among the study participants (n = 80). The findings indicate that the prevalence of erectile dysfunction increased with advancing age. In the 18–30 years age group, erectile dysfunction was present in 8 participants (36.4%), while

14 participants (63.6%) did not report erectile dysfunction. Among those aged 31–45 years, 20 participants (58.8%) had erectile dysfunction and 14 (41.2%) did not. In the 46–60 years age group, 12 participants (66.7%) experienced erectile dysfunction, whereas 6 (33.3%) did not. Similarly, in

participants aged above 60 years, erectile dysfunction was observed in 4 individuals (66.7%), while 2 (33.3%) did not report the condition. Overall, out of the total 80 participants, 44 (55.0%) had erectile

dysfunction and 36 (45.0%) did not, suggesting a higher occurrence of erectile dysfunction among older age groups compared to younger participants.

Table 5: Association between Age Group and Erectile Dysfunction (n = 80)

Age Group (years)	ED Present n (%)	ED Absent n (%)	Total
18–30	8 (36.4)	14 (63.6)	22
31–45	20 (58.8)	14 (41.2)	34
46–60	12 (66.7)	6 (33.3)	18
>60	4 (66.7)	2 (33.3)	6
Total	44 (55.0)	36 (45.0)	80

Discussion

The current research study investigates erectile dysfunction (ED) occurrence and degree of disability among psychiatric outpatients who visit psychiatric outpatient departments while examining the relationship between ED and their socio-demographic and clinical characteristics. The study results showed that 55 percent of psychiatric patients suffered from erectile dysfunction which demonstrates that sexual dysfunction represents a widespread yet often unrecognized condition that affects people with mental health disorders. The study results match earlier research which showed that psychiatric patients experience higher rates of erectile dysfunction than people in the general population. For instance, Laumann et al. (2007) [10] reported that the prevalence of erectile dysfunction in community-based populations of men aged 40 years and above ranged from 20% to 40% which is considerably lower than the 55% prevalence observed in the current study. The findings show that psychiatric disorders together with their corresponding treatments raise sexual dysfunction risk for people who experience these conditions.

A study conducted by Fatusi et al. (2003) [11] found that married men in Nigeria had an erectile dysfunction rate of 43.8% which exceeds the rate discovered in this research study. The psychiatric settings show higher prevalence rates because psychological distress together with neurobiological changes from psychiatric disorders and the negative effects of psychotropic drugs create a threefold impact. The psychiatric patients show reduced sexual desire and difficulty achieving sexual arousal together with lower sexual satisfaction because their neurotransmitter systems which include dopamine and serotonin have been disrupted. Antidepressants and antipsychotic medications produce sexual function effects because they interact with both hormonal and neurological systems.

The current study found that 25% of participants exhibited mild erectile dysfunction while 15% of participants showed mild-to-moderate erectile dysfunction and 10% of participants had moderate erectile dysfunction with 5% of participants experiencing

severe erectile dysfunction. The distribution shows that psychiatric patients typically experience mild erectile dysfunction which occurs as the most common form of the condition. Rhoden et al. (2002) [12] reported similar results when they used the International Index of Erectile Function (IIEF-5) to measure erectile dysfunction among men which showed that 30-35% of men studied had mild erectile dysfunction while 10-15% of men experienced moderate erectile dysfunction and less than 10% experienced severe erectile dysfunction. The present study showed that most patients had mild erectile dysfunction which matches the results of the earlier study. The predominance of mild dysfunction suggests that early identification and appropriate management may significantly improve sexual health outcomes among psychiatric patients.

The current research demonstrates that age constitutes a major element which connects to erectile dysfunction. The ED prevalence showed an upward trend which continued to the next age group, starting with 36.4% in the 18-30 age group and progressing to 58.8% in the 31-45 age group and reaching 66.7% among people who reached 46 years or older. The present trend matches previous studies about erectile dysfunction which establish that the condition becomes more prevalent with increasing age. The Massachusetts Male Aging Study reported that the prevalence of erectile dysfunction increased from approximately 40% among men aged 40 years to nearly 70% among men aged 70 years (Feldman et al., 1994) [13]. The growing trend results from age-related bodily transformations which include decreased testosterone production and changes in blood vessels and the development of persistent medical illnesses. The combination of these elements with mental health conditions and extended drug treatment leads to a higher probability of developing erectile dysfunction.

The current research found that marital status functions as a significant factor which affects the way people report and recognize their erectile dysfunction condition. The study found that 62.5% of the participants were married and married participants reported erectile dysfunction at higher rates than those who were single. Akkus et al. (2002) [14]

conducted a population-based study in Turkey which revealed that married men suffered from erectile difficulties because they understood their sexual performance better during intimate relationships. Unmarried people tend to identify and report their sexual issues at lower rates because they lack consistent sexual encounters which make those problems seem less significant to their everyday existence.

The current research study discovered that psychiatric disorders establish a link to erectile dysfunction. The most prevalent diagnosis among study subjects was depression which affected 37.5% of participants while anxiety disorders impacted 22.5% of subjects and schizophrenia affected 20% and bipolar disorder affected 12.5% of participants. Previous research has consistently demonstrated a strong relationship between mood disorders and sexual dysfunction. Rosen et al. (1999) [15] reported that individuals with depressive disorders frequently experience decreased sexual desire and erectile difficulties which affected 40% to 70% of patients with major depression. The individuals experience sexual functioning problems because psychological elements such as low self-esteem and emotional distress and negative self-perception affect their mental state.

Sexual functioning in psychiatric patients depends on various factors, and medication use stands as a crucial element. The current research found that 40% of participants used antidepressants while 32.5% needed antipsychotic treatments. Psychotropic medications have been widely documented to cause sexual side effects, which include erectile dysfunction and delayed ejaculation and reduced libido. Knegtering et al. (2004) [16] reported that approximately 45–60% of patients receiving antipsychotic treatment experienced some form of sexual dysfunction. The drugs produce sexual dysfunction because they block dopaminergic pathways while increasing prolactin levels. The high rates of erectile dysfunction that doctors observe in psychiatric patients emerge from the combination of their medical conditions and the medications they take.

The duration of psychiatric illness also appears to influence the occurrence of erectile dysfunction. The present study showed that 45% of participants had been ill for 1 to 5 years while 30% of participants had been ill for more than five years. People who suffer from chronic psychiatric disorders experience enduring psychological distress which causes them to lose their ability to maintain normal sexual functioning and leads to continuous need for medication. A study by Shamloul and Ghanem (2013) [17] reported that patients with chronic medical or psychiatric conditions developed erectile dysfunction at higher rates than individuals without long-term illnesses because over 50% of patients in many chronic disease populations experienced this condition.

The present study results demonstrate that evidence about erectile dysfunction exists as a widespread health problem which affects psychiatric patients. The observed 55% prevalence underscores the importance of addressing sexual health as an integral component of psychiatric care. Patients frequently avoid discussing their sexual problems because they feel embarrassed or they face cultural stigma or they cannot identify their sexual health issues. Clinicians need to make sexual functioning assessments a standard practice during their psychiatric evaluations. The identification and management of erectile dysfunction at an early stage will lead to better sexual health outcomes and increased treatment adherence and enhanced psychological well-being and improved life quality for psychiatric patients.

Conclusion

The present study highlights that erectile dysfunction is a common problem among patients attending psychiatric outpatient departments. The findings revealed that more than half of the participants (55%) experienced some degree of erectile dysfunction, indicating a relatively high prevalence in this population. Most cases were mild to moderate in severity, suggesting that early identification and timely intervention could significantly improve sexual health outcomes. The results also demonstrated that the occurrence of erectile dysfunction increased with advancing age and was frequently observed among patients suffering from depression and other psychiatric disorders. In addition, the use of psychotropic medications and the chronic nature of psychiatric illness may contribute to the development of sexual dysfunction. Therefore, routine assessment of sexual functioning should be incorporated into psychiatric care to ensure comprehensive management and to improve the overall quality of life of patients.

References

1. Flynn KE, Lin L, Bruner DW, Cyranowski JM, Hahn EA, Jeffery DD, Reese JB, Reeve BB, Shelby RA, Weinfurt KP. Sexual satisfaction and the importance of sexual health to quality of life throughout the life course of US adults. *The journal of sexual medicine*. 2016 Nov;13(11):1642-50.
2. Rosen RC, Fisher WA, Eardley I, Niederberger C, Nadel A, Sand M. The multinational Men's Attitudes to Life Events and Sexuality (MALES) study: I. Prevalence of erectile dysfunction and related health concerns in the general population. *Current medical research and opinion*. 2004 May 1;20(5):607-17.
3. Fleming KM, Aithal GP, Solaymani-Dodaran M, Card TR, West J. Incidence and prevalence of cirrhosis in the United Kingdom, 1992–2001: a general population-based study. *Journal of hepatology*. 2008 Nov 1;49(5):732-8.

4. Gareri P, Castagna A, Francomano D, Cerninara G, De Fazio P. Erectile dysfunction in the elderly: an old widespread issue with novel treatment perspectives. *International journal of endocrinology*. 2014;2014(1):878670.
5. Gandaglia G, Briganti A, Jackson G, Kloner RA, Montorsi F, Montorsi P, Vlachopoulos C. A systematic review of the association between erectile dysfunction and cardiovascular disease. *European urology*. 2014 May 1;65(5):968-78.
6. Andersson KE. Erectile physiological and pathophysiological pathways involved in erectile dysfunction. *The Journal of urology*. 2003 Aug 1;170(2):S6-14.
7. Corona G, Ricca V, Bandini E, Mannucci E, Petrone L, Fisher AD, Lotti F, Balercia G, Faravelli C, Forti G, Maggi M. Association between psychiatric symptoms and erectile dysfunction. *The journal of sexual medicine*. 2008 Feb;5(2):458-68.
8. Montejo AL, Montejo L, Baldwin DS. The impact of severe mental disorders and psychotropic medications on sexual health and its implications for clinical management. *World psychiatry*. 2018 Feb;17(1):3-11.
9. O'Donnell AB, Araujo AB, McKinlay JB. The health of normally aging men: the Massachusetts Male Aging Study (1987–2004). *Experimental gerontology*. 2004 Jul 1;39(7):975-84.
10. Laumann EO, West S, Glasser D, Carson C, Rosen R, Kang JH. Prevalence and correlates of erectile dysfunction by race and ethnicity among men aged 40 or older in the United States: from the male attitudes regarding sexual health survey. *The Journal of Sexual Medicine*. 2007 Jan;4(1):57-65.
11. Fatusi AO, Ijadunola KT, Ojofeitimi EO, Adeyemi MO, Omidoyi AK, Akinyemi A, Adewuyi AA. Assessment of andropause awareness and erectile dysfunction among married men in Ile-Ife, Nigeria. *The Aging Male*. 2003 Jan 1;6(2):79-85.
12. Rhoden EL, Telöken C, Sogari PR, Vargas Souto CA. The use of the simplified International Index of Erectile Function (IIEF-5) as a diagnostic tool to study the prevalence of erectile dysfunction. *International journal of impotence research*. 2002 Aug;14(4):245-50.
13. Feldman HA, Goldstein I, Hatzichristou DG, Krane RJ, McKinlay JB. Impotence and its medical and psychosocial correlates: results of the Massachusetts Male Aging Study. *The Journal of urology*. 1994 Jan 1;151(1):54-61.
14. Akkus E, Kadioglu A, Esen A, Doran S, Ergen A, Anafarta K, Hattat H, Turkish Erectile Dysfunction Prevalence Study Group. Prevalence and correlates of erectile dysfunction in Turkey: a population-based study. *European urology*. 2002 Mar 1;41(3):298-304.
15. Rosen RC, Cappelleri JC, Smith MD, Lipsky J, Pena BM. Development and evaluation of an abridged, 5-item version of the International Index of Erectile Function (IIEF-5) as a diagnostic tool for erectile dysfunction. *International journal of impotence research*. 1999 Dec;11(6):319-26.
16. Knegtering R, Castelein S, Bous H, Van Der Linde J, Bruggeman R, Kluiters H, van den Bosch RJ. A randomized open-label study of the impact of quetiapine versus risperidone on sexual functioning. *Journal of Clinical Psychopharmacology*. 2004 Feb 1;24(1):56-61.
17. Shamloul R, Ghanem H. Erectile dysfunction. *The Lancet*. 2013 Jan 12;381(9861):153-65.