ORIGINAL ARTICLE

Psychological aspects of the quality of life of men with hypoactive sexual desire disorder

Volodymyr I. Trishch, Oryna Z. Detsyk
IVANO-FRANKIVSK NATIONAL MEDICAL UNIVERSITY, IVANO-FRANKIVSK, UKRAINE

ABSTRACT

Aim: To analyze the psychological aspects of the quality of life of men with hypoactive sexual desire disorder.

Materials and Methods: An observed case-control study was conducted. The main group consisted of 61 men with hypoactive sexual desire disorder, the control group consisted of 200 practically healthy men. Standard questionnaires were used to assess quality of life and psychological characteristics: Quality of Life Enjoyment and Satisfaction Questionnaire – Short Form (Q-LES-Q-SF), Oxford Happiness Inventory (OHI), Hospital Anxiety and Depression Scale (HADS).

Results: It was found that hypoactive sexual desire disorder in men is accompanied by a significant decrease in the quality of life (by 37.5%), the main components of which are: dissatisfaction with sexual drive, interest and/or performance (98.4% of respondents), mood (55.7 %), leisure time activities (44.4%) and general physical health (41.0%). Men with hypoactive sexual desire disorder are characterized by an extremely low level of the integral happiness index (13.8% [6.9-20.7] of the maximum possible 100% according to the OHI scale) against the background of 100% prevalence of clinically expressed depression and significant prevalence of subclinical (32.8%) and clinically expressed (55.7%) anxiety. It was displayed a strong negative Correlation between the integral happiness index and the level of anxiety (rs= –0.89) and a moderate negative Correlation – between the integral happiness index and the level of depression (rs= –0.43).

Conclusions: In the management of hypoactive sexual desire disorder a mandatory component should be psychological therapy aimed at depression and anxiety correcting and the quality of life improving.

KEY WORDS: male hypoactive sexual desire disorder, quality of life, anxiety, depression, happiness index, medical care management

Wiad Lek. 2025;78(12):2717-2724. doi: 10.36740/WLek/214413 DOI

INTRODUCTION

Libido is one of the basic instincts that people need to reproduce, and satisfying their sexual desires is an important aspect of their quality of life.

Libido varies greatly from person to person and can temporarily decrease due to various psychological conditions such as fatigue, anxiety, etc. However, a consistently low libido already belongs to the components of male sexual dysfunction. According to the 4th International Consultation on Sexual Medicine (ICSM), Hypoactive Sexual Desire Disorder (HSDD) is defined as a "persistent or recurrent deficiency or absence of sexual or erotic thoughts or fantasies and desire for sexual activity (clinical principle)". The ICSM consensus statement resulted in a detailed assessment of the International Classification of Diseases, 10th Edition (ICD-10) and the Diagnostic and Statistical Manual of Mental Disorders, fifth edition (DSM-5) [1].

According to ICD-10 this disease has code F 52.0 as a primary problem, not a secondary one, for example, against the background of erectile dysfunction [2].

In the DSM-5, male HSDD is defined as "the persistent or recurrent deficiency (or absence) of sexual or erotic thoughts or fantasies and desire for sexual activity". The decision about the level of deficiency or absence is determined by the clinician, taking into account factors that can affect sexual activity, such as: age; the general and sociocultural context of a man's life; persistence of symptoms for at least six months that cause mild, moderate, or severe distress. HSDD can arise from the beginning of sexual life or after relatively normal sexual functioning; can be situational – limited to a certain type of stimulation, in certain situations and with certain partners, as well as generalized – not limited to a certain type of stimulation, in certain situations and with certain partners. Therefore, to establish a diagnosis of HSDD, a mandatory condition is the presence of distress caused by a weakened sexual drive, since there are men who are satisfied with such a condition [3].

A decrease in sexual desire is more characteristic of women, but it also occurs in men. According to various scientific data the prevalence rates of HSDD in the male

population in the world ranges from 3 to 28%, with an average of 15.8% [4-7]. In particular, the DSM-5 indicates that approximately 6% of men aged 18 to 24 and almost half (41%) aged 66 to 74 have problems with sexual desire, so in today's aging society it may be one of the important problems that worsen the quality of life of elderly couples. It is also noted that the prevalence of HSDD among men aged 40-80 varies in different cultures from 12.5% in Northern Europe to 28% in Southeast Asia [3].

All scientists agree that sex drive gradually declines with age, and is a well-known symptom of late-onset hypogonadism syndrome, caused by declining testosterone levels with age [8]. However, HSDD is also described in young men (18-29 years old) with prevalence rates from 6 to 19% [9-11].

Core etiological factors of HSDD are changes among the main three components of sexual drive, namely: psychological, cultural, and biological. Usually, these components are intertwined in clinical practice [12].

The psychological aspects of low libido are based on negative obsessions, such as: lack of erotic thoughts, preoccupation with erections, and limited attitudes towards sexuality. Unattractiveness of a partner, long-term relationships, conflicts in relationships, stress at work, anxiety, depression, age, can be provoking factors of HSDD [13-16].

Among the biological components of low libido in men, the most significant are: androgen deficiency, hyperprolactinemia, stroke, epilepsy, cardiovascular failure, coronary heart disease, chronic prostatitis/chronic pelvic pain syndrome, lower urinary tract symptoms, bodybuilding. Also, other sexual disorders, for example erectile dysfunction and premature ejaculation, can be accompanied by low sexual desire [7-8, 17].

Management of low sexual desire is based on etiological factors, and therefore it is advisable to combine psychotherapy and pharmacotherapy. It has been proven that psychological methods focused on cognitive and behavioral strategies, based on the needs of the couple, including age, are effective in the case of HSDD. Hormone replacement therapy is used for low testosterone levels, and dopamine agonists are used for hyperprolactinemia. In addition, it is necessary to correct endocrine disorders in diabetes, hyper- or hypothyroidism [18-20].

Despite the fact that enough scientific sources have been devoted to the study of HSDD, comprehensive researches of the psychological consequences of reduced libido are still lacking.

AIM

The purpose of this study was to analyze the psychological aspects of the quality of life of men with hypoactive sexual desire disorder.

MATERIALS AND METHODS

An observed case-control study was carried out during 2023-2024, at three private-funded health care out-patient facilities of the Ivano-Frankivsk region of Ukraine.

Sexual desire was assessed on the basis of the unified questionnaire - International index of erectile function (IIEF) [21] in the domain "Sexual desire" (with a score of less than 6 on questions 11, 12). Out of 402 men with sexual dysfunctions, 61 were diagnosed with «hypoactive sexual desire disorder».

The assessment of quality of life (QoL) was carried out on the basis of a short standardized questionnaire Q-LES-Q-SF (Quality of Life Enjoyment and Satisfaction Questionnaire – Short Form) [22], as well as the Oxford Happiness Inventory (OHI).

The Q-LES-Q-SF consists of 14 main questions about satisfaction with various aspects of quality of life and two additional questions about satisfaction with treatment outcomes and life in general. For each of the questions, the respondents chose one of the answers: very bad, bad, satisfactory, good, very good, which corresponded to points from 1 to 5. For each respondent, his individual quality of life integral index was also calculated for the main 14 questions as a percentage of the maximum score (70) and its percent decrease from the maximum possible 100%.

The OHI contains 29 questions, each of which has four answers, corresponding to points from 0 to 3. Accordingly, an individual integral happiness index was calculated for each respondent as a percentage of the maximum possible 87 points. At values of 0-20%, the index was evaluated as low, 21-40% - below average, 41-60% - average, 61-80% - above average, and 81-100% - high.

The HADS (Hospital Anxiety and Depression Scale) [23] was used for screening detection of anxiety and depression, which consists of 14 questions, the unpaired ones of which are designed to assess anxiety, and the paired ones – depression. There are four answers to each question, corresponding to points from 0 to 3. According to the corresponding sum of points (for paired and unpaired questions), the level of anxiety and depression was determined for each respondent: 0-7 points – normal, 8-10 points – subclinical, and more than 11 points – clinically expressed anxiety and depression.

The median age of the examinees was 33 [26.0-40.0] years. Accordingly, the largest shares of patients were under 30 years old (44.3%) and 30-39 years old (31.1%). The rest – equally represented each of the following age groups - 8.2% of people aged 40-49, 50-59 and over 60 years.

The individual data obtained were compared with the indicators of 200 practically healthy men who,

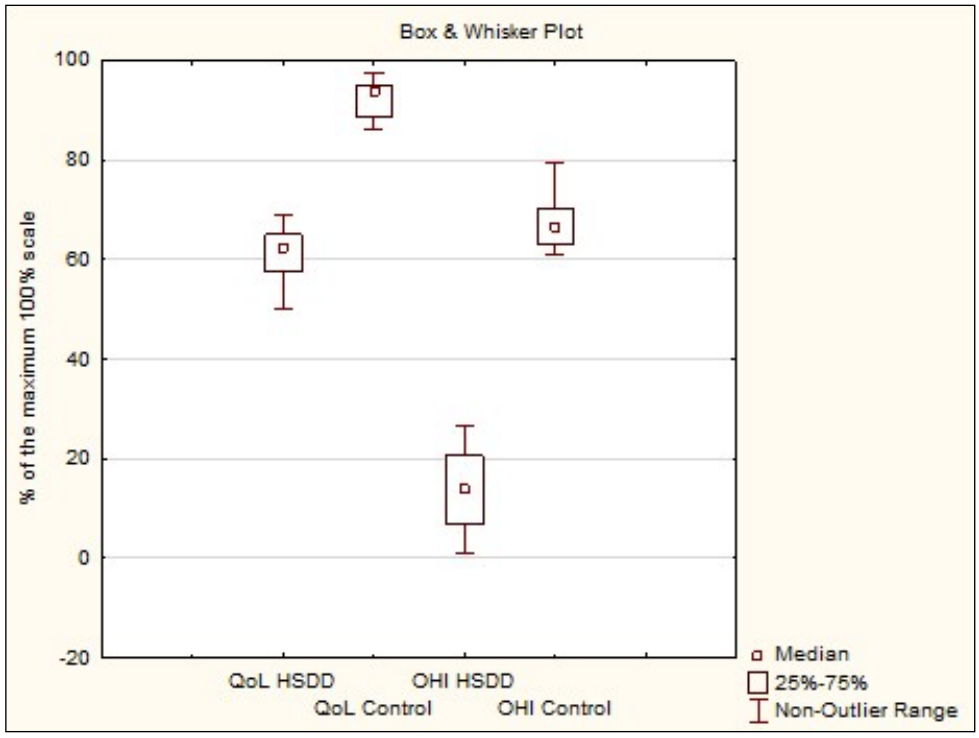

Fig.1. Quality of life integral indices and integral happiness indices in the comparison groups
Picture taken by the authors

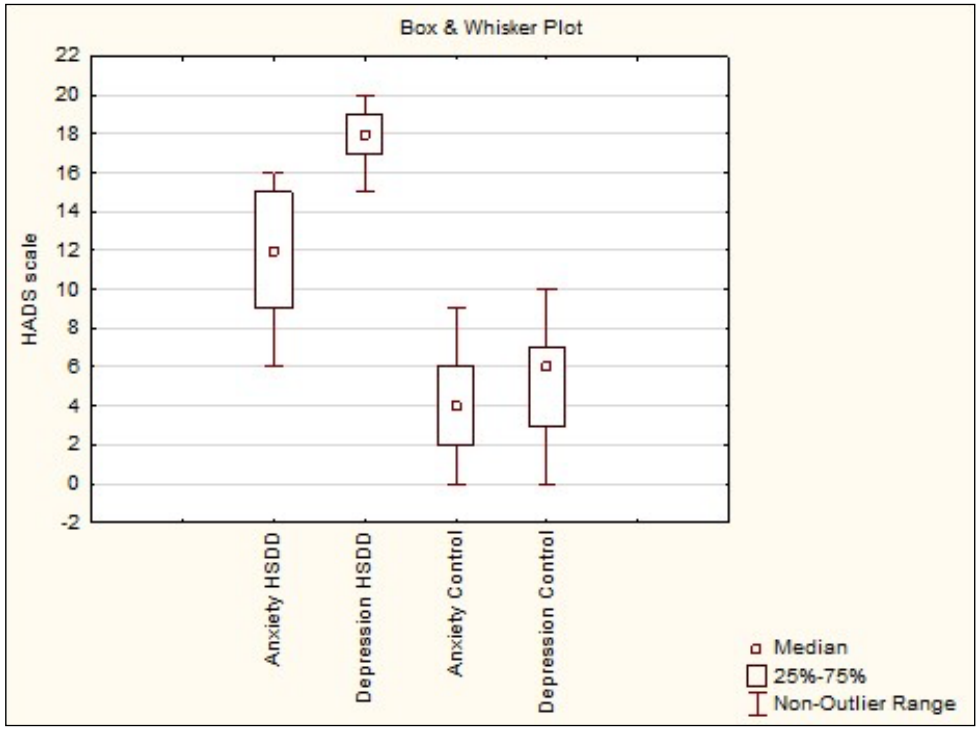

Fig. 2. Levels of anxiety and depression according to the HADS scale in comparison groups
Picture taken by the authors

according to the results of their examination, did not have sexual dysfunctions. The median age of the control group did not differ from the same age in the main group (p>0.05) and was 33.0 [27.0-42.0] years.

The research design and programs were reviewed and approved by the Ivano-Frankivsk National Medical University Ethics Committee (protocol № 133/23 dated March 29, 2023).

All statistical calculations were performed with the help of built-in Microsoft Excel data analysis license packages and the Statistic 10.0 program.

Quantitative data obtained in the study (age, scores of answers to individual questions and questionnaires in general, individual integral indicators of quality of life and indices of happiness) were first checked for the type of their distribution according to the Shapiro-Wilk's W test. Since most of them did not correspond to the law of normal distribution, the median (Me) and interquartile range (25%-75%) were chosen to represent the measure of central tendency, and non-parametric the

Mann-Whitney U test was used to assess the reliability of the data between the main and control groups.

Accordingly, the relationships between the indicators were evaluated based on the calculation of the non-parametric Spearman's rank correlation coefficient (r_s).

Statistical processing of categorical (qualitative) data was carried out by calculating the prevalence rates of answers per 100 r, and respondents the reliability of their differences in comparing groups was assessed using the Pearson chi-square ($\chi 2$) test.

RESULTS

It was found that the median of the quality-of-life integral index of respondents with HSDD is significantly lower than in the control group: 62.5% [57.5-65.0] of the maximum possible 100% versus 93.6% [88.6-95.0], respectively ($p<0.001$). That is present decrease of QoL in men with HSDD was -37.5%, while in the control group the quality of life was reduced by 6.4%.

The study of individual components of QoL showed that the main reasons for its deterioration in the respondents of the main group were quite predictably dissatisfaction with sexual drive, interest and/or performance (98.4% of respondents), combined with negative self-assessments of mood (55.7%), quality of leisure time activities (44.3%) and general physical health (41.0%), while dissatisfaction with other aspects of QoL (financial situation, work, relationships with people, etc.) ranged from 6.6-18.0%.

Such an obvious predominance of psychological aspects of QoL in respondents with HSDD may explain the generally low integral happiness index OHI among them (Fig. 1).

Thus, the median of the integral happiness indices in men with HSDD was only 13.8% [6.9-20.7] of the maximum possible 100%, which is assessed as a low level according to the criteria for interpreting the results of the OHI questionnaire. It should be noted that in the control group this index was significantly higher ($p<0.001$), but far from high, and corresponded to an above average level - 66.7% [63.2-70.1].

The prevalence rates of an anxiety and depression were much higher in the group of men with HSDD than in the control group ($p<0.001$). Thus, only 11.5% of the respondents of the main group corresponded to the norm according to the "Anxiety" subscale of HADS, 32.8% had subclinical anxiety and more than half (55.7%) had clinically expressed anxiety. As for depression, all 100% of the respondents from the main group had clinically expressed one. The majority of respondents from the control group had the norm according to the HADS criteria and none of them had clinical of anxiety and depression, but 6.5% of them had subclinical anxiety and almost every fifth (21.0%) – subclinical depression.

Accordingly, the median of scores on the "Depression" subscale in the HSDD group were higher than on the "Anxiety" subscale: 18.0 [17.0-19.0] versus 12.0 [9.0-15.0] points (Fig. 2). In the control group, similar indices were 6.0 [3.0-7.0] and 4.0 [2.0-6.0] points ($p<0.001$).

The correlation analysis displayed that in men with HSDD there is a negative strong Correlation ($r_s= –0.89$, $p<0.05$) between the integral happiness index and the level of anxiety (Fig. 3) and a moderate negative Correlation – between the integral happiness index and the level of depression (r_s –0.43, $p<0.05$) (Fig. 4).

DISCUSSION

The hypoactive sexual desire disorder is more often studied in the female population, since this pathology is more common among them [24-25]. While among men, scientists pay more attention to other forms of sexual disorders that are more common among them, such as erectile dysfunction and premature ejaculation. [26]. At the same time, HSDD is also occur in men and is accompanied, as research data show, by low sexual well-being, the sexual distress growth, and the deterioration of interpersonal relationships due to the decrease of the quality of sexual life [27-29].

Usually, scientists note a decline in sexuality in men with age [30], but they emphasize that HSDD also occurs among young people [11]. In particular, our study included 61 male persons with HSDD, whose median age was 33 [26,0-40,0] years, which highlights of the problem relevance, because they are mostly young workable people. Nevertheless, the data obtained in our study showed a significant decrease in the quality of life in men with HSDD – by 37.5%, mainly due to the psychological components of the QoL. In our opinion, this can serve as an explanation for the critically low level of the integral happiness indices OHI, the median of which in the observed men with HSDD was only 13.8% [6.9-20.7] of the maximum possible 100%. However, in the control group, this index corresponded to an above-average level - 66.7% [63.2-70.1]. In our opinion, this situation is largely explained by the fact that the study was conducted during a full-scale war in Ukraine, which has a negative impact on the mental health of all population.

It should be noted that the scientists pay considerable attention to such psychological companions of HSDD as anxiety and depression, which can be both predictors of the occurrence and manifestations of reduced sexual desire. [12, 14-17]. In our study, it was shown that depression prevails

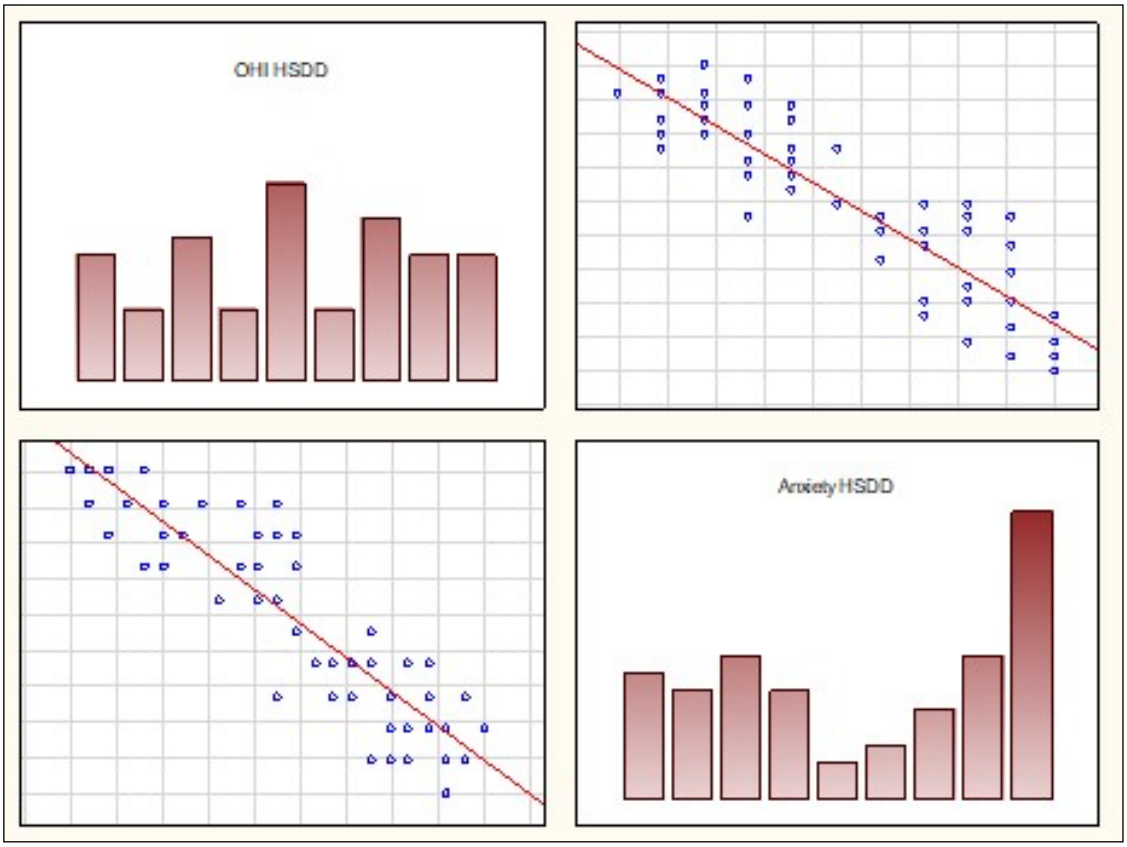

Fig. 3. Correlation between the integral happiness index and the level of anxiety among men with hypoactive sexual desire disorder
Picture taken by the authors

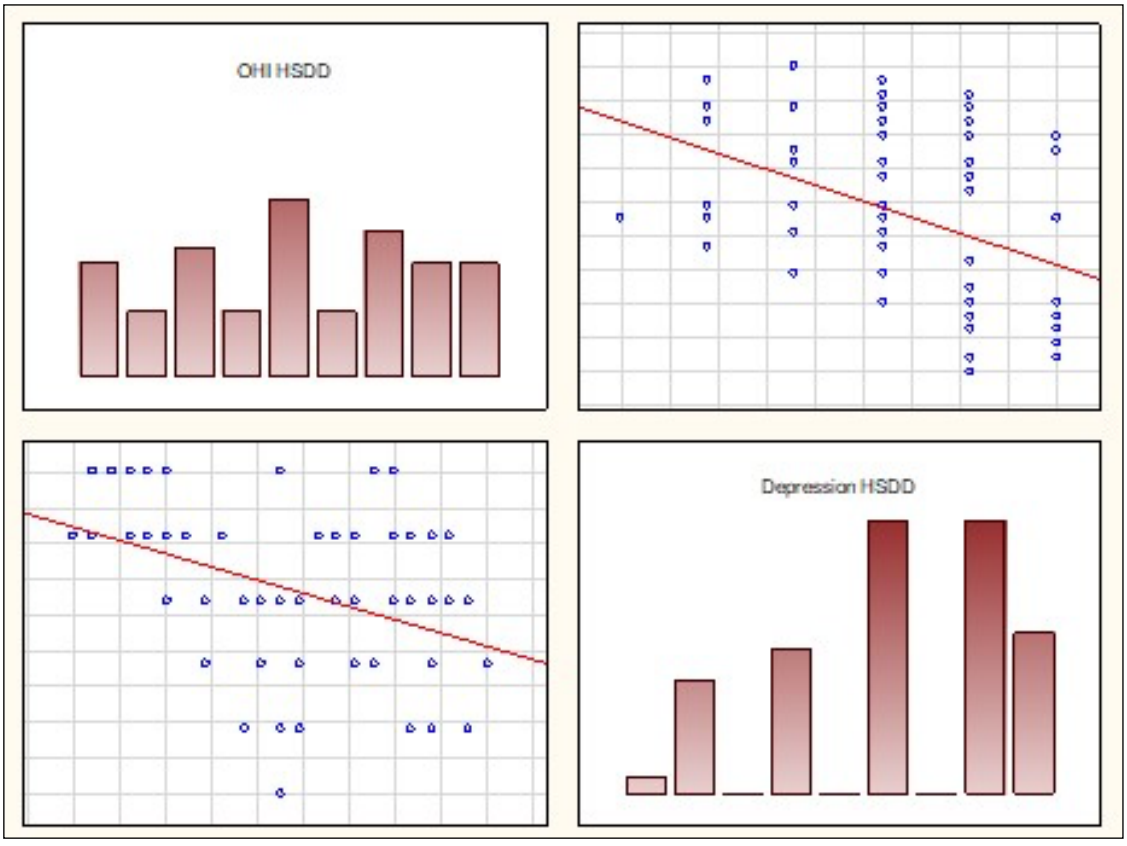

Fig. 4. Correlation between the integral happiness index and the level of depression among men with hypoactive sexual desire disorder
Picture taken by the authors

in men with HSDD - 100% of them had clinically advanced form according to the HADS scale. The same level of anxiety was found in 55.7% of respondents in the main group, and another 32.8% had subclinical manifestations of it.

The correlation analysis displayed that in men with HSDD there is a negative strong Correlation (r_s = –0.89) between the integral happiness index and the level of anxiety and a moderate negative Correlation – between the integral happiness index and the level of depression (r_s –0.43). That is, with the development of anxiety and depression, the feeling of happiness decreases.

LIMITATIONS

The study was conducted during the full-scale aggression of the russian federation, which could deepen psychological reactions and be an additional factor in the decrease in sexual activity due to the generally negative impact of the war on the mental health of the whole population.

The research was conducted in private-owned health-care facilities. After all, currently there are practically no publicly-owned health care facilities in Ukraine where patients can receive sexological care, which, as it is known, has a negative impact on its financial accessibility. Obviously, this was the main reason why the sample included mostly young working-age people, although HSDD are more common among older men. On the other hand, this may be a reflection of the higher need of young men to seek medical care when the quality of their sexual life decreases, while older people tend to consider a decrease in libido as a normal option.

CONCLUSIONS

It was found that hypoactive sexual desire disorder in men is accompanied by a significant decrease in the quality of life (by 37.5%), the main components of which are: dissatisfaction with sexual drive, interest and/or performance (98.4% of respondents), mood (55.7 %), leisure time activities (44.4%) and general physical health (41.0%).

It is shown that men with hypoactive sexual desire disorder are characterized by an extremely low level of the integral happiness index (13.8% [6.9-20.7] of the maximum possible 100% according to the OHI scale) against the background of 100% prevalence of clinically expressed depression and significant prevalence of subclinical (32.8%) and clinically expressed (55.7%) anxiety.

It was displayed a strong negative Correlation between the integral happiness index and the level of anxiety (r_s = –0.89) and a moderate negative Correlation – between the integral happiness index and the level of depression (r_s = –0.43).

In the management of hypoactive sexual desire disorder a mandatory component should be psychological therapy aimed at depression and anxiety correcting and the quality of life improving.

REFERENCES

1. McCabe MP, Sharlip ID, Atalla E, Balon R, Fisher AD, Laumann E, Lee SW. Definitions of Sexual Dysfunctions in Women and Men: A Consensus Statement from the Fourth International Consultation on Sexual Medicine 2015. J Sex Med. 2016;13:135. doi: 10.1016/j.jsxm.2015.12.019. DOI
2. International Statistical Classification of Diseases and Related Health Problems 10th Revision. https://icd.who.int/browse10/2019/en [Accessed 03 May 2025]
3. Diagnostic and Statistical Manual of Mental Disorders. Fifth Edition. United States: American Psychiatric Association. 2013, p.947.
4. Quinta Gomes AL, Nobre PJ. Prevalence of sexual problems in Portugal: results of a population-based study using a stratified sample of men aged 18 to 70 years. J Sex Res. 2014;51:13 doi:10.1080/00224499.2012.744953. DOI
5. Kocharian HS. Poshyrenist znyzhenoho libido i hipoaktyvnoho rozladu statevoho potiahu. [Prevalence of decreased libido and hypoactive sexual desire disorder] Zdorovia cholovika. 2021;4:72-78. (Ukrainian)
6. Laumann EO, Nicolosi A, Glasser DB et al. Sexual problems among women and men aged 40-80 y: prevalence and correlates identified in the Global Study of Sexual Attitudes and Behaviors. Int J Impot Res. 2005;17:39. doi: 10.1038/sj.ijir.3901250. DOI
7. Meissner VH, Schroeter L, Köhn FM et al. Factors Associated with Low Sexual Desire in 45-Year-Old Men: Findings from the German Male Sex-Study. J Sex Med. 2019;16:981. doi: 10.1016/j.jsxm.2019.04.018. DOI
8. Zitzmann M, Faber S, Nieschlaget E. Association of specific symptoms and metabolic risks with serum testosterone in older men. J Clin Endocrinol Metab. 2006;91:4335. doi: 10.1210/jc.2006-0401. DOI
9. Laumann EO, Paik A, Rosen RC. Sexual dysfunction in the United States: prevalence and predictors. Jama. 1999;281:537. doi:10.1001/jama.281.6.537. DOI
10. Najman JM, Dunne MP, Boyle FM et al. Sexual dysfunction in the Australian population. Aust Fam Physician. 2003;32:951. https://pubmed.ncbi.nlm.nih.gov/14650796
11. Traeen B, Stigumet H. Sexual problems in 18-67-year-old Norwegians. Scand J Public Health. 2010;38:445. doi: 10.1177/1403494810371245. DOI

12. Nimbi FM, Tripodi F, Rossi R et al. Male Sexual Desire: An Overview of Biological, Psychological, Sexual, Relational, and Cultural Factors Influencing Desire. Sex Med Rev. 2020;8(1):59-91. doi:10.1016/ j. sxmr.2018.12.002. DOI
13. Nimbi FM, Tripodi F, Rossi R, Simonelli C. Expanding the Analysis of Psychosocial Factors of Sexual Desire in Men. J Sex Med. 2018;15:230. doi: 10.1016/j.jsxm.2017.11.227. DOI
14. Carvalheira A, Traeen B, Štulhoferet A. Correlates of men's sexual interest: a cross-cultural study. J Sex Med. 2014;11:154. doi: 10.1111/ jsm.12345. DOI
15. Deziel J, Godbout N, Hébert M. Anxiety, Dispositional Mindfulness, and Sexual Desire in Men Consulting in Clinical Sexology: A Mediational Model. J Sex Marital Ther. 2018;44:513. doi:10.1080/0092623X.2017.1405308. DOI
16. Nimbi FM, Tripodi F, Rossi R et al. Which psychosocial variables affect drive the most? Analysis of sexual desire in a group of Italian men. Int J Impot Res. 2019;31(6):410-423. doi: 10.1038/s41443-018-0105-8. DOI
17. Rubio-Aurioles E, Bivalacquaet TJ. Standard operational procedures for low sexual desire in men. J Sex Med, 2013. 10: 94. doi: 10.1111/ j.1743-6109.2012. 02778. x DOI
18. Jannini EA, Nappi RE. Couplepause: A New Paradigm in Treating Sexual Dysfunction During Menopause and Andropause. Sex Med Rev. 2018;6:384. doi: 10.1016/j.sxmr.2017.11.002. DOI
19. Wang AT, Mullan RJ, Lane MA et al. Treatment of hyperprolactinemia: a systematic review and meta-analysis. Syst Rev. 2012;1:33 doi: 10.1186/2046-4053-1-33. DOI
20. Cuijpers P, Straten AV, Hollon SD, Andersson G. The contribution of active medication to combined treatments of psychotherapy and pharmacotherapy for adult depression: a meta-analysis. Acta Psychiatr Scand. 2010;121:415. doi: 10.1111/j.1600-0447.2009.01513x. DOI
21. Rosen R, Riley A, Wagner G et al. The International Index of Erectile Function (IIEF): A multidimensional scale for assessment of erectile dysfunction. Urology. 1997;49:822-830. doi: 10.1016/s0090-4295(97)00238-0. DOI
22. Endicott J, Nee J, Harrison W, Blumenthal R. Quality of Life Enjoyment and Satisfaction Questionnaire: A New Measure. Psychopharmacology Bulletin. 1993;29:321-326.
23. Zigmond AS, Snaith RP. The hospital anxiety and depression scale. Acta Psychiatr. Scand. 1983;67:361–370. doi:10.1111/j.1600-0447.1983. tb09716.x. DOI
24. Parish SJ, Hahn SR. Hypoactive Sexual Desire Disorder: A Review of Epidemiology, Biopsychology, Diagnosis, and Treatment. Sex Med Rev. 2016;4(2):103-120. doi: 10.1016/j.sxmr.2015.11.009. DOI
25. Fooladi E, Islam RM, Bell RJ et al. The prevalence of hypoactive sexual desire disorder in Australian and Iranian women at midlife. Menopause. 2020;27(11):1274-1280. doi: 10.1097/GME.0000000000001665. DOI
26. McCarthy B, McDonald D. Assessment, treatment, and relapse prevention: male hypoactive sexual desire disorder. J Sex Marital Ther. 2009;35(1):58-67. doi: 10.1080/00926230802525653. DOI
27. McClung E, Rosen NO, Dubé JP et al. Motivation When Desire Is Low: Associations Between Sexual Motivation and Sexual Intimacy, Sexual Satisfaction, and Sexual Distress for Men with Hypoactive Sexual Desire Disorder and Their Partners. Arch Sex Behav. 2024;53(3):1075-1089. doi: 10.1007/s10508-023-02752-x. DOI
28. Belu CF, Serena Corsini-Munt S, Dubé JP et al. Partner responses to low desire among couples coping with male hypoactive sexual desire disorder and associations with sexual well-being. J Sex Med. 2023;20(7):955-964. doi: 10.1093/jsxmed/qdad069. DOI
29. Wang GA, Corsini-Munt S, Dubé JP et al. Regulate and Communicate: Associations between Emotion Regulation and Sexual Communication among Men with Hypoactive Sexual Desire Disorder and their Partners. J Sex Res. 2023;60(3):325-335. doi: 10.1080/00224499.2022.2092588. DOI
30. Lu Y, Fan S, Cui J et. al. The decline in sexual function, psychological disorders (anxiety and depression) and life satisfaction in older men: A cross-sectional study in a hospital-based population. Andrologia. 2020;52(5):e13559. doi: 10.1111/and.13559. DOI

CONFLICT OF INTEREST

The Authors declare no conflict of interest

CORRESPONDING AUTHOR

Volodymyr I. Trishch
Ivano-Frankivsk National Medical University
2 Halytska St, 76018 Ivano-Frankivsk, Ukraine
e-mail: votrishch@ifnmu.edu.ua

ORCID AND CONTRIBUTIONSHIP
Volodymyr I. Trishch: 0000-0001-6569-0258 A B D F
Oryna Z. Detsyk: 0000-0003-3975-9455 A C E F

A – Work concept and design, B – Data collection and analysis, C – Responsibility for statistical analysis, D – Writing the article, E – Critical review, F – Final approval of the article

RECEIVED: 30.11.2024
ACCEPTED: 18.11.2025

CREATIVE COMMONS 4.0