

# Quality of Sexual Life and Its Relationship with Socio-demographic Characteristics among Older Men with symptoms of Andropause

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ARTICLE INFO	ABSTRACT
<p><i>Article type:</i> Original article</p>	<p><b>Background &amp; aim:</b> Evidence now indicates insufficient knowledge about the quality of sexual life of older adults with symptoms of andropause. This study was therefore performed to measure the quality of sexual life of older adults with symptoms of andropause and its relationship with some socio-demographic characteristics.</p>
<p><i>Article History:</i> Received: 13-Jan-2022 Accepted: 18-Jul-2022</p>	<p><b>Methods:</b> This cross-sectional study was performed on 271 older adults with symptoms of andropause, who were selected by convenience sampling from health centers in Mashhad, Iran in 2021. The data was collected using a demographic questionnaire and the Men's Sexual Quality of Life Questionnaire. Data were analyzed using correlation tests, independent t-tests, and one-way analysis of variance.</p>
<p><i>Key words:</i> Quality of Sexual Life Andropause Syndrome Male Menopause Older Men</p>	<p><b>Results:</b> The mean age of older men with andropause was 73.37±8.08 years. The quality of sexual life had a significant relationship with the underlying variables including age, education, type of employment, duration of marriage, age of spouse, education of spouse, type of spouse employment, type of sexual attitude of the spouse, number of sexual intercourse and chronic diseases (P&lt;0.05). The results showed a significant inverse relationship between quality of sexual life and andropause severity in older adults (r = -0.36, P &lt;0.001).</p> <p><b>Conclusion:</b> Based on the results, it can be recommended to the healthcare planners to improve quality of sexual life of older men with andropause by paying more attention to the role of changeable factors such as knowledge and type of sexual attitude of spouses, knowledge regarding andropause and sexual intercourse as well as monitoring some underlying diseases in planning health promotion programs.</p>

► Please cite this paper as:

Mohammadi M, Allahverdipour H, Ghanbari Moghaddam A, Matlabi H. Quality of Sexual Life and Its Relationship with Socio-demographic Characteristics among Older Men with symptoms of Andropause. Journal of Midwifery and Reproductive Health. 2022; 10(4): 3508-3515. DOI: 10.22038/JMRH.2022.62946.1798

## Introduction

With the gradual but significant increase in the population and life expectancy of the elderly in Iran and the emergence of male menopause symptoms, the issue of "quality of sexual life"

will become a severe concern in the field of health, which requires special attention to prevent disabilities resulting from andropause (1). Andropause, or "male menopause," which is

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also known as Testosterone Deficiency Syndrome (TDS) in the world, is a stage of men's life in old age where the changes experienced in this period affect their physical, mental, and emotional health and causes the symptoms such as weakness, decrease in sexual desire and erectile dysfunction, depressed mood, anxiety, insomnia and concentration disorder (2).

The severity of andropause includes mild, moderate, and severe (2). According to global statistics, more than 480,000 men over 40 experience andropause, which gradually progresses in severity and size (3). One of the dimensions of the quality of life which may occur due to the influence of andropause in an older adult is the quality of sexual life (4). In general, the quality of sexual life refers to the feeling of sexual attraction, interest, and participation in sexual activity and the perception of sexual performance (5). Nevertheless, the dimensions of the quality of sexual life in men mainly include sexual self-confidence, emotional health, and interpersonal relationships (6).

When men's sexual desire declines, they no longer show much tendency to have intercourse and, in acute cases, can threaten the family's foundation (4). The changes caused by andropause are not only profound but may also be a threat to sexual life in some people (7). Male sexual disorders during andropause have different types and a wide range, one of the most common of which is erectile dysfunction, sexual desire disorder, and ejaculation disorder (8). However, researchers believe that the occurrence of male menopause signs and symptoms does not necessarily mean that a person is unable to play a positive and influential role in a sexual interaction (9).

It seems that evaluation of sexual issues should be started from the first level of providing medical services, such as health centers, family doctors, geriatric experts, endocrinologists or counselors, and psychologists (10). The quality of men's sexual life depends to a large extent on their personality traits, emotions, cognition, beliefs, and thoughts, which of course, are greatly influenced by information, media, training, and experiences of the individual, so in order to improve the sexual health, the therapists of each

society should consider the background factors, especially the cultural background of the society (3). A good sexual life includes the performance resulting from interacting with all physical, psychological, social, and emotional factors, creating a clear mental understanding and strengthening the desire to participate in a future sexual relationship (11).

Despite the increasing needs for providing health programs to improve the quality of sexual life in the elderly population, there is little epidemiological data in this regard. Unfortunately, in Iran, despite the increasing importance of the quality of sexual life during andropause in the world, local studies are still limited, insignificant and superficial (1, 12-14). Therefore, due to the dearth of studies inside the country, this study aimed to measure the quality of sexual life of older adults suffering from andropause and its relationship with some socio-demographic characteristics in Iran.

## Materials and Methods

This cross-sectional study was performed in 2021 among older adults in Mashhad. The total sample size included 271 men with symptoms of andropause, who were selected as targeted through the data related to the investigation of the prevalence of andropause in the city using cluster sampling method among urban health centers and using andropause symptoms assessment tool for Iranian men MASSQ-25 (15).

The inclusion criteria were: age  $\geq 60$  years, informed consent; living in the city of Mashhad for at least one recent year, the state of alertness and cognition necessary to obtain correct information, and suffering from moderate or severe degrees of andropause syndrome. Also, the exclusion criteria were no desire to continue participating in the research and the lack of sufficient answers to the questions of the questionnaires.

After identifying the sample and explaining the research through a phone call (recorded in the files of health centers) or WhatsApp (according to the conditions of the Covid-19 epidemic and the need to comply with health protocols), the information required for the questionnaires was completed by the principle investigator and his assistants. A code was given to each of the questionnaires. Data was collected using socio-demographic

questionnaire and the Standard Questionnaire of Men's Sexual Quality of Life (SQL-M) in Farsi developed by Azin and colleagues in 2015 as well as Iranian Men's Andropause Syndrome Self-assessment Questionnaire (MASSQ-25) (10). Its reliability was tested through calculation of internal consistency and test-retest with Cronbach's alpha of 94% and the intraclass correlation of 95%.

This questionnaire consists of 11 items. The items have a 6-point Likert scale from a score of 1 (agree) to six (disagree) with a range of 11-66, indicating a higher quality of life (10). Regarding the Iranian men's andropause syndrome self-assessment questionnaire MASSQ-25, the cut-off points was as follows: no or mild symptoms  $\leq 40$ , moderate symptoms = 41-84, and severe symptoms  $\geq 85$ . This questionnaire contains 25 items that measure

four categories of sexual, physical, psychological, and behavioral symptoms.

Data were entered into the SPSS-V23 software and were analyzed using frequency indices, mean, standard deviation, correlation coefficient, independent t-tests, and one-way analysis of variance.

## Results

The mean age of the participants was  $73.37 \pm 8.08$  years (range of 60 to 89 years). The highest education of older men was elementary with 41%, and voluntary work with 37% was the most common type of employment. Moreover, 83% of them were married. The most elderly had moderate health status (through self-report), while nearly 80% did not exercise. Also, 70% of them did not have a good income level. The status of sexual life quality scores in older adults with andropause symptoms was shown in Table 1.

**Table 1.** Frequency distribution of participants according to the socio- demographic characteristics and their relationship with quality of sexual life in older men with andropause

Variable	Mean	Standard deviation	Lowest-Highest
Quality of sexual life	48.86	14.43	11-66
Variable	Frequency (%)	Mean Score of Quality of Sexual Life	P-value
<b>Marital status</b>			
Single	-	-	
Married	226 (83)	45.62	0.135
Single due to husband's death	39 (15)	41.15	
Single due to divorce	6 (2)	40.66	
<b>Educational level</b>			
Illiterate	98 (36)	44.69	
Elementary	111 (41)	42.55	0.043
Secondary and High school	55 (21)	48.40	
College	4 (2)	46	
<b>Occupation</b>			
Employee	4 (2)	36	
Free job	79 (28)	41.05	
Housewife / Unemployed	57 (21)	49.18	<0.001
Retired / pensioner	30 (11)	39.92	
Voluntary job	101 (37)	47.87	
<b>Health status (self-report)</b>			
Very good	-	-	
Good	45 (17)	42.65	<0.001
Moderate	162 (61)	45.51	

Variable	Mean	Standard deviation	Lowest-Highest
Quality of sexual life	48.86	14.43	11-66
Variable	Frequency (%)	Mean Score of Quality of Sexual Life	P-value
Poor	51 (19)	40.33	
Very poor	9(3)	63.77	
<b>Exercise</b>			
Yes	56 (21)	45.96	0.459
No	215 (79)	44.63	
<b>Income sufficiency</b>			
Good	76 (28)	46.34	0.295
Undesirable	190 (72)	44.33	
<b>Body mass</b>			
Thin	2 (1)	32	0.232
Desirable	45 (12)	44.80	
Overweight	107 (40)	45.42	
Fat	36(14)	42.62	
<b>Patriarchal thinking</b>			
Yes	145(54)	43.44	0.064
No	126(46)	46.60	
<b>Taking hormonal drugs</b>			
Yes	16 (6)	43	0.576
No	225 (94)	45.02	
drug use			
Yes	15 (5)	21.26	<0.001
No	256 (95)	46.29	
<b>Suffering from a specific disease*</b>			
Yes	136 (50)	42.75	0.011
No	135 (50)	47.08	
<b>Awareness of andropause</b>			
Aware	16(6)	45.43	<0.001
Unaware	252 (94)	34.50	

\*Vasculitis, cancer, thyroid, cardiovascular disease, mental and nervous

Also, the status of the studied units in terms of demographic-social variables and their relationship with the quality of sexual life scores was shown in Table 2.

Other findings showed an inverse and significant relationship ( $P < 0.001$ ) between the

quality of sexual life and the severity of andropause symptoms in general ( $r = -0.36$ ) and in all its dimensions, including psychological symptoms ( $r = -0.37$ ), physical symptoms ( $r = -0.36$ ), sexual symptoms ( $r = -0.20$ ) and behavioral symptoms ( $r = -0.36$ ) (Table 3).

**Table 2.** Frequency distribution of participants according to the spouses' socio- demographic characteristics and their relationship with quality of sexual life in older men with andropause

Variable	Frequency (%)	Mean score of quality of sexual life	P-value
<b>Impotence (self-report)</b>			
Yes	208 (77)	45.57	0.151
No	63 (23)	42.66	
<b>Sexual/marital counseling</b>			
Yes	7 (3)	46	0.209
No	263 (97)	44.89	
<b>Experiencing extreme stress</b>			
Yes	146 (54)	44.88	0.976
No	125 (46)	44.93	
<b>Spouse's sexual attitude</b>			
Positive	50 (22)	40.76	0.005
Negative	27 (12)	40.25	
indifferent	154 (66)	46.91	
<b>Spouse's occupation</b>			
Housewife	233 (98)	45.37	<0.001
Employee	-	-	
Free work outside the home	4 (2)	23	
<b>Spouse's education</b>			
Illiterate	70 (30)	51.20	<0.001
Elementary	131 (56)	40.40	
Secondary/High school	28 (12)	47.14	
College	4 (2)	57	
<b>Spouse's presence at home</b>			
Low	2 (1)	31.50	<0.001
Moderate	36 (15)	36.11	
High	198 (83)	46.77	
<b>Frequency of sex per week</b>			
None	147 (55)	46.37	<0.021
Once	106 (40)	41.57	
Two or three	12 (5)	53.66	
More than three	-	-	
<b>Spouse's menopausal status</b>			
Menopause	190 (85)	45.79	<0.551
Non-menopause	34 (15)	47.23	
<b>Spouse's sexual knowledge</b>			
Low	163 (70)	41.49	<0.001
Moderate	66 (28)	52.12	
High	4 (2)	57.50	
		<b>Quality of sexual life</b>	
<b>Variable</b>	<b>Mean</b>	<b>Correlation Coefficient</b>	<b>P-value</b>
Age	73.37	0.41	<0.001

Spouse's age	60.42	0.26	<0.001
Number of accompanying children	0.57	0.12	0.062
Duration of marriage (years)	41	0.22	0.004

**Table 3.** The relationship between the quality of sexual life of older men and andropause symptoms

Andropause symptoms	Mean score	Standard deviation	Scores range	Quality of sexual life	
				Correlation coefficient	P-Value
physical symptoms	14.57	12.80	9-45	-0.367	<0.001
Mental symptoms	12.02	9.18	7-35	-0.378	<0.001
Behavioral symptoms	10.18	2.81	4-20	-0.307	<0.001
Sexual symptoms	15.78	5.42	5-25	-0.201	<0.001
symptoms of andropause	67.65	18.01	25-125	-0.360	<0.001

## Discussion

This research was performed to measure the quality of sexual life of older men with andropause and its relationship with some socio-demographic factors. The results indicated a significant inverse relationship between the quality of sexual life and the severity of andropause in older adults ( $r = 0.36$ ,  $P < 0.001$ ), so it can be concluded that the intensification of sexual, physical, behavioral, and psychological symptoms of male menopause, their quality of sexual life significantly decreased. Also, the results showed that only 13% of the changes in the quality of sexual life were directly affected by this syndrome ( $r^2 = 0.13$ ), which is consistent with the studies of Novak et al. (2013) and Novak et al. (2002) (1, 5).

Other research results showed that the quality of sexual life of older men with andropause has a statistically significant relationship with the demographic variables, including age, education, employment type, and marriage duration ( $p < 0.05$ ). In addition, the quality of sexual life had a statistically significant relationship with other factors such as their spouse's age, education, type of employment, sexual knowledge, and type of sexual attitude ( $p < 0.05$ ), which is consistent with some results in the studies by Afsharnia et al. (2014), Novak et al. (2002), Mousavi et al. (2018) and Bahri et al. (1, 5, 16, 17).

Although the results showed that the higher sexual knowledge of the wives of men with andropause was associated with a better quality of sexual life, unfortunately, only 2% of these women had a good level of sexual knowledge, and 60% of them also stated the lack of knowledge in the field of sexual life. On the other hand, an increase in women's sexual awareness regarding male menopause in their husbands affects their sexual attitude is worthy of consideration and requires more detailed investigations. The importance of this issue becomes more apparent when we know that the results obtained have confirmed the significant relationship between women's attitudes and the quality of their men's sexual life ( $p < 0.05$ ).

The results of similar studies, including those by Mazloumi and Fatousi, have also shown a statistically significant relationship between the mean knowledge score and the attitude score regarding andropause (18, 19). It seems necessary to mention this point that the investigation of women's attitude toward their menopause in most countries of the world has indicated a positive attitude (17, 20), that due to the lack of information in this field in the country, it is suggested that by designing detailed studies in this field, we could confirm or reject this issue. Another noteworthy point was that it was found that the level of awareness or understanding of the elderly about male menopause and its associated symptoms has a

significant relationship with the quality of sexual life, so 93% of the participants who were unaware had a lower quality of life ( $p < 0.001$ ).

Along with the current research, the study of Samipour et al. (13) and the study of Keshtkaran et al. (21) also showed that the level of awareness about andropause is low among all people, including doctors. Hence, it seems justified and reasonable that the elderly participating in the research also have very little information in this regard; in addition, we know that this age group uses less social media. Based on the results obtained in terms of the type of employment, homemakers had the lowest quality of sexual life, while those engaged in voluntary work had higher mean scores than others. Also, men whose wives were housewives experienced a higher quality of life than those employed. In general, it can be said that the employment of women outside the home leads to the break of the principles of traditional life and is followed by disadvantages. One of these disadvantages is that women who experience hard and long-term jobs outside the home feel more tired and bored performing domestic roles than housewives, which causes working women to have more mental problems (22). In other words, playing another job role diminishes the roles of women; working women appear in their job role like their husbands, but when they get home, they are expected to play the role of wife, housewife, and mother, which also requires other strength to perform these roles (22).

According to the research results, primary education was the highest literacy level among men and their wives, while the lowest mean quality of sexual life scores was also in the same category. The mean scores also increased as the literacy level of men and their spouses. It seems that what needs to be investigated is the role of equal education of men and their wives in their quality of life, which has not been addressed in this research. The issue has been conducted in other studies, and different results have been reported (23).

Other results of this research showed that the difference in the status of the studied units in terms of the number of sexual intercourse and chronic diseases such as vasculitis, thyroid, cancers, cardiovascular or mental diseases also caused a significant difference in the scores of

the quality of sexual life ( $p < 0.05$ ). It should be said that men who experience symptoms related to andropause have decreased blood testosterone. Therefore, decreased testosterone in the body's tissues may cause physical, mental, and psychological changes in a person and ultimately negatively affect the quality of his sexual life (2).

In the end, we hope that the results of this study indicating the relationship between some individual and social factors with the quality of sexual life of older adults in the country provide the necessary field for focusing on or guiding more detailed future studies.

## Conclusion

Based on the results, it can be recommended to the healthcare planners to improve quality of sexual life of older men with andropause by paying more attention to the role of changeable factors such as knowledge and type of sexual attitude of spouses, knowledge regarding andropause and sexual intercourse as well as monitoring some underlying diseases in planning health promotion programs.

## Acknowledgements

This is a report of database from PhD thesis registered in Tabriz University of Medical Sciences with the number of IR.TBZMED.REC.1400. 015. We would like to express our gratitude to the deputy of research and technology for their valuable supports. We also are most grateful for the assistance given by the facilitators of health centers in Mashhad.

## Conflicts of interest

Authors declared no conflict of interest.

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