

# SYMPTOMS OF DYSFUNCTION AND QUALITY OF LIFE AMONG MENOPAUSAL WOMEN: A COMMUNITY-BASED STUDY IN A RURAL AREA OF THAI BINH, VIETNAM IN 2021

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#### **ABSTRACT**

**Background**: During menopause transitions, fluctuate hormone levels make menopausal women susceptible to mental and physical disorders that affect their quality of life. Research on menopause-related problems, especially among rural women, are currently insufficient. With that sense, our objective is to investigate signs of dysfunction and quality of life (QOL) in menopausal women in Vietnam, 2021.

**Methods**: A cross-sectional study was performed on 296 menopausal women aged 45-60 in 2 communes Tan Phong, Tan Hoa, Vu Thu district, Thai Binh province, Vietnam. Data was collected with 2 study tools: The Menopause Rating Scale (MRS) scale and the World Health Organization's quality of life questionnaire (WHOQOL-BREF).

**Results**: 68.2% of women participating in the study has mild-moderate, severe-very severe symptoms 7.4% and 24.3% of women has no menopausal symptoms. The average score of the QOL is  $66.0\pm8.4$ . The highest quality score in the field of environment is  $21.5\pm3.7$ , the lowest is in the field of social relations with  $8.7\pm2.1$ .

**Conclusions**: Menopause causes physical, mental and urogenital problems. Almost all domains evaluated were impaired in menopausal women and affect their quality of life. Education, creating awareness and providing suitable intervention to improve the QOL of menopausal women are important at both the individual and community level.

Keywords: Quality of life, menopausal women.

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### 1. BACKGROUND

Menopause is a condition in which a woman ceases menstruation due to exhaustion of her ovaries, which are no longer receptive to gonadotropic hormone stimulation, and as a result, she no longer secretes enough sex hormones. A woman can no longer become pregnant after menopause. Menopause is the end of menstruation and the secondary amenorrhea, which is caused by a natural and irreversible reduction in ovarian function. Menopause occurs at an average age of 45-50 [1].

Menopause is a natural part of the aging process that can occur smoothly or with a slew of symptoms including changes in menstrual cycle, cardiovascular, sexual and urinary issues, as well as mental health disorders. In the long run, symptoms can be worse resulting in osteoporosis, cardiovascular disease, Alzheimer's disease et cetera, which impair postmenopausal women's quality of life, work efficiency, and family happiness. As a result of improved living conditions and health care, people's average life expectancy has increased in recent years. As the improvement of women's lifespans, they spend roughly a third of their lives with hormone deficiency; consequently, analyzing quality of life during menopause is of pivotal importance [2]. In addition, women are more involved in social activities and hold a prominent place in modern society; life quality is one of the indicators of health-care outcomes. Therefore, understanding the symptoms of dysfunction and quality of life in menopausal women is an important aspect of women's health treatment at this period. With this in mind, the goal of this study is to look into certain signs of dysfunction in Vietnamese postmenopausal women in 2021 as well as their quality of life.

#### 2. SUBJECT AND METHODOLOGY

## 2.1. Subject

Menopausal women who lived and worked in Tan Phong and Tan Hoa communes in Vu Thu district of Thai Binh province, Vietnam in 2021.

## 2.2. Researching location and time

The research was carried out in the communes of Tan Phong and Tan Hoa, Vu Thu district, Thai Binh province, from August 2020 to February 2021.

## **2.3. Research design:** Cross-sectional study

**2.4. Sample size:** Total sampling method. Selected 296 postmenopausal women aged 45-60 in 2 communes Tan Phong and Tan Hoa, Vu Thu district, Thai Binh province, Vietnam

## 2.5. Measuring and evaluating methodology

We used a three-part questionnaire system.

- Part 1: Demographic information of the subjects.
- Part 2: The Menopause Rating Scale (MRS), which consists of 11 questions in three subscales, was used to assess the severity of menopausal symptoms. Physical symptoms (four questions); psychiatric symptoms (four questions); and urogenital symptoms (three questions). Each question is measured by 5-point scale, ranging from none (0) to very severe (4). The minimum total score is 0 points, and the maximum value is 44 points.  $MRS \leq 11$ : no symptoms;  $12 \leq MRS \leq 35$ : mild to moderate;  $MRS \geq 36$ : symptoms ranging from severe to very severe [3].
- Part 3: The WHO Quality of Life Scale (WHOQOL-BREF) is a questionnaire with 26 items grouped into four categories: physical, mental, social interactions, and environment. This questionnaire uses the Likert-5 scale for measurement, ranging from very terrible (1) to very good (5) [4].

The average score of four areas of physical, mental, social relations, and environment is used to determine the subject's quality of life, which is converted to a scale of 100 according to the convention table; the higher the score, the higher the quality of life, and vice versa. Classification of low, medium and high quality of life based on QOL score [4].

WHOQOL-BREF < 33.3: low quality of life

 $33.3 \le WHOQOL\text{-BREF} \le 66.7$ : moderate quality of life

WHOQOL-BREF > 66.7: high quality of life

In this study, we classified the quality of life into two levels: good (WHOQOL-BREF > 66.7) and not good

(WHOQOL-BREF  $\leq$  66.7)

software after data cleanse, and summary statistics were applied for data analysis.

# 2.6. Data analysis

The data was input and processed using SPSS 20.0 3. RESULTS

Table 1. Average menopause rating scale score

Menopause symptoms	Number of women	Percentage	<b>X</b> ±SD	Min-Max
Physical symptoms			7.3±3.6	1-15
1. Hot flashes	·			
No symptoms	11	3.7	2.0±1.0	0-4
Mild to moderate	194	65.6		
Severe to very severe	91	30.7		
2. Discomfort in the heart	·			
No symptoms	107	36.1	1.1±1.1	0-4
Mild to moderate	141	47.6		
Severe to very severe	48	16.2		
3. Sleep problems	·			
No symptoms	12	4.1	2.4±1.2	0-5
Mild to moderate	151	51.0		
Severe to very severe	133	45.0		
4. Muscles and joints problems	·			
No symptoms	49	16.6	1.9±1.2	0-4
Mild to moderate	139	47.0		
Severe to very severe	108	36.5		
Psychiatric symptoms			7.2±3.6	0-16
1. Low mood				
No symptoms	79	26.7	1.6±1.1	0-4
Mild to moderate	150	50.7		
Severe to very severe	67	22.6		
2. Surliness		·		
No symptoms	41	13.9	1.9±1.2	0-4
Mild to moderate	165	55.8		
Severe to very severe	90	30.4		

Menopause symptoms	Number of women	Percentage	<b>X</b> ±SD	Min-Max
3. Anxiety				
No symptoms	58	19.6	1.6±1.1	0-4
Mild to moderate	169	57.1		
Severe to very severe	69	23.3		
4. Fatigue				
No symptoms	28	9.5	2.1±1.1	0-4
Mild to moderate	172	58.1		
Severe to very severe	86	32.4		
Urogenital symptoms			4.6±2.7	0-2
1. Reduced sex drive (libido)				
No symptoms	53	17.9	1.5±1.2	0-4
Mild to moderate	154	52.0		
Severe to very severe	89	30.1		
2. Bladder and urinary tract problem (diffic	ulty urinating, frequent	urination)		
No symptoms	69	23.3	1.5±1.1	0-4
Mild to moderate	167	56.4		
Severe to very severe	60	20.3		
3. Vaginal dryness	'			
No symptoms	26	8.8	1.6±1.1	0-4
Mild to moderate	173	58.4		
Severe to very severe	97	32.8		
<b>Total score</b>		19.1±9.2		2-43

Menopause symptoms had the highest average score of 7.3±3.6 points in the physical category, followed by 7.2±3.6 points in the mental category, and 4.6±2.7 points in the urogenital symptoms category. Sleeping problems had the highest average score of 2.4±1.2 points in the physical symptoms category, with 96.0% of women experiencing them. Then there were hot flashes, which scored 2.0±1.0 points and were reported by 96.3 percent of women. With 90.5% of women

experiencing this indication, tiredness had the highest average score of 2.1±1.1 points in the psychiatric category. Regarding category of urogenital-genital symptoms: vaginal dryness had the highest average score of 1.6±1.1 points with 91.2% of women having it, and the number of women with reduced sex drive (libido) and bladder problems were 82.1% and 76.7%, respectively.



Table 2. Distribution of menopausal women according to levels of menopausal symptoms

Levels of sympstom	Number of cases	Percentage	<b>X</b> ±SD	Min-Max
No symptoms	72	24.3	7.9±1.8	2-11
Mild to moderate	202	68.2	21.1±6.1	12-35
Severe to very severe	22	7.4	37.5±2.0	36-43

While 202 of the women (68.2%) in the study had mild severe symptoms, and 24.3 percent had no menopausal to moderate symptoms, only 7.4% had severe to very discomfort.

Table 3. Distribution of postmenopausal women according to life satisfaction

Satisfaction with the following	Number of cases	Percentage
Sleep	44	14.9
Ability to carry out daily activities	55	18.5
Working ability	76	25.6
Self satisfaction	57	19.3
Personal relationships	115	38.8
Sex life	43	14.5
Help received from friends	129	43.5
Living conditions	108	36.4
Accessibility to health-care services	68	23.0
Means of transport	61	20.5
Average total score	29.5	±4.9

Postmenopausal women reported an average total point of life satisfaction of 29.5±4.9. The highest level of satisfaction was 43.5% for help received from friends, followed by 38.8% for personal relationships. Only

14.9% of menopausal women were happy with their sleep and their satisfaction with their sex life was the lowest at 14.5%.

Table 4. Quality of life score classification

Le	vels	Number of cases	Percentage	Min-Max
NI-4 I	Low	0	0.0	0
Not good	Moderate	170	57.4	52-66
Go	ood	126	42.6	67-95

In the two researched communes, the proportion of postmenopausal women with an excellent quality of life was 42.6% (126 individuals).

Categories	\$\overline{X} \pm SD\$	Min- Max
Physical symptoms	19.7±2.2	16-29
Psychological problems	16.2±1.8	14-23
Social relationships	8.7±2.1	6-13
Environment	21.5±3.7	16-32
Total quality of life score	66.0±8.4	52-95

The average quality of life score was  $66.0\pm8.4$  points, ranging from 52 to 95. The environmental category had the greatest quality of life score of  $21.5\pm3.7$  points, followed by the physical and psychological categories with  $19.7\pm2.2$  and  $16.2\pm1.8$  points, respectively. The lowest figure,  $8.7\pm2.1$ , was in the field of social interactions.

## 4. DISCUSSION

The study found that 7.4% had severe-very severe symptoms, 68.2% of women experienced mild-moderate symptoms, and 24.3% had no symptoms of menopause. Specifically, physical changes such as hot flashes and sleep problems accounted for a relatively high age of symptoms, with 65.6% and 51% of mild and moderate symptoms, respectively, and 30.7% and 45.0% of severe and very severe symptoms.

When it came to psychiatric issues, exhaustion symptoms were the most common. Mild to moderate symptoms accounted for 58.1%, while severe to very severe symptoms accounted for 32.4%. Urogenital abnormalities included vaginal dryness, libido changes, and bladder issues, with mild and moderate symptoms accounting for 58.4%, 52.0% and 56.4%, respectively, and severe and very severe urogenital changes accounting for 32.8%, 30.1% and 20.3%.

This finding is similar to that of Le Thanh Binh et al (2014) [5], who found that 90.6% of postmenopausal women suffer from musculoskeletal discomfort, 73.2% from hot flushes, over 81.1% from headache and memory loss, and 92.1% from vaginal dryness; or in a study in Hue by Nguyen Dinh Phuong Thao et al (2017) [6] found that 84.7% of menopausal women displayed

signs of forgetfulness, while 69.4% felt fatigued and frustrated for no reason. These findings were also reported by author Karmakar N et al (2017) [7], who discovered a moderate prevalence of vasomotor symptoms, with 60% of individuals experiencing hot flashes and 47% sweating. Anxiety and stress (94%), as well as general depression (88%), were the most commonly reported psychosocial symptoms. Physical symptoms manifest themselves in a variety of ways, with 93% of women experiencing fatigue or weakness, decreased fitness, and a loss of energy. Sexual alterations were seen with 49% of study participants avoiding intimacy with their partners and 26% women reporting vaginal dryness. These findings are similar to that of Augoulea A et al in 2019 [8], who found a shift in psychiatric and vasomotor symptoms throughout the menopause transition, with vasomotor symptoms accounting for 50.3% to 82.1% with varying frequency, duration, and intensity. The variability of frequency of certain symptoms could be influenced racial, cultural, genetic, and dietary differences. At the same time, that disparity is most likely due to differences in the authors' evaluation criteria; also, the assessment of this symptom is mainly collected through the perception of the research subjects.

The average WHOQOL-BREF point was 29.5±4.9 points, in which higher value were found in "with help from friends and personal relationships" (43.5% and 38.8%, respectively); 18.5% of menopausal women were satisfied with their sleep, and the lowest value was "satisfaction with sexual activities" (14.5%). The study subjects' perceptions of quality of life and personal health were low. This could be due to the fact that physical health of postmenopausal women in the research area had not been properly cared for, and the

rate of chronic diseases in this demographic was still high (68.9%), which lower the overall quality of life score. Additionally, because the area is a rural suburb, the interaction between villages is extremely close, resulting in the highest level of personal relationship satisfaction. Furthermore, according to various studies, over 80% of menopausal women had varying degrees of symptoms when blood estrogen levels fluctuated during the stages of menopause. Women of this age also experienced menopausal symptoms such as hot flashes and sweats, sleep difficulties, changes in sex drive, and vaginal dryness, among other things, which influenced their satisfaction score on the aforementioned factors.

The district's quality of life for postmenopausal women was rated "not good" by 170 people, or 57.4%. The percentage of women who said their quality of life was "good" was 42.6% (126 cases). The study's average quality of life score for postmenopausal women was 66.0±8.4 points, with the greatest score being 95 and the lowest being 52. The greatest quality of life score was 21.5±3.7 points in the environmental category, followed by 19.7±2.2 points in the physical category, and 8.7±2.1 points in the social interactions area. This differed from the findings of Tran Thi Thanh Nhan et al in 2016 [9], who conducted a study in Hue and found that poor quality of life accounts for 88.5% of the research population, while good quality of life accounts for only 11.5%, with the highest quality of life scores in the social category and the lowest in the physical issue [8]. Because Vu Thu is a purely agricultural district located far from the city center and lacking sort of industrial parks and factories, the environment was cleaner; however, social activities were less popular, and the number of postmenopausal women participating in social activities was still limited, so the reported quality of life score in the social field was low.

#### 5. CONCLUSION

Almost all domains evaluated with physical, mental, and urogenital issues were impaired in menopausal women. Education, creating awareness, and providing suitable interventions to improve the QOL are important social and medical issues that need to be addressed.

### **REFERENCES**

- [1] Duong Thi Cuong, Gynecological physiology, Lectures on obstetrics and gynecology, volume 1, Hanoi Medical Publishing, 2013, pp. 218-230.
- [2] Kaulagekar A, Age of menopause and menopausal symptoms among urban women in Pune, Maharashtra. The Journal of Obstetrics and Gynecology of India, 61(3), 2011, pp323.
- [3] Heinemann LA, Potthoff P, Schneider HP, International versions of the menopause rating scale (MRS). Health and quality of life outcomes, 1(1), 2003, pp 28.
- [4] Huynh Minh Thang, Insomnia rate and related factors in perimenopausal women, Thesis of Master of Medicine. Ho Chi Minh City University of Medicine and Pharmacy, 2018.
- [5] Le Thanh Binh et al., Menopause age and the need to improve health around menopause in Hai Phong city, Journal of Obstetrics and Gynecology 12(3), 2014, pp. 40-44.
- [6] Nguyen Dinh Phuong Thao., Research on functional disorders in postmenopausal women in Hue city and the effectiveness of some treatment methods, Master thesis of Medicine, Hue University of Medicine and Pharmacy, 2017.
- [7] Karmakar N, Majumdar S, Dasgupta A et al., Quality of life among menopausal women: A community-based study in a rural area of West Bengal. Journal of mid-life health, 8(1), 2017, pp. 21.
- [8] Augoulea A, Moros M, Kokras N et al., Association of menopausal symptoms with sociodemographic factors and personality traits. Prz Menopauzalny. 2019 Dec;18(4):191-197. doi: 10.5114/pm.2019.93117.
- [9] Tran Thi Thanh Nhan, Nguyen Hoang Lan, Quality of life and related factors in postmenopausal women in Hue city; Journal of Public Health, 2016, pp. 42-47.