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Physical Domain of Quality of Life in Premenopause and Post Menopause Women in Central of Java

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Abstract

Physical changes during premenopause and menopause would affect a woman's quality of life. This study analyzed the determinant factors of physical symptoms on the quality of life of premenopausal and postmenopausal women. This research method was a descriptive study with a cross-sectional study approach. This research was conducted in Central Java province from March to December 2022. The sampling technique was carried out using the clustered random sampling method. Respondents to this study were taken from 4 districts. Each district involved 25 respondents. Respondents' quality of life was measured using the Menopause Specific Quality of Life (MENQOL) questionnaire. This study was analyzed using chi-square. Education, religion, occupation, age at menarche, parity, income, history of illness, current activity, history of sexual intercourse, and frequency of sexual intercourse significantly influence the physical domain of quality of life of postmenopausal women with a p-value <0.005. Age, education, occupation, age at menarche, marital status, parity, income, medical history, current activity, history of sexual intercourse, and frequency of sexual intercourse significantly influence the physical domain of quality of life of premenopausal women with a p-value <0.005. Physical symptoms in postmenopausal women are in the mild category, while premenopausal women have severe physical symptoms.

Introduction

Menopause is a point in a series of life stages for women and marks the end of their reproductive period. Menopause is caused by loss of ovarian follicular function and decreased circulating blood estrogen levels. The menopausal transition could be gradual, usually starting with a change in the menstrual cycle. 'Perimenopause' refers to the period from when these signs were first observed and ending one year after the last menstrual period. Perimenopause could last several years and could affect your physical, emotional, mental, and social well-being(world health organization, 2022). The problem of menopause was related to the physical aspect, namely the decreased production of the hormone estrogen, which would cause various reproductive disorders such as irregular menstruation (3-4 years before menopause), blood vessel disorders that affected the activities of women experiencing menopause (Kargenti & Marettih, 2013). Symptoms of menopause could affect the quality of life of menopausal and premenopausal women(Kamal & Seedhom, 2017). In the majority of women, the menopause transition causes symptoms and it is a disruptive process that can last for over a decade (Santoro, 2016). Factors that affect the quality of life of premenopausal and menopausal women need to be studied to improve the quality of life of postmenopausal women to be happier in facing menopause. Most women experience menopause between the ages of 45 and 55 as a natural part of biological aging (Li et al., 2013; world health organization, 2022; Zhu et al., 2019). There will be 7,358 women aged 40 -> 75 years in Central Java in 2021(Central Java

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Provincial Health Office, 2022).

Physiological changes during menopause were often accompanied by hormonal changes, which caused the following complaints: physical complaints of hot flushes, complaints of hot currents that arise during menstruation, starting to decrease until menstruation stops. The appearance of hot flushes started from the chest, neck, and face and spread to other bodies, high blood pressure could occur and could cause coronary heart problems, other complaints such as intercourse feeling dry, it hard to receive stimulation because there was a decrease in sensitivity. Dyspareunia in sexual intercourse, decreases elasticity so that it feels loose. Fatigue (tired easily). Complaints of motor function, muscle weakness, inaccurate coordination, tremors, blood circulation disorders, and metabolic diseases in menopause include obesity, which could get worse with careless eating behavior and inadequate nutritional levels. Complaints of nerve function: cell degeneration caused a decline in function and caused sensory complaints. Impaired bone function: depletion of calcium due to the aging process, causing bone loss, which causes pain in the bone joints. Psychological complaints: what was common in menopausal women was irritability, erratic mood/uncomfortable mood, forgetfulness, anxiety, insomnia, loneliness, stress, and depression, some feel low self-esteem because they felt powerless sexual attraction, feeling unneeded by their children and husbands (Kulkarni et al., 2016; world health organization, 2022).

The long-term consequences of women who experience menopause are heart disease, hypertension, Diabetes Mellitus (DM), stroke, and osteoporosis, which could lead to a decrease in the quality of life of women with menopause. Quality of life, whether or not, postmenopausal women were influenced by the response or reaction of the woman. According to Blackburn, the reaction of postmenopausal women, namely resigning themselves to accepting things they couldn't do anymore, usually occurred in women with low education. The second was a neurotic reaction, namely a reaction that arose as a result of strong rejection and the arrival of the climacteric period, which was characterized by feelings of anxiety, tension, and inner conflict, emotional disturbances that could cause poor mental disorders, which could interfere with life/quality of life. Quality of life was an individual's perception of their functioning in their field of life. In previous studies of 3 variables, namely physical activity, sexual activity, and husband's support, there was one variable that had a significant relationship, namely sexual activity related to quality of life(Noorma, 2017). Other research said the quality of life in women with menopause was influenced by several factors, namely age, level of education, occupation, and physical activity. Factors of physical activity and distance to health facilities affected the quality of life of postmenopausal women (Nazarpour et al., 2020). Research conducted by Sharifirad et al. that predisposing factors such as knowledge, attitudes, and perceptions of self-efficacy. The results of this study were that the quality of life of postmenopausal women was not related to their knowledge of menopausal problems, these results were inconsistent with other studies which explain that the quality of life of women increases as their knowledge increases(Sharifirad et al., 2013). Based on the statement above, the background is the author to conduct research related to the factors that affect the quality of life of premenopausal and menopausal women.

Method

This study used a cross-sectional study design. Cross-sectional studies are used for a study that studies risk factors and effects. This design uses approaches, observations, or data collection at the same time(Putra & Hendarman, 2013). This study took place in Central Java Province and took time from March - December 2022. Data collection was carried out in March - May 2022, data analysis was in May-July 2022. The population of this study was menopausal and premenopausal women aged 40-> 65 years in Central Java Province, with a total of 7,358 people (Central Java Provincial Health Office, 2022). The sampling technique was carried out using the clustered random sampling method. Respondents to this study were taken from 4 districts from 4 corners of Central Java province, namely Kudus Regency, Sukoharjo Regency, Tegal Regency, and Semarang

Regency. In each district, 25 people were taken as respondents. The inclusion criteria for this study sample were women aged 45 to >65 years, not currently being treated at the hospital, willing to be respondents. Of the 100 respondents, 53 respondents had menopause, and 47 respondents were premenopausal. The dependent variable in this study is the physical domain of menopause-specific quality of life. The independent variables in this study are the determinant factors consisting of age, education, occupation, income, menarche, religion, marital status, parity, income, history of illness, physical activity, history of sexual intercourse, and frequency of sexual intercourse. This study measured the effect of determinant factors on menopause-specific quality of life in menopausal and premenopausal women, especially in the physical domain. Quantitative data included determinant factors and menopause-specific quality of life. Qualitative data used in-depth interviews related to the quality of life of the respondents. The determinant factor was measured using a multiple choice questionnaire. Demographic data containing age, education, occupation, income, age at menarche, religion, marital status, parity, income, medical history, physical activity, history of sexual intercourse, and frequency of sexual intercourse. Menopause-specific quality of life was measured using the Menopause-Specific Quality of Quality (MENQOL) questionnaire, which consists of 4 domains, namely vasomotor (3 questions), psychosocial (7 questions), physical (16 questions), and sexual (3 questions). The MENQOL (Menopause-Specific Quality of Life) questionnaire is a self-administered instrument that does a good job of differentiating women according to their quality of life and in measuring changes in their quality of life (Hilditch et al., 1996; Nie et al., 2017). The validity and reliability of the MENQOL questionnaire tested for validity and reliability is 0.839. Demographic data are grouped into several groups. Quality of life data is measured by a score of 1-8. interpretation of score 1 for asymptomatic, 2 for symptom, 3-8 for symptom according to level. Quality of life data was then grouped into 4, namely asymptomatic, mild symptoms for a score of 2-3, moderate symptoms for a score of 4-5, severe symptoms for a score of 6-8 (Nie et al., 2017; Smail et al., 2020). Quantitative data were analyzed using univariate analysis using frequency tables and crosstabs, bivariate analysis using correlation tests, and multivariate analysis using the chi-square test. All tests used SPSS 25. Ethical permission to carry out this study was granted by the Department of Research and Community Engagement, Giri Satria Husada Nursing Academy. The confidentiality of the data was ensured for all participants.

Result and Discussion

Respondent demographic data in this study can be seen in table 1 below:

Table 1. Demographic Data of Respondents

Variables		Menopause		Premenopause	
		Frequency	Percent	Frequency	Percent
Age	45-50 old	26	49,1	45	95,7
	50,1-55 old	13	24,5	2	4,3
	55,1-60 old	9	17,0	0	0
	60,1-65 old	1	1,9	0	0
	>65 old	4	7,5		
	Total	53	100,0	47	100,0
Education	Elementary school	6	11,3	3	6,4
	Junior High School	4	7,5	4	8,5
	Senior High School	13	24,5	18	38,3
	Bachelor Degree	15	28,3	16	34,0
	Master Degree	15	28,3	6	12,8
	Total	53	100,0	47	100,0

Religion	Moslem	38	71,7	39	83,0
	Christian	8	15,1	0	0,0
	Catholic	7	13,2	6	12,8
	Hindu	0	0,0	1	2,1
	Buddha	0	0,0	1	2,1
	Others	53	100,0	47	100,0
Occupation	Housewife	23	43,4	18	38,3
	Teacher/Lecture	7	13,2	7	14,9
	Public Worker	10	18,9	12	25,5
	Farmer	1	1,9	0	0
	Government Worker	3	5,7	2	4,3
	Nurses/Midwifery	2	3,8	5	10,6
	Sales	2	3,8	1	2,1
	Entrepreneurship	1	1,9	2	4,3
	Others	4	7,5	0	0,0
	Total	53	100,0	47	100,0
Menarche	<12 old	5	9,4	3	6,4
	12-15 old	38	71,7	38	80,9
	15-20 old	10	18,9	6	12,8
	Total	53	100,0	47	100,0
Marital Status	Married	44	83,0	42	89,4
	Single	4	7,5	1	2,1
	Widowed	5	9,4	4	8,5
	Total	53	100,0	47	100,0
Parity	Have no Child	7	13,2	1	2,1
	1	6	11,3	2	4,3
	2	16	30,2	27	57,4
	3	21	39,6	14	29,8
	>3	3	5,7	3	6,4
	Total	53	100,0	47	100,0
Income	< 1 Million	15	28,3	4	8,5
	1-3 Million	14	26,4	15	31,9
	3-5 Million	10	18,9	16	34,0
	5-7 Million	3	5,7	8	17,0
	>7 Million	11	20,8	4	8,5
	Total	53	100,0	47	100,0
History of illness	Does not have	34	64,2	32	68,1
	Diabetes Mellitus	2	3,8	1	2,1
	Hypertension	8	15,1	3	6,4
	vertigo	3	5,7	0	0,0
	Gout	2	3,8	0	0,0
	asthma	0	0,0	4	8,5
	Hypotension	3	5,7	3	6,4
	Others	1	1,9	4	8,5
	Total	53	100,0	47	100,0
Physical Activity	Aerobic/Exercise every weeks	8	15,1	6	12,8
	House daily activity	26	49,1	18	38,3
	Office daily activity	14	26,4	20	42,6
	Others	5	9,4	3	6,4
	Total	53	100,0	47	100,0
Sexual Intercourse History	not having sex	16	30,2	2	4,3
	still having sex	37	69,8	45	95,7
	Total	53	100,0	47	100,0

Sexual Intercourse Frequency	never	16	30,2	2	4,3
	once a week	18	34,0	13	27,7
	once every two weeks	11	20,8	19	40,4
	three times a month	6	11,3	0	0,0
	more than four times a month	2	3,8	13	27,7
	Total	53	100,0	47	100,0

Source: Primer Data, 2022

Table 2. Distribution of Respondent Physical Domain

Variables		Menopause		Premenopause	
		Frequency	Percent	Frequency	Percent
Flatulence or gas pains	asymptomatic	47	88,7	37	78,7
	Mild symptom	2	3,8		
	Moderate symptom	4	7,5		
	Severe symptom			10	21,3
	Total	53	100,0	47	100,0
Aching muscles or joints	asymptomatic	25	47,2	25	53,2
	Mild symptom	16	30,2	2	4,3
	Moderate symptom	12	22,6	3	6,4
	Severe symptom			17	36,2
	Total	53	100,0	47	100,0
Feeling tired or worn out	asymptomatic	26	49,1	20	42,6
	Mild symptom	16	30,2	2	4,3
	Moderate symptom	11	20,8	7	14,9
	Severe symptom			18	38,3
	Total	53	100,0	47	100,0
Difficulty Sleeping	asymptomatic	38	71,7	39	83,0
	Mild Symptom	11	20,8	3	6,4
	Moderate symptom	4	7,5	5	10,6
	Total	53	100,0	47	100,0
Aches in back of neck or head	asymptomatic	34	64,2	32	68,1
	Mild symptom	12	22,6	4	8,5
	Moderate symptom	7	13,2	7	14,9
	Severe symptom			4	8,5
	Total	53	100,0	47	100,0
Decrease in physical strength	asymptomatic	20	37,7	21	44,7
	Mild symptom	18	34,0	3	6,4
	Moderate symptom	15	28,3	13	27,7
	Severe symptom			10	21,3
	Total	53	100,0	47	100,0
Decrease in stamina	Asymptomatic	22	41,5	26	55,3
	Mild symptom	24	45,3	1	2,1
	Moderate symptom	7	13,2	10	21,3
	Severe symptom			10	21,3
	Total	53	100,0	47	100,0
Feeling a lack of energy	Asymptomatic	32	60,4	31	66,0
	Mild symptom	16	30,2		
	Moderate symptom	5	9,4	3	6,4
	Severe symptom			13	27,7
	Total	53	100,0	47	100,0

Drying skin	Asymptomatic	30	56,6	31	66,0
	Mild symptom	13	24,5		
	Moderate symptom	10	18,9	7	14,9
	Severe symptom			9	19,1
	Total	53	100,0	47	100,0
Weight gain	Asymptomatic	23	43,4	26	55,3
	Mild symptom	22	41,5	1	2,1
	Moderate symptom	8	15,1	9	19,1
	Severe symptom			11	23,4
	Total	53	100,0	47	100,0
Increased facial hair	Asymptomatic	42	79,2	43	91,5
	Mild Symptom	7	13,2	1	2,1
	Moderate symptom	4	7,5	3	6,4
	Total	53	100,0	47	100,0
Changes in appearance, texture, or tone of skin	Asymptomatic	38	71,7	36	76,6
	Mild symptom	10	18,9	3	6,4
	Moderate symptom	3	5,7	4	8,5
	Severe symptom	2	3,8	4	8,5
	Total	53	100,0	47	100,0
Feeling Bloated	Asymptomatic	45	84,9	37	78,7
	Mild symptom	5	9,4	2	4,3
	Moderate symptom	2	3,8	8	17,0
	Severe symptom	1	1,9		
	Total	53	100,0	47	100,0
Low Backache	asymptomatic	32	60,4	30	63,8
	Mild symptom	8	15,1		
	Moderate symptom	6	11,3	12	25,5
	Severe symptom	7	13,2	5	10,6
	Total	53	100,0	47	100,0
Frequent Urination	Asymptomatic	28	52,8	33	70,2
	Mild symptom	10	18,9		
	Moderate symptom	10	18,9	8	17,0
	Severe symptom	5	9,4	6	12,8
	Total	53	100,0	47	100,0
Involuntary Urination	Asymptomatic	38	71,7	31	66,0
	Mild symptom	12	22,6	2	4,3
	Moderate symptom	2	3,8	12	25,5
	Severe symptom	1	1,9	2	4,3
	Total	53	100,0	47	100,0

Source: Primer Data, 2022

Based on Table 1, the majority of menopausal and premenopausal respondents were aged 45-50 years, with 26 respondents (49.1%) and 45 respondents (95.7%). The education of the most menopausal respondents was Bachelor's and Master's Degrees, with 15 respondents (28.3%) most premenopausal respondents were high school educated, with 18 respondents (38.3%). The religion of the most menopausal and premenopausal respondents was Moslem, with as many as 38 respondents (71.7%) and 39 respondents (83%). The majority of menopausal and premenopausal respondents were housewives, with 23 respondents (43.4%) and 18 respondents (38.3%). The most menarche age of menopausal and premenopausal respondents were 12-15 years with 38 respondents (71.7%) and 38 respondents (80.9%). The marital status of menopausal and premenopausal respondents was married as many as 44 respondents (83%) and 42 respondents (89.4%). Menopausal and premenopausal respondents mostly did not have a history of disease, as many as 34 respondents (64.2%) and 32 respondents (68.1%). Sexual history of menopausal and premenopausal respondents was still having sex as many as 37 respondents (69.8%) and 45 respondents (95.7%). Data distribution Physical domain of respondents can be seen in the table2

Based on Table 2, the distribution of physical domains that have symptoms in most menopausal respondents is aching muscle joints by 28 respondents (55.8%), feeling tired or worn out by 27 respondents (50.9%), decrease in physical strength by 33 respondents (62.3%), decrease in stamina by 31 respondents (58.5%), weight gain by 30 respondents (56.6%). Based on Table 2, the distribution of physical domains with the most symptoms in premenopausal respondents is feeling tired or worn out by 27 respondents (57.3%) and a decrease in physical strength by 26 respondents (55.3%).

Based on Table 3 above, it can be concluded that for menopausal respondents, several variables have a significant correlation in several physical domains, namely age has a significant correlation with increased facial hair (p-value = 0.035); education has a significant correlation to feeling tired or worn out, difficulty sleeping, decrease in physical strength, dry skin, weight gain, increased facial hair, and changes in appearance, texture, or skin tone; work has a significant correlation with difficulty sleeping; marital status has a significant correlation to weight gain; parity has a significant correlation to aching muscles or joints, feeling tired or worn out, aches in back of neck or head, dry skin and changes in appearance, texture or skin tone; income has a significant correlation with low backache; medical history has a significant correlation with decrease in physical strength, decrease in stamina, and increased facial hair; current activity has a significant correlation with sleep difficulty; history of sexual intercourse has a significant correlation with aching muscles or joints, low backache, frequent urination; frequency of sexual intercourse has a significant correlation to aching muscles or joints, feeling bloated, involuntary urination.

Based on Table 3 above, for premenopausal respondents, several variables have a significant correlation in several physical domains, namely age has a significant correlation with difficulty sleeping, decrease in physical strength and increased facial hair; religion has a significant correlation to drying skin; work has a significant correlation to decrease in physical strength, and decrease in stamina; age of menarche has a significant correlation to aching muscles or joints and increased facial hair, income has a significant correlation to difficulty sleeping and weight gain; history of disease has a significant correlation to feeling bloated and frequent urination; current activity has a significant correlation to decrease in stamina; history of sexual intercourse has significant correlation to change in appearance, texture or skin tone, frequency of sexual intercourse has a significant correlation to drying skin.

Table 3. Bivariate Analysis

		Correlation															
		Flatulance or gas pains	Achingmuscles or joints	Feeling tired or worn out	Difficulty Sleeping	Aches in back of neck or head	Decrease in physical strenght	Decrease in stamina	Feeling a lack of energy	Drying skin	Weight gain	Increased facial hair	Changes in appearance, texture, or tone of skin	Feeling Bloated	Low Backache	Frequent Urination	Involuntary Urination
age	p-value of premenopause	0,321	0,209	0,295	0,000	0,231	0,041	0,112	0,275	0,478	0,668	0,014	0,136	0,250	0,143	0,337	0,056
	p-value of menopause	0,184	0,302	0,239	0,573	0,179	0,968	0,234	0,936	0,113	0,156	0,035	0,854	0,899	0,891	0,620	0,115
education	p-value of premenopause	0,778	0,292	0,426	0,192	0,148	0,786	0,544	0,818	0,714	0,907	0,930	0,686	0,840	0,897	0,330	0,191
	p-value of menopause	0,929	0,115	0,010	0,032	0,796	0,015	0,296	0,323	0,028	0,032	0,044	0,001	0,332	0,073	0,950	0,381
religion	p-value of premenopause	0,468	0,131	0,250	0,212	0,361	0,331	0,301	0,487	0,030	0,909	0,725	0,168	0,344	0,814	0,406	0,654
	p-value of menopause	0,461	0,887	0,100	0,232	0,835	0,802	0,625	0,610	0,942	0,260	0,943	0,305	0,056	0,997	0,393	0,796
Occupation	p-value of premenopause	0,406	0,115	0,087	0,646	0,925	0,003	0,007	0,101	0,493	0,832	0,143	0,767	0,472	0,275	0,112	0,051
	p-value of menopause	0,666	0,907	0,992	0,026	0,429	0,360	0,471	0,657	0,080	0,259	0,325	0,685	0,743	0,634	0,518	0,409
Menarche	p-value of premenopause	0,272	0,050	0,403	0,931	0,768	0,838	0,652	0,132	0,671	0,935	0,021	0,058	0,214	0,883	0,533	0,326
	p-value of menopause	0,168	0,569	0,240	0,742	0,379	0,627	0,175	0,178	0,970	0,094	0,263	0,718	0,220	0,975	0,421	0,266
Marital Status	p-value of premenopause	0,959	0,192	0,421	0,563	0,950	0,280	0,254	0,629	0,668	0,247	0,745	0,144	0,856	0,096	0,584	0,119
	p-value of menopause	0,297	0,508	0,272	0,154	0,968	0,533	0,346	0,484	0,109	0,028	0,266	0,363	0,434	0,407	0,214	0,174
Parity	p-value of premenopause	0,783	0,425	0,218	0,189	0,740	0,220	0,489	0,546	0,358	0,355	0,325	0,973	0,474	0,476	0,670	0,553
	p-value of menopause	0,165	0,023	0,029	0,772	0,013	0,960	0,376	0,322	0,003	0,868	0,152	0,035	0,934	0,480	0,078	0,401
Income	p-value of premenopause	0,629	0,052	0,258	0,033	0,842	0,341	0,128	0,414	0,280	0,050	0,784	0,638	0,240	0,925	0,196	0,665
	p-value of menopause	0,159	0,594	0,116	0,127	0,214	0,053	0,093	0,136	0,923	0,131	0,577	0,087	0,514	0,024	0,667	0,380
History of Illness	p-value of premenopause	0,085	0,397	0,085	0,548	0,148	0,646	0,892	0,400	0,615	0,357	0,215	0,865	0,021	0,840	0,035	0,781
	p-value of menopause	0,142	0,206	0,230	0,306	0,949	0,018	0,007	0,081	0,547	0,087	0,000	0,639	0,663	0,938	0,469	0,621
Physical Activity	p-value of premenopause	0,316	0,157	0,778	0,979	0,355	0,063	0,036	0,588	0,372	0,495	0,576	0,763	0,407	0,082	0,194	0,449
	p-value of menopause	0,911	0,166	0,066	0,029	0,314	0,119	0,079	0,065	0,533	0,964	0,280	0,242	0,294	0,255	0,202	0,557
Sexual Intercourse History	p-value of premenopause	0,321	0,798	0,991	0,544	0,617	0,779	0,925	0,572	0,061	0,908	0,325	0,023	0,250	0,301	0,733	0,332
	p-value of menopause	0,282	0,009	0,088	0,901	0,639	0,859	0,513	0,947	0,056	0,061	0,469	0,091	0,431	0,018	0,028	0,087
Sexual Intercourse Frequency	p-value of premenopause	0,410	0,335	0,827	0,528	0,672	0,469	0,983	0,074	0,005	0,589	0,880	0,258	0,108	0,110	0,961	0,095
	p-value of menopause	0,149	0,033	0,199	0,396	0,212	0,740	0,194	0,910	0,272	0,650	0,455	0,826	0,024	0,220	0,059	0,031

Source: Data Primer, 2022

Table 4. Multivariate Analysis Of Menopause Respondents

		Flatulance or gas pains	Achingmuscles or joints	Feeling tired or worn out	Difficulty Sleeping	Aches in back of neck or head	Decrease in physical strenght	Decrease in stamina	Feeling a lack of energy	Drying skin	Weight gain	Increased facial hair	Changes in appearance, texture, or tone of skin	Feeling Bloated	Low Backache	Frequent Urination	Involuntary Urination
age	p-value of premenopause	0,310	0,057	0,427	0,000	0,056	0,052	0,420	0,000	0,489	0,780	0,036	0,193	0,440	0,048	0,253	0,107
	p-value of menopause	0,507	0,362	0,247	0,447	0,103	0,329	0,635	0,094	0,125	0,178	0,224	0,903	0,193	0,933	0,160	0,680
education	p-value of premenopause	0,233	0,037	0,046	0,154	0,535	0,044	0,397	0,203	0,626	0,517	0,586	0,701	0,265	0,398	0,086	0,620
	p-value of menopause	0,495	0,037	0,074	0,115	0,278	0,179	0,021	0,316	0,004	0,095	0,109	0,071	0,112	0,209	0,608	0,126
religion	p-value of premenopause	0,289	0,099	0,867	0,922	0,989	0,664	0,742	0,952	0,137	0,870	0,960	0,467	0,447	0,948	0,508	0,904
	p-value of menopause	0,380	0,900	0,035	0,322	0,142	0,063	0,160	0,530	0,603	0,002	0,079	0,829	0,022	0,729	0,070	0,765
Occupation	p-value of premenopause	0,145	0,002	0,650	0,023	0,086	0,085	0,143	0,400	0,872	0,598	0,968	0,416	0,360	0,653	0,257	0,914
	p-value of menopause	0,032	0,610	0,475	0,233	0,782	0,803	0,452	0,797	0,059	0,612	0,678	0,720	0,386	0,376	0,857	0,995
Menarche	p-value of premenopause	0,514	0,303	0,692	0,634	0,419	0,523	0,027	0,218	0,162	0,937	0,001	0,192	0,005	0,938	0,512	0,582
	p-value of menopause	0,048	0,310	0,545	0,443	0,725	0,929	0,651	0,688	0,176	0,403	0,763	0,719	0,689	0,499	0,044	0,492
Marital Status	p-value of premenopause	0,859	0,479	0,716	0,003	0,316	0,701	0,895	0,925	0,880	0,024	0,018	0,960	0,530	0,881	0,823	0,721
	p-value of menopause	0,847	0,070	0,061	0,624	0,733	0,909	0,742	0,129	0,565	0,232	0,672	0,571	0,890	0,847	0,604	0,868
Parity	p-value of premenopause	0,721	0,516	0,715	0,010	0,568	0,192	0,906	0,413	0,656	0,929	0,522	0,101	0,985	0,862	0,655	0,862
	p-value of menopause	0,049	0,045	0,074	0,091	0,292	0,025	0,198	0,661	0,023	0,314	0,333	0,349	0,893	0,154	0,092	0,795
Income	p-value of premenopause	0,934	0,691	0,792	0,569	0,847	0,029	0,192	0,454	0,004	0,313	0,076	0,864	0,678	0,204	0,140	0,074
	p-value of menopause	0,423	0,008	0,041	0,201	0,913	0,388	0,164	0,761	0,387	0,374	0,185	0,473	0,354	0,260	0,263	0,139
History of Illness	p-value of premenopause	0,003	0,281	0,433	0,003	0,000	0,705	0,526	0,166	0,457	0,592	0,996	0,278	0,000	0,245	0,093	0,445
	p-value of menopause	0,247	0,657	0,466	0,746	0,704	0,180	0,002	0,093	0,563	0,470	0,003	0,897	0,913	0,473	0,006	0,445
Physical Activity	p-value of premenopause	0,502	0,337	0,762	0,038	0,685	0,493	0,216	0,472	0,112	0,865	0,223	0,942	0,425	0,315	0,309	0,689
	p-value of menopause	0,486	0,479	0,078	0,061	0,150	0,572	0,238	0,333	0,040	0,496	0,761	0,835	0,428	0,739	0,002	0,575
Sexual Intercourse History	p-value of premenopause	0,310	0,070	0,918	0,807	0,535	0,674	0,727	0,744	0,126	0,663	0,000	0,007	0,440	0,553	0,423	0,782
	p-value of menopause	0,338	0,003	0,212	0,870	0,612	0,917	0,728	0,699	0,152	0,158	0,668	0,323	0,672	0,029	0,152	0,371
Sexual Intercourse Frequency	p-value of premenopause	0,734	0,337	0,697	0,406	0,736	0,134	0,803	0,205	0,123	0,638	0,000	0,052	0,352	0,445	0,668	0,275
	p-value of menopause	0,300	0,055	0,565	0,310	0,809	0,458	0,359	0,612	0,558	0,123	0,256	0,444	0,019	0,238	0,205	0,056

Source: Primer Data, 2022

Based on Table 4, in postmenopausal women, flatulence or gas pains are significantly influenced by work, age at menarche, and parity; aching muscles or joints were significantly influenced by education, income, history of sexual intercourse; feeling tired or worn out is significantly influenced by religion, income; Decrease in physical strength is significantly affected only by parity; decrease in stamina was significantly influenced by education and medical history; drying skin was significantly affected by parity and current activity; weight gain is only significantly influenced by religion; increased facial hair was significantly influenced by medical history; feeling bloated is significantly influenced by religion and frequency of sexual intercourse; low backache was only significantly influenced by history of sexual relations; Frequent urination was significantly influenced by medical history and current activity. Based on Table 4, in premenopausal women that flatulence or gas pains is significantly influenced by history of the disease; aching muscles or joints significantly affected by work; feeling tired or worn out is significantly influenced by education; difficulty sleeping is significantly influenced by age, occupation, marital status, parity, history of illness, and this activity; Aches in back of neck or head significantly affected by history of disease; Decrease in physical strength is significantly influenced by education and income; decrease in stamina is significantly affected by menarche age; Feeling of lack of energy is significantly affected by age; drying skin is significantly affected by income; weight gain is significantly affected only by marital status; increased facial hair was significantly influenced by age, age at menarche, history of sexual intercourse and frequency of sexual intercourse; Changes in appearance, texture or skin tone were significantly influenced by history of sexual intercourse, feeling of bloated was significantly affected by age of menarche and history of disease; low backache is only significantly affected by age.

Based on Table 1, the age of the most menopausal and premenopausal respondents was in the age range of 45-50 years. The natural age of premenopause and menopause can be divided into several categories, namely <40 years including premature menopause, 40-44 years including early menopause, 45-49 years including relatively early menopause, 50-51 years including reference category), 52-54 years including relatively late, and ≥55 years including late menopause (Zhu et al., 2019). In another study, the mean age of premenopause and menopause was 49.53 ± 5.74 years (el Hajj et al., 2020). Median age at natural menopause in Jiangsu women is 50 years (Li et al., 2013). The majority of Emirates women who are menopausal are in the age range of 50-64 years, with 53 respondents (75.7%) (Smail et al., 2020). In rural Minia, Egypt, the mean age of menopause was 48.9 ± 4 years (Kamal & Seedhom, 2017). In China, the mean age of premenopausal women was 49.72 ± 2.150, and that of postmenopausal women was 53.77 ± 2.766 (Strand et al., 2015).

Based on Table 1, the most education among menopausal respondents is higher education, namely bachelor and master degrees, while the most education among premenopausal respondents is lower education, namely senior high school. Most of the Emirati women who are perimenopausal have educational levels at secondary school and primary school 6 respondents (33%), and most of the postmenopausal education are university graduates 15 respondents (29%) (Smail et al., 2020). Menopause symptoms that occur in perimenopausal women in Jiangsu are fatigue, insomnia, and muscle/joint pain. Most of the symptoms that occur in postmenopausal women in Jiangsu are sexual problems, muscle/joint pain, and insomnia (Li et al., 2013). In Minia, Egypt, the most frequent symptoms of menopause are joint and muscle joints, physical and mental exhaustion, hot flushes, and sweating (Kamal & Seedhom, 2017). In premenopausal women in the German Breast Cancer Registry, most of them complained of fatigue intensity of 37%, while menopausal women experienced arm symptoms of 44-49% (Marschner et al., 2019). Most of the symptoms of menopause in Europe are feeling tired and worn out, weight gain, and low backache. In Spain, the most common symptom of menopause is aching in muscles and joints. In European menopausal women, hot flashes and night sweats have a greater influence on daily activities than work

activities (Nappi et al., 2023). In Hamadan Health Care Center, the most common physical symptoms of menopausal women are aching in muscle joints (91.1%), feeling tired or worn out (85.6%), a decrease in physical strength (86.3%), lack of energy (87.8%) (Barati et al., 2021).

In postmenopausal women, age correlates with one physical symptom, namely increased facial hair. It is because the age of menopause will affect physical changes caused by a decrease in the amount of the hormone estrogen and a slight increase in the hormone androgen. An increase in androgen hormones causes increased facial hair (Thornton et al., 2015). Age has a significant positive correlation with postmenopausal symptoms (Kulkarni et al., 2016). Postmenopausal women's education correlates with several physical symptoms, namely feeling tired or worn out, difficulty sleeping, decreased physical strength, drying skin, weight gain, increased facial hair, and changes in appearance, texture, or skin tone. education affects insomnia and fatigue in postmenopausal women in China (Huang et al., 2020). The work of menopausal women only correlates with difficulty sleeping. Most of the menopausal women in this study were housewives. Work as a housewife for menopausal women can affect the physical dimension (Baker et al., 2018; Kanadys et al., 2016).

Factors that affect the physical symptoms of menopausal women in terms of several symptoms, namely flatulence or gas pains, are significantly influenced by work, age at menarche, and parity. Aching muscles or joints are significantly influenced by education, income, and history of sexual relations. Feeling tired or worn out is significantly influenced by religion and income. A decrease in physical strength is significantly affected only by parity. A decrease in stamina is significantly influenced by education and medical history. Drying skin is significantly affected by parity and current activity. Weight gain is only significantly influenced by religion. Increased facial hair is significantly affected by the history of the disease. Feeling bloated is significantly influenced by religion and the frequency of sexual intercourse. Low backache is only significantly influenced by the history of sexual intercourse. Frequent urination is significantly influenced by medical history and current activity. Physical symptoms of Menopausal women in Nepal are Feeling tired or worn out, a decrease in stamina, a decrease in physical strength, and a lack of energy. It relates to marital status, parity, educational and occupational status (Thapa & Thebe, 2021). The current activities of the respondents in this study were mostly yoga and aerobics. Exercise also affects the physical symptoms of quality of life in menopausal women. Exercise has a significant effect on improving the quality of life of postmenopausal women, especially in the physical domain (Asghari et al., 2017; del Carmen Carcelén-Fraile et al., 2020; Nguyen et al., 2020; Reed et al., 2014). Aerobic exercise can improve the quality of life for menopausal women (Asghari et al., 2017; Kim et al., 2014). Physical activity in the form of exercise can improve the quality of life for postmenopausal women during midlife in Lebanese women (El Hajj et al., 2020). Yoga improves significantly the quality of life of menopausal women. Exercise showed significant benefits physical domain of MENQOL in menopause women (Asghari et al., 2017; Dąbrowska-Galas et al., 2019; del Carmen Carcelén-Fraile et al., 2020; Reed et al., 2014; Sincihu et al., 2018; Sternfeld et al., 2014; Sufyan et al., 2022). In yoga practitioners, 39.3% of yoga practitioners had no menopausal symptoms, and none reported severe symptoms (Souza et al., 2022). Higher education, especially university graduates, has a significant effect on quality of life, especially on somatic symptoms and sleep problems in perimenopausal women in Lublin City (Reed et al., 2014). Parity and occupation as a housewife have a significant relationship to the quality of life of menopausal women, while age, marital status, education level, and income have no significant effect on the quality of life of menopausal women (Poomalar & Arounassalame, 2013; Trisetiyaningsih, 2016).

Factors that affect physical symptoms in premenopausal women in some symptoms, namely flatulence or gas pains, are significantly influenced by the history of the disease. Aching muscles or joints are significantly affected by work. Feeling tired or worn out is significantly

influenced by education. Difficulty sleeping is significantly influenced by age, occupation, marital status, parity, history of illness, and activity. Aches in back of the neck or the head are significantly affected by history. A decrease in physical strength is significantly influenced by education and income. A decrease in stamina is significantly affected by the age of menarche. The feeling of lack of energy is significantly affected by age. Dry skin is significantly affected by income. Weight gain is only significantly influenced by marital status. Increased facial hair is significantly influenced by age, age at menarche, history of sexual intercourse, and frequency of sexual intercourse. Changes in appearance, texture, or skin tone are significantly influenced by the history of sexual intercourse. Feeling bloated is significantly influenced by age at menarche and medical history. Low backache is only significantly affected by age. In premenopausal women, some respondents experienced severe physical disorders. Physical symptoms, education level, income, and psychological disorders affect the quality of life of premenopausal women (Siti & Nurbaeti, 2018). In premenopausal women in Qatar, the top five physical symptoms of quality of life are Aches in the back of neck or head, Decrease in physical strength, Dry skin, Aching in muscles and joints, and Feeling tired or worn out (Bener & Falah, 2014). In Chinese women, more than 75% perimenopause women have mild physical and psychological symptoms, whereas less than 5% of them have moderate/ severe symptoms (Tang et al., 2022).

Conclusion

The physical domain of quality of life for menopausal and premenopausal women is influenced by the same factors, namely education, occupation, age at menarche, parity, income, medical history, current activity, history of sexual intercourse, and frequency of sexual intercourse. Physical symptoms in postmenopausal women are in the mild category, while premenopausal women have severe physical symptoms.

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