



Factors that affect quality of life in menopausal women

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ABSTRACT

Background: The increase in life expectancy causes an increase in the number of women entering menopause, so this period negatively impacts a woman. Physiologically, at this time, women will decrease the function of the ovaries, which can affect a decrease in reproductive hormones. This situation will affect various health problems, which include physical and psychological changes, such as osteoporosis, diabetes, depression, and sleep problems; which these health problems will have an impact on the quality of life in menopausal women.

Objective: This study aims to determine factors that affect the quality of life in menopausal women.

Methods: This study uses a literature review method from secondary data in the form of research journals related to factors

that affect the quality of life in menopausal women.

Results: For a woman, changes in the quality of life are one of the effects of the menopause she is experiencing. These changes are influenced by several factors, namely physical activity (50%), education (33.3%), employment (16.7%), mild menopausal symptoms (16.7%), history of chronic disease (16.7%), and duration of menopause (16.7%).

Conclusion: Based on some of the literature collected and the previous discussion, it can be concluded that several factors affect the quality of life, namely physical activity, education, occupation, mild menopausal symptoms, history of chronic disease, and duration of menopause.

Keywords: risk factor, quality of life, menopausal women, elderly, QOL.

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INTRODUCTION

Indonesia's success in improving people's welfare has led to changes in several aspects, including an increase in life expectancy.¹ In Indonesia, the life expectancy of women has continued to increase in the last ten years. In 2011, the life expectancy for women was recorded at 72.02 years, then it touched 73 years in 2017, and in 2020 it became 73.46 years. The life expectancy of a woman can reach 75 years. Based on this, it can be said that women have the opportunity to live for approximately 25 years from the initial period of entering Menopause.²

New developments in the medical sciences suggest that life expectancy has increased globally.³ Today, many women spend a third of their lives after menopause.⁴ Therefore, the QoL of postmenopausal women is of great public health interest.⁵ An increase in life expectancy causes an increase in the number of women who experience menopause, so menopause also has a negative impact. The impact that women may feel when they enter menopause beyond the initial complaints that are supposed to be an increase in cases of degenerative diseases or non-communicable diseases.⁶

Menopause is a period when physiologically, the menstrual cycle in women stops, accompanied by a decrease in the function of the ovaries which

causes a reduction of reproductive hormones such as estrogen, progesterone, and testosterone, and is related to their advanced age.⁷ In general, a woman enters menopause at the age of 45 -50 years.⁶ According to the Central Statistics Agency (BPS), in 2025 in Indonesia, there is predicted that 60 million females population will face menopause. In addition, in 2013, according to the Central Statistics Agency, women entering menopause were 155,527 residents.⁸ Armed with these problems, menopausal women need to get attention in addition to other health problems because when a woman enters menopause, there will be many changes in themselves.⁹ The changes in question are that women in menopause will experience several physical and psychological changes, such as urinary tract infections, diabetes, kidney disease, hypertension, sleep problems, and depression.¹⁰ These changes will impact the quality of life of women in Menopause.¹¹

Quality of life can be interpreted as a person's perception of survival in the context of the norms and culture in which they live, which is related to their goals, expectations, and living standards.¹² Based on the World Health Organization-Quality of Life (WHO-QOL), quality of life is divided into six domains: physical health, level of freedom, psychological, environmental, social relations,

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and religion. After that, these six domains were condensed into four domains: psychological health, physical health, environmental, and social relationships.^{13,14}

Generally, the quality of life is influenced by several aspects, such as individual and environmental characteristics.¹⁵ According to Putri's research in 2014, several factors can affect the quality of life in postmenopausal women, namely the higher education level, not having a history of chronic disease, routinely carrying out physical activity 1-2 times a week, and having mild menopausal symptoms.¹ Physical activity (exercise) in women Menopauspositively impacts their quality of life. Previous results indicate increased physical activity positively impacts postmenopausal women's quality of life.^{16,17}

Support and attention from the family are also factors that can affect the quality of life of postmenopausal women, such as checking their condition and always providing support in reducing anxiety during menopause can improve the quality of life.¹⁸ Of course, this support has an excellent effect on the changes experienced by menopausal women; if these problems are not addressed, serious attention will cause several disturbances that affect the quality of life, such as headaches, fatigue, depression, psychological disorders, sexual dysfunction, and osteoporosis.^{19,20}

Based on this background, this literature review aims to discover more about the factors influencing the quality of life in postmenopausal women. This research is also expected to provide benefits for physiotherapists to add insight and determine prevention and treatment measures for women who are entering menopause to improve their quality of life.

METHOD

The research method used is a literature review study or literature review based on secondary data in the form of research journals related to the factors that affect the quality of life in postmenopausal women.

RESULTS

Based on the search results, we obtained four studies related to the topic: four cross-sectional study designs, as shown in Table 1. Sari et al. examined the relationship between sport, coffee, and smoking with the quality of life of menopausal women living in 50 menopausal women. This study found the relationship exercising with the quality of life of postmenopausal women has a significant relationship with the value of P : 0.016. Coffee consumption with the quality of

life of postmenopausal women has no significant relationship with the $P= 0.505$. Smoking with the quality of life of postmenopausal women has no significant relationship with the $P= 0.804$.

Arini (2018) examined the menopausal quality of life who do orhiba routine physical exercise in 100 menopausal women aged 45-59 years divided into the Orhiba group of 50 people and the control group of 50. Menopausal quality of life was examined with the World Health Organization Quality of Life (WHOQOL)-BREF questionnaire. This study result was a significant difference ($p=0.000$) ($p<0.05$) where the orphan's group had a higher total QoL score than the control group.

Putri et al. examined the quality of life among menopausal women aged 45-59, totaling 128 people. The instruments of this study were the Menopause Rating Scale (MRS) questionnaire and the World Health Organization Quality of Life-BREF (WHOQOL-BREF). This study found the relationship between education, chronic disease, physical activity, and menopausal symptoms has significant results with a p -value of less than $\alpha = 0.05$. Age, marital status, and income have no significant results with a p -value of more than $\alpha = 0.05$.

Tarigan et al. examined the correlation between education, parity, employment, and menopause length with the quality of life of menopausal women at Kabanjahe Health Center, Karo District, in 103 menopausal women aged 45-55 years. This study's univariate analysis showed 71 respondents (68.9%) have a good quality of life. Bivariate analysis showed education ($p=0.003$), occupation ($p=0.001$), and length of menopause ($p<0.001$), whereas parity does not affect the quality of life of postmenopausal women. Multivariate analysis showed that the duration of menopause was the most dominant influence on the quality of life of postmenopausal women ($p=0.009$).

DISCUSSION

Menopause is a condition where the menstrual cycle stops in women.²¹ During this period, complaints will usually appear, such as discomfort. They can disrupt carrying out daily work, where which will undoubtedly have an impact on a woman's quality of life.¹⁰ Some aspects of quality of life in menopausal women that can have an impact include psychological health (psychological health), physical health (physical health), environment (environmental), and social relationships (social relationships) menopausal women. According to Sari et al.'s research in 2019, it was found that there was a significant correlation between exercise and

quality of life in postmenopausal women. This is because exercising menopausal women can reduce the risk of several diseases, such as cardiovascular, breast cancer, osteoporosis, diabetes, depression, and anxiety. In addition, regular exercise can effectively improve physical and mental health by regulating mood and reducing the risk of dementia. The sport

also allows postmenopausal women to interact and share the complaints they experience during menopause with their friends. This will indirectly impact the quality of life of postmenopausal women. This is because when exercising, there will be an increase in blood circulation so that the production of the hormone estrogen increases,

Table 1. The result of the study reviewed

Author	Title	Method	Result
Sari dkk (2019)	The Relationship between Sport, Coffee, and Smoking with the Quality of Life of Menopausal Women Living in Rural Areas	<ul style="list-style-type: none"> - Design: cross-sectional - Sample: 50 menopausal women - Inclusion criteria: women who have stopped menstruating for 12 consecutive months without drug induction or medical intervention. - Exclusion criteria: women who are not willing to be respondents, women with a history of ovariectomy and hysterectomy, currently or have experienced mental disorders, are facing problems psychology, such as divorce, termination of employment, and illness/death of the next of kin. - Method: purposive sampling - Instrument: Hilditch & Bener quality of life questionnaire. - Data analysis: Chi-square test 	<ul style="list-style-type: none"> - Exercising with the quality of life of postmenopausal women has a significant relationship with the value of $P: 0.016$. - Coffee consumption with the quality of life of postmenopausal women has no significant relationship with the P-value: 0.505. - Smoking with the quality of life of postmenopausal women has no significant relationship with the P-value: 0.804.
Arini (2018)	Menopausal Quality of Life Who Do Orhiba Routine Physical Exercise: A Measurement Study Using the WHOQOL-BREF Questionnaire	<ul style="list-style-type: none"> - Design: cross-sectional - Sample: 100 menopausal women aged 45-59 years, divided into the Orhiba group of 50 people and the control group of 50. - Criteria for the orhiba group: menopausal women aged 45-59 years, participating in orhiba physical exercise, not currently suffering from chronic diseases. - Group criteria control: menopausal women who never do physical exercise. - Method: purposive sample - Data collection techniques: interviews - Instrument: World Health Organization Quality of Life (WHOQOL)-BREF questionnaire - Data analysis: sample t-test 	There was a significant difference ($p=0.000$) ($p<0.05$) where the orphan's group had a higher total QoL score than the control group.
Putri dkk (2014)	Quality of Life Among Menopausal Women	<ul style="list-style-type: none"> - Design: cross-sectional - Sample: menopausal women aged 45-59 years, totaling 128 people - Method: systematic sampling - Inclusion criteria: menopausal women who had outpatient care at the Summersari Health Center during the study period. - Exclusion criteria: women who have had ovarian or uterine surgery. - Data collection techniques: interviews - Instruments: the Menopause Rating Scale (MRS) questionnaire and the World Health Organization Quality of Life-BREF (WHOQOL-BREF). - Data analysis: Chi-square test, One Way Anova, and t Free Samples. 	<ul style="list-style-type: none"> - Education, chronic disease, physical activity, and menopausal symptoms have significant results with a p-value of less than $\alpha = 0.05$. - Age, marital status, and income have no significant results with a p-value of more than $\alpha = 0.05$.

Author	Title	Method	Result
Tarigan dkk (2019)	Correlation between Education, Parity, Employment, and Menopause Length with the Quality of Life of Menopausal Women at the Kabanjahe Health Center, Karo District	<ul style="list-style-type: none"> - Design: cross-sectional - Sample: 103 menopausal women aged 45-55 years. - Inclusion criteria: menopausal women aged 45-55 years, able to read and write and willing to become informants, still have a husband and live with family, not accompanied by illness, in a state of sickness or under supervision and therapy by a doctor, not using hormone replacement therapy (TSH), no history of ovarian removal or uterine surgery (hysterectomy). - Method: Purposive Sampling - Data collection techniques: interviews - Instruments: the Menopause Rating Scale (MRS) questionnaire and the World Health Organization Quality of Life-BREF (WHOQOL-BREF). - Data analysis: univariate, bivariate analysis using the Chi-Square test, and multivariate analysis using the dominant logistic regression test. 	<ul style="list-style-type: none"> - Univariate analysis showed 71 respondents (68.9%) have a good quality of life. - Bivariate analysis showed education ($p=0.003$), occupation ($p=0.001$), length of menopause ($p<0.001$), whereas parity does not affect the quality of life of postmenopausal women. - Multivariate analysis showed that the duration of menopause was the most dominant influence on the quality of life of postmenopausal women ($p=0.009$).

which will undoubtedly affect the woman's health and quality of life. Consuming coffee can affect menopausal symptoms caused by the effects of caffeine from coffee. Drinking coffee in the long term can impact the estradiol hormone, which, if this hormone change occurs over a long time, will cause a decrease in a woman's health. However, this study showed an insignificant relationship between coffee and quality of life because no clear information was found regarding the amount and type of coffee consumed. Then, the smoking factor can also affect the health of menopausal women. Smoking can have negative health consequences for a woman because the nicotine and hydrocarbons in cigarettes can affect sex hormones, causing aging of the ovaries and causing toxic effects on ovarian cells. However, smoking did not show significant results in this study because only one respondent smoked. In addition, the respondent smoked no more than two cigarettes a month and only smoked when he wanted to.^{20,22}

A similar study was also conducted in 2018 by Arini, which stated that physical activity affects the quality of life of postmenopausal women. In the physical domain, postmenopausal women who regularly carry out physical activity will have a good quality of life. Physical exercise can also increase endurance and can avoid various diseases. In addition, practice can expand and improve blood circulation, which will affect the increase in estradiol production, which can slow the onset of menopause in women and affect their quality of life. Similarly, in the psychological domain, it shows that those who often exercise are better able

to concentrate, accept changes in body appearance, and rarely have negative feelings. In addition, in the social domain, physical activity such as exercise can make postmenopausal women interact with others, thereby increasing productivity. In the environmental part, menopausal women have enough time for recreation so they can go through menopause well. However, menopausal women who do not do physical activity show poor sleep quality, which affects their body health. It also has a destructive impact because it will affect the decrease in hormones in the body during menopause.²²

Another study by Putri et al. in 2014 showed that age had no relationship to quality of life because the respondents did not have such a significant age difference. It was found that they still had sufficient vitality and physicality in carrying out their daily activities. Not only that, income factors and marital status also do not affect the quality of life of postmenopausal women. Respondents admitted that those without income could still meet their needs and were satisfied with their residence and access to health services. It's the same with marital status, which has nothing to do with quality of life. Those who are married receive support from their families, those who are divorced receive support from their children, and those who are not married receive support from their families. This makes them feel satisfied with their home and the conditions in their surroundings. Educational factors show a relationship with quality of life. This is because women with higher education feel comfortable living their daily lives and feel satisfaction in receiving health services. In addition, chronic

disease, differences in symptoms experienced during menopause, and physical activity have a relationship to quality of life. Exercise can prevent the risk of cardiovascular disease and diabetes and reduce anxiety and depression. Chronic disease factors can affect the quality of life because, during menopause, the production of the hormone estrogen decreases, resulting in an increased risk of diseases such as cardiovascular disease, Alzheimer's disease, and osteoporosis. Furthermore, differences in menopausal symptoms are negatively correlated with quality of life. Menopause with mild symptoms is different from menopause that has severe symptoms, where menopausal symptoms with severe symptoms can inhibit activities, are less satisfied with sleep quality, feel dissatisfied with work abilities, mood changes, emotional lability, and reduced concentration.¹

A 2019 study by Tarigan et al. found a correlation between education, length of menopause, and work on quality of life in postmenopausal women. In general, menopausal women have a subjectively better quality of life if they have higher education. This is related to higher education, the possibility for postmenopausal women to know, and a better standard of living. The importance of education can also help postmenopausal women to be able to understand self-care, manage diabetes mellitus, and deal with symptoms of other diseases that arise with excellent and appropriate treatment. Work affects the quality of life of a menopausal woman because it can determine the income that supports the availability of facilities used for an activity they need, such as knowledge and information media. In addition, work that has an income.¹⁰

Low levels can also affect a person's education, health, and physical fitness. Not only that, but the length of menopause also has a relationship with the quality of life in menopausal women. The longer a woman experiences menopause, the more they will be able to deal with the changes they undergo during menopause. The duration of experiencing this period will affect psychological adaptation regarding the changes that occur in menopause. This will impact menopausal women in improving their quality of life.¹⁰ This study's limitation is not carrying out the risk of bias assessment. In the future, studies can be carried out with more advanced methods.

CONCLUSION

Based on some of the literature collected along with previous discussions, it can be concluded that several factors affect the quality of life of menopausal women, namely physical activity, education,

employment, mild menopausal symptoms, history of chronic diseases, and length of menopause.

ETHICAL CONSIDERATIONS

This literature review used publicly accessible documents as evidence and did not require institutional ethics approval.

CONFLICT OF INTEREST

There is no conflict of interest that the author declares following the publication.

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AUTHOR CONTRIBUTION

NLNA conceived the study design, collected and analyzed the data, and drafted the manuscript; IAWWG interpreted the data analysis and drafted the manuscript.

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