

Menopause Readiness in Perimenopausal Women in Tanjungpinang Region

Komala Sari*, Hotmaria Julia Dolok Saribu, Linda Widiastuti

STIKES Hang Tuah Tanjungpinang, Kota Tanjung Pinang, Riau Islands, Indonesia

*E-mail: komalasari@gmail.com

Abstract

Menopause is a natural phase in a woman's life that is faced with various physical and psychological changes. However, many women are not fully prepared for this transition. Lack of education and social support often affect their readiness to face menopause, especially in areas with low health literacy rates. Limited knowledge about perimenopause symptoms and how to manage them can impact a woman's quality of life during this time. This study aims to determine the level of preparedness of women in Tanjungpinang in facing menopause. Method: This study used a quantitative descriptive design. The sampling technique used was purposive sampling with a sample size of 51 women in the perimenopause age range. Data were collected through a questionnaire related to readiness to face menopause. Data analysis was carried out using descriptive statistics to describe the frequency distribution. Most respondents were in the age range of 50 years (27%), with the majority having secondary education (56.9%) and already having more than one child (86.3%). Smoking behavior was found in 96.1% of respondents. Although 54.9% of respondents felt ready to face menopause, there were still 45.1% who felt unprepared. Factors such as education level, number of children, and smoking behavior affect their readiness to face this transition. Women's readiness to face menopause in Tanjungpinang is influenced by various factors, including education, number of children, and smoking behavior. Further research is needed to identify effective interventions to improve women's readiness to face menopause, especially in diverse socio-cultural contexts.

Keywords: menopause readiness, perimenopause, women

1. Introduction

Menopause is a natural transition that occurs in women when menstruation permanently stops, marking the end of the reproductive years.¹ This event usually occurs in women between the ages of 45 and 55, although the exact age can vary. Menopause is marked by a decrease in the production of the hormones estrogen and progesterone, which affect many aspects of a woman's physical and emotional health. Before reaching menopause, women enter a phase known as perimenopause, a transition period that can last for several years.² During this phase, a woman's body experiences hormonal fluctuations that can cause irregular menstrual cycles, symptoms such as hot flashes, sleep disturbances, mood swings, and other physical symptoms. Perimenopause is

an important stage in this biological process, where hormonal and physical changes gradually prepare the body for menopause.³

Menopause and perimenopause are natural phases experienced by millions of women worldwide and have great significance at both a global and national level. The World Health Organization (WHO) estimates that by 2030, more than 1.2 billion women will be in menopause or perimenopause, with millions more entering this phase each year.⁴ In Indonesia, around 27 million women are expected to experience menopause by 2025. Perimenopause can have significant impacts on women's quality of life and reproductive health, such as hot flashes, sleep disturbances, mood swings, and increased risk of conditions such as osteoporosis and heart disease. These impacts not only affect

physical well-being, but also mental and emotional aspects, disrupting productivity, social relationships, and daily life balance.⁵

Perimenopausal women face significant issues and challenges, both physically and psychologically. Physically, the hormonal changes that occur during perimenopause can cause distressing symptoms, such as hot flashes, sleep disturbances, and mood swings. These symptoms often reduce the quality of life by interfering with daily activities, concentration, and general well-being.⁶ In addition, perimenopause also brings psychological and social challenges. Many women experience anxiety, depression, and stress due to the body changes that occur, coupled with fears about the transition to menopause. In some communities, the social stigma associated with menopause can exacerbate feelings of isolation and low self-esteem, making it difficult to adjust to these changes. Difficulty in accepting these changes and lack of adequate social support and knowledge further compound the challenges that women face during perimenopause.^{7,8}

The level of preparedness of perimenopausal women for menopause varies and depends largely on their understanding and readiness for the upcoming changes. Some women may feel prepared because they have access to sufficient information and support, while others may feel anxious or confused due to a lack of understanding about this phase.⁹ This readiness is influenced by a variety of factors, including education level, which plays a significant role in influencing how women process information about menopause. Women with higher education tend to have better knowledge and are more open to health interventions. Culture also plays a large role; in some societies, menopause is seen as a symbol of the end of productive years, while in others it can be seen as a natural transition. Family support is also an important factor in

readiness, where supportive relationships can reduce anxiety and provide emotional support during this phase.¹⁰

Research related to the readiness of perimenopausal women in Indonesia still faces various limitations. Many available studies focus on the physical and psychological symptoms of menopause in general, but very few specifically explore women's readiness or knowledge in facing this transition phase.^{8,11} In Indonesia, studies on menopause readiness are often limited to small populations or certain geographic contexts, and there has been no in-depth study covering the specific conditions in Tanjungpinang. This indicates a knowledge gap that needs to be filled through more contextual and comprehensive research. Meanwhile, in other countries, there are more comprehensive studies that include educational interventions, social support, and community-based approaches to help women face menopause better. The purpose of this study is to describe menopause readiness in perimenopausal women in Tanjungpinang.

2. Methods

2.1. Design

This study used a descriptive design to describe the characteristics and readiness for menopause in perimenopausal women in the Tanjungpinang area. The descriptive design was chosen because it allows researchers to systematically identify and describe physical, and psychological changes, and the level of readiness of women to face menopause. This study aims to provide a comprehensive picture of the phenomena that occur in the population studied.

2.2. Sample Selection

The sampling technique used in this study was total sampling, where the entire population that met the inclusion criteria was included as respondents. The sample in this

study consisted of 51 perimenopausal women domiciled in the Tanjungpinang area. The inclusion criteria included women who were in the perimenopausal phase based on age criteria and hormonal symptoms, willing to participate, and able to fill out the questionnaire properly. This technique was chosen to ensure that the entire target population was represented so that the results of the study could reflect the real conditions of the group.

2.3. Data collection

Data collection was conducted through the distribution of questionnaires that had been tested for validity and reliability. This instrument consisted of 25 questions designed to evaluate physical changes, psychological changes, and menopause readiness. The validity of the instrument has been tested with the results of the calculated *r*-value being greater than the *r* table (0.5140), indicating that each question item has a significant relationship with the measurement objective. The reliability test showed a Cronbach's Alpha value of 0.909, indicating that this instrument is very reliable, exceeding the minimum standard of 0.60. This questionnaire was given directly to respondents, accompanied by a detailed explanation of the purpose of the study and how to fill it out.

2.4. Research Ethics

This study was conducted by considering the principles of research ethics to ensure the protection of the rights and welfare of respondents. The principle of autonomy was applied by providing clear and complete explanations to respondents regarding the purpose, procedures, benefits, and potential risks of this study. Respondents were also given full freedom to participate or refuse without any negative consequences. The principle of justice was implemented by treating all respondents fairly without discrimination, either based on social,

cultural, or economic background. This study also adheres to the principle of beneficence and non-maleficence, where research is designed to provide real benefits to the community by increasing understanding of menopause readiness, without causing risk or harm to respondents. Finally, the principle of confidentiality was upheld by maintaining the confidentiality of respondents' data, which was only used for this study. All documents related to respondents were stored securely and would not be shared with third parties.

2.5. Data analysis

The collected data were analyzed using a frequency distribution test to describe the characteristics of respondents and their menopause readiness. The characteristics of respondents analyzed included demographic variables such as age, education level, number of children, and smoking behavior. The results of the questionnaire were also analyzed to provide an overview of menopause readiness, both from physical, psychological, and emotional aspects. The results of the analysis are presented in the form of a frequency distribution table that provides an in-depth understanding of the pattern and distribution of data among respondents so that it can describe the overall menopause readiness of perimenopausal women in the Tanjungpinang area.

3. Results

The results showed that most respondents were 50 years old (39.2%), followed by 49 years old (23.5%), and 47 and 48 years old each at 13.7%, while respondents aged 51 years were the smallest group (9.8%). Based on education level, the majority of respondents had secondary education (junior high school or high school) at 56.9%, followed by elementary education (elementary school) at 35.3%, and only 7.8% had higher education (diploma, bachelor's, master's, or doctoral). In terms of the number of children, most

respondents were multiparous (86.3%), while the rest were primiparous (13.7%). Regarding smoking behavior, the majority of respondents (96.1%) were smokers, and only 3.9% were non-smokers. These findings provide an overview of the characteristics of the respondents in this study (Table 1).

4. Discussion

The results of this study are consistent with previous findings that the peak age of perimenopause is typically in the late 40s to early 50s. Previous research has shown that the menopausal transition often begins at an average age of 47–51 years, with more significant hormonal changes occurring closer

to age 50. Other studies have also found that the majority of women experience perimenopausal symptoms such as irregular menstrual cycles and hot flashes at a similar age. This comparison suggests global consistency regarding the age of perimenopause, although small variations may be influenced by genetic factors, lifestyle, or local public health conditions.¹² These findings reinforce the relevance of age as an important indicator for designing interventions tailored to the hormonal transition phase that women experience.¹³

Table 1. Distribution of Respondents (n=51)

Characteristics	Frequency	Percentage	
Age	47 years old	7	13.7
	48 years old	7	13.7
	49 years old	12	23.5
	50 years	20	39.2
	51 years old	5	9.8
Schools	Elementary	18	35.3
	Secondary (Junior High School, Senior High School)	29	56.9
	Higher (Diploma, Bachelor's, Master's, Doctorate)	4	7.8
Number of children	Primipara	7	13.7
	Multipara	44	86.3
Smoking behavior	Yes	49	96.1
	No	2	3.9

Table 2. Results of Classification of Menopause Readiness (n=51)

No	Menopause Preparedness	Frequency	%
1.	Not ready	23	45.1
2.	Ready	28	54.9

Previous studies have shown that women with higher education tend to have a better understanding of hormonal changes and menopausal symptoms than those with lower education.¹⁴ This is due to greater access to health information and better literacy skills in the highly educated group. In contrast, previous studies noted that women with lower education often have difficulty understanding health information, making them more

vulnerable to being unprepared for menopause.¹¹ These findings emphasize the importance of community-based health education programs that consider respondents' literacy levels to improve their understanding of the perimenopause and menopause processes. This approach can reduce the negative impacts caused by lack of information and improve women's well-being during this hormonal transition.¹⁵

The number of children may be related to a woman's readiness for menopause. Previous research has shown that multiparous women tend to have a better understanding of the hormonal and physical changes that occur during menopause, as they have had the experience of adapting to similar changes during pregnancy and childbirth.¹¹ This experience allows them to be more physically and psychologically prepared for the transition to menopause. In contrast, primiparous women, who have not experienced pregnancy or childbirth, often feel less prepared for menopausal symptoms due to their lack of experience in managing hormonal and bodily changes. This is important so that they can better prepare themselves and reduce anxiety related to the process.¹⁶ These findings reinforce the need for more targeted and experience-based interventions to improve women's readiness for the changes that occur during menopause.¹⁷

Smoking behavior has a significant impact on women's health during perimenopause. The majority of respondents (96.1%) were smokers, which can worsen perimenopausal symptoms such as hot flashes, sleep disturbances, and mood swings. In addition, smoking increases the risk of serious diseases, including osteoporosis and heart disease, both of which can worsen the quality of life during the transition to menopause.¹⁸ The dominance of smoking behavior among respondents emphasizes the need for effective health interventions, such as smoking cessation programs and education about the impact of smoking on health, to reduce these risks.¹⁹

The level of preparedness for menopause among respondents showed a significant division, with 54.9% feeling prepared and 45.1% not yet prepared. Although more than half of respondents felt prepared, a large percentage of those

who were not yet prepared indicated that preparedness for menopause did not only depend on existing understanding or support but was also influenced by various external factors. Access to accurate information, adequate social support, and cultural views related to menopause played an important role in shaping this preparedness.²⁰ Therefore, it is important to create educational programs that not only increase knowledge but also provide emotional and social support for women who still feel less prepared to face this major change in their lives.²¹

Factors that influence women's readiness for menopause include the role of education, socio-cultural impacts, and health behaviors. Higher education can improve women's understanding of hormonal changes and physical symptoms during perimenopause, helping them to be better prepared for this transition.¹⁹ However, socio-cultural factors, such as negative stigma related to menopause, can worsen women's perceptions and readiness, due to societal views that associate menopause with aging and decreased quality of life. In addition, smoking behavior also has a negative effect, worsening menopausal symptoms and increasing the risk of heart disease and osteoporosis. Therefore, an approach that combines education, socio-cultural changes, and promotion of healthy lifestyle behaviors, such as smoking cessation, is essential to improve women's readiness for menopause.^{22,23}

The results of this study emphasize the importance of the role of structured health education in preparing women for menopause, especially in the Tanjungpinang area. A well-designed education program should include comprehensive information about the physical and psychological changes that occur during perimenopause, as well as strategies to manage these symptoms

effectively.²⁴ In addition, social support, both from family and community, is essential to reduce the stigma that is often attached to menopause and help women undergo this transition better. With increased understanding and support, women can feel more physically and mentally prepared to face these changes.²⁵ Another recommendation is the importance of further, broader, and more in-depth research to explore more effective intervention strategies, especially those that can be applied in various cultural and social contexts. Such research can provide a stronger basis for designing more adaptive and inclusive health programs, which will improve the quality of life of women during perimenopause and menopause.

5. Conclusions

This study aims to explore women's readiness to face menopause in Tanjungpinang, by highlighting various factors that influence such readiness. The results showed that most respondents were in the age range of 50 years, which is the age of perimenopause, with the majority having a secondary education level and more than 80% of them already having more than one child. Although more than half of respondents felt ready to face menopause, there were still groups who felt less ready, indicating that education and social support factors are still very much needed. Education and understanding of physical and psychological changes during perimenopause are very important to increase readiness. In addition, socio-cultural impacts, such as stigma towards menopause, also influence women's perceptions of their readiness. Smoking behavior is a significant risk factor for women's health during perimenopause, increasing the likelihood of more severe

symptoms and related diseases, such as osteoporosis and heart disease.

This study has important implications for nursing practice, especially in terms of education and support for women going through perimenopause. Nurses can play a significant role in providing clear and comprehensive information about the changes that occur during perimenopause, as well as how to manage the symptoms that arise. Nursing interventions based on education and counseling, as well as reducing risk behaviors such as smoking, can help improve women's readiness to face menopause. Future studies are recommended to explore more deeply the intervention strategies that can be applied to improve women's readiness to face menopause, especially in different socio-cultural contexts.

References

1. Lee BG, Ham OK, Kim SH, Lee EJ, Kang HS, Chae D. Concomitants of menopause-specific quality of life in premenopausal and postmenopausal women living in South Korea. *Women Heal.* 2020;60.
2. Kirshner ZZ, Yao JK, Li J, Long T, Nelson D, Gibbs RB. Impact of estrogen receptor agonists and model of menopause on enzymes involved in brain metabolism, acetyl-CoA production and cholinergic function. *Life Sci.* 2020;256:117975.
3. Lodha P, De SA. Female Sexual Dysfunction and Schizophrenia: A Clinical Review. *J Psychosexual Heal.* 2020;2(1):44–55.
4. Sharman Moser S, Chodick G, Bar-On S, Shalev V. Healthcare Utilization and prevalence of symptoms in women with menopause: a real-world analysis. *Int J Womens Heal.* 2020;12.
5. Moseley RL, Druce T, Turner-Cobb

- JM. 'When my autism broke': A qualitative study spotlighting autistic voices on menopause. *Autism*. 2020;24(6):1423–37.
6. Jim HSL, Hoogland AI, Han HS, Culakova E, Heckler C, Janelins M, et al. A randomized placebo-controlled trial of bupropion for Cancer-related fatigue: Study design and procedures. *Contemp Clin Trials*. 2020 Apr;91:105976.
 7. Panay N, Anderson RA, Nappi RE, Vincent AJ, Vujovic S, Webber L, et al. Premature ovarian insufficiency: an International Menopause Society White Paper. *Climacteric*. 2020;23(5):426–46.
 8. Sydora BC, Graham B, Oster RT, Ross S. Menopause experience in First Nations women and initiatives for menopause symptom awareness; a community-based participatory research approach. *BMC Womens Health*. 2021;21(1):179.
 9. Dillaway H. Living in Uncertain Times: Experiences of Menopause and Reproductive Aging BT - The Palgrave Handbook of Critical Menstruation Studies. In: Bobel C, Winkler IT, Fahs B, Hasson KA, Kissling EA, Roberts TA, editors. Singapore: Springer Singapore; 2020. p. 253–68.
 10. Bhatt R, Jurel SK, Chand P, Solanki N, Agrawal KK, Jaiswar SP, et al. Functional and psychological evaluation of premenopausal and postmenopausal women after provision of a complete denture prosthesis. *J Prosthet Dent*. 2021;
 11. Grisotto G, Farago JS, Taneri PE, Wehrli F, Roa-Díaz ZM, Minder B. Dietary factors and onset of natural menopause: a systematic review and meta-analysis. *Maturitas*. 2022;159.
 12. Yerra AK, Bala S, Yalamanchili RK, Bandaru RK, Mavoori A. Menopause-related quality of life among Urban women of Hyderabad, India. *J Midlife Heal*. 2021;12.
 13. Vasudevan B, Karunakaran U, Antony A, Ramachandran R. Vitamin D status and associated factors among peri menopausal women in two selected districts of Kerala. *Indian J Public Health*. 2021;65(2):166–71.
 14. Quick AM, Dockter T, Le-Rademacher J, Salani R, Hudson C, Hundley A, et al. Pilot study of fractional CO(2) laser therapy for genitourinary syndrome of menopause in gynecologic cancer survivors. *Maturitas*. 2021 Feb;144:37–44.
 15. Vetrani C, Barrea L, Rispoli R, Verde L, Alteriis G, Docimo A. Mediterranean Diet: what are the consequences for Menopause? *Front Endocrinol*. 2022;13.
 16. Hambisa HD, Birku Z, Gedamu S. Magnitude of Symptomatic Pelvic Floor Dysfunction and Associated Factors Amongst Women in Western Ethiopia: A Cross-Sectional Study. *Inquiry*. 2023.
 17. Hulteen RM, Marlatt KL, Allerton TD, Lovre D. Detrimental changes in Health during Menopause: the role of physical activity. *Int J Sport Med*. 2023;44.
 18. Rafiei EH, Riazi H, Shams J, Majd HA. Exploring sexual life enrichment: a journey into strengthening well-being for women post- menopause through qualitative study. *BMC Womens Health*. 2024;24(1):506.
 19. Heidari M, Sheikhi RA, Rezaei P, Kabirian Abyaneh S. Comparing Quality of Life of Elderly Menopause Living in Urban and Rural Areas. *J menopausal Med*. 2019;25(1):28–34.
 20. Khoudary SR, Greendale G, Crawford SL, Avis NE, Brooks MM, Thurston RC. The menopause transition and

- women's health at midlife: a progress report from the study of women's Health across the Nation (SWAN). *Menopause*. 2019;26.
21. Heidari M, Ghodusi M, Rezaei P, Kabirian Abyaneh S, Sureshjani EH, Sheikhi RA. Sexual Function and Factors Affecting Menopause: A Systematic Review. *J Menopausal Med*. 2019;25.
 22. Sharifi N, Najari S, Rezaii N, Jalili L, Yazdizadeh H, Yaralizadeh M. The Association between Menopausal Symptoms and General Health among Iranian Women with Menopause: a cross-sectional study. *Int J Womens Heal Reprod Sci*. 2019;7.
 23. Im EO, Kim S, Lee C, Chee E, Mao JJ, Chee W. Decreasing menopausal symptoms of Asian American breast cancer survivors through a technology-based information and coaching/support program. *Menopause*. 2019 Apr;26(4):373–82.
 24. González-Rodríguez A, Seeman M V. The association between hormones and antipsychotic use: a focus on postpartum and menopausal women. *Ther Adv Psychopharmacol*. 2019;9.
 25. Montazeri SA, Ramezani Tehrani F, Bidhendi Yarandi R, Erfani H, Mansournia MA, Azizi F. Effect of aging, menopause, and age at natural menopause on the trend in body mass index: a 15-year population-based cohort. *Fertil Steril*. 2019;111(4):780–6.