



Coping Mechanisms and Stress Levels in the Climacteric Phase

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ABSTRACT

Background: The climacteric phase is a transitional period in a woman's life characterized by significant hormonal, physical, and emotional changes that may influence stress levels. This study aimed to analyze the relationship between adaptive coping mechanisms and stress levels among women experiencing the climacteric phase. **Methods:** A total of 169 respondents participated in the quantitative phase, followed by in-depth interviews with 10 key informants. **Results:** The findings revealed a significant association between adaptive coping mechanisms and stress levels ($p = 0.000$; $p < 0.05$). Women who used adaptive coping strategies, such as problem-solving, emotional regulation, and positive reframing, experienced lower stress levels. Qualitative analysis identified three key themes supporting adaptive coping: social support, spirituality and acceptance, and engagement in meaningful activities. **Conclusion:** Adaptive coping plays a crucial role in maintaining emotional stability during the climacteric phase. Strengthening social support, spiritual reflection, and community-based empowerment programs may enhance resilience and improve women's quality of life during this transitional period.



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INTRODUCTION

The climacteric phase marks a significant transition in a woman's life, representing the gradual shift from reproductive to non-reproductive stages (Fenn & Giovannoni, 2021). This period is accompanied by hormonal changes, including a decline in estrogen levels, which can affect both physical and psychological well-being. Common symptoms include vasomotor disturbances, insomnia, mood swings, anxiety, and decreased libido all of which can contribute to increased stress levels and diminished quality of life (Maya rafida, 2022). Coping mechanisms are essential strategies that help women manage the physical and emotional challenges of this phase. Adaptive coping, such as problem-focused coping and emotional regulation, has been associated with reduced stress, enhanced resilience, and improved emotional balance (Vannini et al., 2021). Conversely, maladaptive coping can intensify anxiety and lead to depressive symptoms.

In Indonesia, discussions about menopause remain limited, and many women experience these changes silently due to cultural taboos (Thakur et al., 2019). The lack of open communication and emotional support may heighten stress and hinder the

development of effective coping strategies (Rahmi et al., 2023). Health interventions that integrate education, counseling, and peer support are needed to promote adaptive coping and mental well-being (Setiawan, 2020). Interventions such as health education, counseling, and peer support have been found to enhance adaptive coping and improve psychological resilience among women in this phase (Mudrikatin, 2020).

This study is urgent because it provides empirical evidence and deeper insight into the relationship between coping mechanisms and stress levels among women in the climacteric phase. The findings are expected to support the creation of community-based health education, stress management programs, and psychosocial interventions that strengthen resilience, promote emotional well-being, and improve the overall quality of life for women undergoing this natural yet challenging stage of life. Previous studies on stress and coping in older populations often focus on elderly groups or caregivers, with limited research specifically addressing women in the climacteric phase within Indonesia's sociocultural context. Therefore, this study aimed to examine the relationship between adaptive coping mechanisms and stress levels among women in the climacteric phase, using a mixed-methods approach to gain both statistical and experiential insights. The novelty of this study lies in combining quantitative and qualitative methods to provide a comprehensive understanding of coping behaviors during the climacteric phase. The findings are expected to inform culturally sensitive health programs that promote resilience and enhance emotional well-being among Indonesian women

METHODS

This study employed a sequential explanatory mixed-methods design involving a total of 169 women aged 40–55 years who were experiencing the climacteric phase. Participants were selected through total sampling from several community health centers. Quantitative data were collected using two standardized instruments the Adaptive Coping Mechanism Questionnaire, developed based on Lazarus and Folkman's coping theory, and the Perceived Stress Scale (PSS-10) to measure stress levels. Both instruments were translated into Bahasa Indonesia and tested for validity and reliability, yielding Cronbach's alpha values of 0.87 for the coping scale and 0.84 for the stress scale, indicating good internal consistency. The quantitative data were analyzed using Fisher's Exact Test to determine the association between adaptive coping mechanisms and stress levels (Sugiyono, 2022). To complement and deepen the quantitative findings, a qualitative phase was subsequently conducted through in-depth interviews with ten purposively selected participants, consisting of five with low stress levels and five with high stress levels. The interviews explored participants' coping experiences, emotional regulation, and sources of social support. Qualitative data were analyzed thematically following a six-step analytical framework to identify key themes and patterns. Ethical approval for this study was obtained from the Health Research Ethics Committee of STIKES Telogorejo Semarang (No. 0135/XII/EC/P3M/STIKES/2024). All participants provided written informed consent, and the principles of confidentiality, anonymity, and voluntary participation were strictly maintained throughout the research process.

RESULTS

The quantitative phase of this study was conducted to identify the relationship between adaptive coping mechanisms and stress levels among women in the climacteric phase at several community health centers. Descriptive analysis was first carried out to determine the distribution of respondents by age, gender, coping

category, and stress level. The results indicated that most respondents demonstrated good adaptive coping with relatively low stress levels.

Table 1: Characteristics of Respondents

Variables	n	%
Age (years)		
40-45 years old	47	27.8
46-55 years old	122	72.2
Adaptive Coping		
Poor Coping	23	7.1
Good Coping	146	92.9
Stress Level		
High Stress	12	7.1
Low Stress	157	92.9

Table 1 presents the distribution of respondents by age, coping category, and stress level. The majority of participants were between 46 and 55 years old (72.2%) and demonstrated good adaptive coping (92.9%). Most respondents experienced low stress levels (92.9%), indicating a generally positive psychological adaptation during the climacteric phase

Table 2. Relationship between Adaptive Coping Variables and Stress Levels

Adaptive Coping	Stress Level				Total	P Value
	High		Low			
	n	%	n	%		
Less adaptive	10	43.5	13	56.5	23	
Adaptive	2	1.4	144	98.6	146	<0.001

Table 2 presents the relationship between adaptive coping mechanisms and stress levels among climacterium women experiencing climacteric transition. The findings show that most respondents with adaptive coping strategies experienced low stress levels 144 individuals (98.6%), while only 2 respondents (1.4%) in this group reported high stress. In contrast, among those with less adaptive coping, 13 respondents (56.5%) had low stress levels, and 10 respondents (43.5%) experienced high stress. Statistical analysis using Fisher's Exact Test yielded a p-value of <0.0001 ($p < 0.05$), indicating a significant association between adaptive coping and stress levels. These results suggest that climacterium woman individuals who employ adaptive coping mechanisms such as problem-solving, positive reframing, and emotional regulation are more likely to maintain low stress levels compared to those who rely on less adaptive strategies.

The qualitative findings of this study, viewed through the lens of nursing management, emphasize the crucial role of leadership, organizational support, and professional guidance in facilitating adaptive coping among women in the climacteric phase. From a nursing management perspective, three central themes emerged: the importance of supportive leadership and communication, empowerment through health education and counseling, and the integration of holistic, community-based care strategies to sustain women's psychological well-being and stress management (Wiese & Van Der Westhuizen, 2023).

Supportive leadership and communication, highlights the managerial responsibility of nurses and midwives in creating a caring environment where women feel heard, respected, and understood. Participants described that emotional comfort and trust in healthcare providers significantly influenced their ability to manage stress.

Women who received empathetic listening and consistent follow-up from community nurses reported feeling more confident in dealing with physical and emotional symptoms. This underscores the need for nursing managers to strengthen staff competencies in therapeutic communication and empathetic interaction. Effective leadership in nursing services should promote a patient-centered culture where women can openly discuss their experiences and receive tailored emotional support.

Empowerment through health education and counseling, reflects the managerial task of ensuring that structured programs are available to enhance women's knowledge and coping abilities. Participants expressed that education about the climacteric phase, stress management techniques, and relaxation strategies helped them better understand bodily changes and reduced anxiety. From a managerial standpoint, this finding supports the development of comprehensive health promotion programs that integrate education, counseling, and peer discussion groups. Nursing managers play a key role in planning and coordinating such initiatives, ensuring that staff are well-trained and educational materials are culturally sensitive. Empowerment in this context is not limited to individual learning but involves creating a system that encourages active participation and shared decision-making between women and healthcare providers.

Integration of holistic and community-based care, highlights the managerial need to coordinate multidisciplinary collaboration to address both physical and psychosocial aspects of women's health. Participants reported that community health programs, group counseling, and family-based support improved their emotional resilience. This finding points to the importance of managerial roles in mobilizing community resources, fostering partnerships with religious and social institutions, and implementing health promotion activities that extend beyond clinical settings. By facilitating cooperation among nurses, midwives, psychologists, and community leaders, nursing managers can ensure continuity of care and promote an environment conducive to adaptive coping.

The qualitative results demonstrate that effective nursing management is essential in guiding women through the climacteric transition. Managerial practices that emphasize empathy, empowerment, collaboration, and holistic care contribute to lower stress levels and improved emotional well-being. Strengthening leadership in nursing, enhancing communication skills, and developing community-based educational interventions can help transform the management of climacteric health from a purely clinical approach to a more comprehensive model of psychosocial care. Therefore, the implications of this study encourage nursing managers to design programs that not only address physical symptoms but also support women's emotional, social, and spiritual adaptation during this critical life stage.

DISCUSSION

The findings of this study revealed a significant relationship between adaptive coping mechanisms and stress levels among women experiencing the climacteric phase. This result demonstrates that women who employ adaptive coping strategies, both problem-focused and emotion-focused, tend to experience lower stress levels and better emotional balance compared to those who rely on maladaptive or avoidant coping styles (Gibbons, 2024). The climacteric phase is a critical period marked by hormonal changes, including decreased estrogen levels, which influence both physical and psychological well-being (Belešová & Tóthová, 2023). These hormonal fluctuations can trigger a variety of symptoms such as hot flashes, mood swings, anxiety, irritability, and sleep disturbances, all of which can contribute to increased

stress. However, this study shows that women who are able to interpret these physiological and emotional changes as a natural process of aging and employ effective coping strategies are more likely to maintain emotional stability and mental health (Tahara et al., 2021).

This finding is consistent with Lazarus and Folkman's transactional model of stress and coping, which suggests that an individual's response to stress depends on the cognitive appraisal of the situation and the strategies used to manage it. Adaptive coping enables individuals to view stressors not as uncontrollable threats but as challenges that can be managed or adapted to (Lazarus & Averill, 1972). In this study, women who applied problem-focused coping such as seeking information, maintaining healthy routines, and engaging in constructive problem-solving were more successful in managing their stress. Meanwhile, emotion-focused coping through emotional regulation, acceptance, and positive reframing helped participants manage feelings of anxiety and uncertainty. These results are supported by previous studies, who found that adaptive coping enhances psychological well-being and quality of life (Grandi et al., 2022). Similarly, Chen et al., (2023) noted that adaptive coping is associated with reduced anxiety and improved emotional regulation among women undergoing menopausal transitions.

The present study also highlights that stress during the climacteric phase is not solely the result of biological changes but is influenced by psychosocial and cultural factors. The qualitative findings revealed that social support plays a major role in moderating stress levels. Emotional, informational, and instrumental support from family, peers, and community members helps women feel accepted, valued, and less isolated during this transitional phase. Participants described that being able to share their feelings with others and receive empathy from their family and peers reduced the burden of stress. This finding aligns with the social buffering hypothesis, which explains that social relationships can protect individuals from the negative effects of stress. In the Indonesian cultural context, which emphasizes collectivism and the values of *gotong royong* (mutual cooperation), family and community support are crucial for emotional resilience. When women receive understanding and encouragement from their social environment, they are more likely to interpret the challenges of menopause as manageable and temporary, leading to lower perceived stress levels (Shin, 2023).

Spirituality also emerged as an essential dimension of adaptive coping among women in this study (de Medeiros et al., 2020; Siallagan et al., 2023). Many participants expressed that prayer, religious reflection, and acceptance of life changes based on faith helped them maintain inner peace and optimism. Spiritual coping enables women to reinterpret stressful experiences as meaningful parts of God's plan, which provides comfort and emotional strength (Glawing et al., 2024; Gutterman, 2020). This finding is in line with (Mariyani & Putri, 2022) who reported that faith-based coping promotes emotional regulation and resilience among aging women. Spirituality in this context functions not only as a source of personal strength but also as a cognitive framework for acceptance and positive reinterpretation. Women who believe that their life transitions have divine purpose tend to show greater acceptance and emotional stability. This is further supported by the work Sukmawati (2025) who found that elderly individuals who relied on spiritual practices such as prayer and reflection experienced lower levels of psychological distress (Dubale et al., 2019). The integration of spiritual approaches into coping can therefore be an effective culturally relevant strategy for maintaining mental well-being during the climacteric phase.

Another important finding from this study is the role of engagement in meaningful and productive activities as part of adaptive coping. Women who stayed active through

volunteering, gardening, entrepreneurship, or mentoring younger generations reported lower stress and greater life satisfaction. These activities not only provided a sense of purpose and identity but also kept them socially connected and mentally engaged. Active involvement in social or community activities helps reduce feelings of loneliness and promotes positive self-esteem. This is consistent with studies by Nugraheni, Melda, and Agustin (2024), who demonstrated that participation in recreational and group activities helps reduce stress among older adults. Likewise, Li and Miller (2017) highlighted that resilience and engagement in meaningful activities are key predictors of emotional health during middle and late adulthood. Maintaining active routines and social interactions allows women to focus their energy on positive experiences rather than the discomforts of menopause. This proactive attitude represents a practical manifestation of adaptive coping that transforms a potentially stressful life stage into an opportunity for personal growth.

Coping behaviors during the climacteric phase are deeply influenced by cultural norms and gender roles. In Indonesia, women's identities are closely tied to their roles as mothers, wives, and caregivers. The transition into the climacteric phase, often associated with the end of reproductive ability, may lead to feelings of loss or decreased social value. However, this study shows that many women adaptively reframe this phase as a time for self-care, reflection, and social contribution. Those who could redefine their roles beyond reproduction such as becoming mentors, caregivers, or community leaders reported a stronger sense of fulfillment and lower stress. Cultural values such as patience (*sabar*), gratitude (*syukur*), and mutual support foster emotional endurance and acceptance of life changes. These findings align with the view of De Jose (2018), who found that coping strategies among Filipino women were shaped by cultural expectations of endurance and collective responsibility. Similarly, Barai and Sharma (2021) reported that cultural values emphasizing family solidarity strengthened coping effectiveness among elderly women. Thus, culturally grounded approaches to stress management may be more effective in promoting adaptive coping than Western individual-centered models.

The integration of quantitative and qualitative data in this study provides a richer understanding of coping mechanisms in the climacteric phase. While quantitative analysis confirmed that adaptive coping is significantly associated with lower stress, the qualitative findings illuminated how women apply these coping strategies in their daily lives through social connection, spirituality, and meaningful engagement. This mixed-methods approach reflects the complexity of coping as both a psychological process and a social behavior influenced by context. It also underscores that coping during the climacteric phase is dynamic rather than static, involving continuous adjustments between cognitive appraisal, emotional regulation, and environmental interaction. These results support the argument of Sampedro-Piquero et al. (2018) that coping flexibility the ability to switch between strategies based on situational demands is crucial to psychological resilience during periods of hormonal and emotional transition.

The findings of this study also have important implications for nursing and midwifery practice. Health professionals who work in community settings should pay greater attention to the psychological aspects of the climacteric phase, not only the physical symptoms. Nurses and midwives can play a vital role in early detection of stress, providing counseling, and educating women about adaptive coping techniques. They can facilitate group discussions where women share experiences and learn relaxation techniques, mindfulness, or breathing exercises to manage anxiety. Incorporating family members in counseling sessions may further enhance the

effectiveness of these programs, as family understanding and empathy are central to women's emotional adjustment (Zenoni et al., 2023). Community health workers can also be trained to deliver educational materials about menopause, helping reduce stigma and misinformation that often surround this natural biological transition (Curta & Weissheimer, 2020). By adopting a holistic and culturally sensitive approach, nursing and midwifery practices can empower women to face the climacteric phase with confidence and positivity (Kou et al., 2021).

Theoretically, this study reinforces Lazarus and Folkman's transactional theory of stress and coping, demonstrating its applicability to women's health contexts in non-Western settings. The results show that coping is not merely a reaction to stress but an evolving process shaped by personal beliefs, relationships, and culture. Adaptive coping mediates the relationship between stressors and emotional outcomes, transforming stress from a destructive force into an opportunity for psychological growth (Maretalinia et al., 2023). This study also adds to the body of knowledge by highlighting the interplay between emotional regulation, spirituality, and social engagement as interdependent components of resilience among climacteric women (Oldra et al., 2020). These insights can inform future theoretical developments in psychosocial adaptation and women's health (Syed Alwi et al., 2021).

Despite its strengths, this study has several limitations. The sample was drawn from a single region, which may limit the generalizability of the findings to other cultural or socioeconomic groups. Additionally, the use of self-reported questionnaires may introduce subjective bias. Future research should include more diverse populations and consider longitudinal designs to examine changes in coping patterns throughout the pre-, peri-, and post-menopausal stages. Investigating the role of digital communities or online support groups as alternative coping resources could also provide new perspectives in the era of technological advancement. Furthermore, intervention-based studies are recommended to evaluate the effectiveness of structured coping enhancement programs in reducing stress and improving quality of life among climacteric women.

Overall, the results of this study highlight that adaptive coping mechanisms are fundamental for maintaining emotional well-being during the climacteric phase. Effective coping strategies such as problem-solving, emotional regulation, positive reframing, and acceptance allow women to manage stress constructively, leading to better psychological health and life satisfaction. Social support, spirituality, and engagement in meaningful activities further reinforce these coping capacities, illustrating that resilience during menopause is not only an individual psychological attribute but also a reflection of social and cultural strength. These findings underline the need for community-based interventions that integrate psychosocial, spiritual, and educational components to strengthen women's ability to cope with the challenges of the climacteric phase. Empowering women through knowledge, supportive relationships, and spiritual growth can transform this natural transition into a phase of empowerment, self-acceptance, and emotional maturity. The climacteric period, rather than being viewed as a stage of decline, can thus become an opportunity for renewal and resilience when supported by adaptive coping and a nurturing social environment.

CONCLUSION

Adaptive coping mechanisms significantly influence stress levels among women in the climacteric phase. Women who apply constructive coping strategies such as emotional regulation, problem-solving, and positive reframing experience lower stress and improved well-being. Social support, spirituality, and meaningful activity are key

elements that enhance resilience during this period. Health professionals should incorporate coping and stress management education into community programs and encourage family and peer involvement. Future research should explore diverse cultural settings to develop tailored interventions for climacteric women's mental health and quality of life

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