



Relationship of the Use of Internet Electronic Media in Increasing Premenopause Women's Knowledge About Menopause Complications

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Abstract. Many premenopausal women in Indonesia are unaware of the potential health impacts associated with menopause. This lack of awareness stems from the perception that menopause is a natural process. However, during this transition, women become more vulnerable to physical health issues, which may affect their biological well-being depending on the symptoms they experience. This study adopts a quantitative approach using a cross-sectional design and survey methods. A total of 106 respondents participated in the study. Data analysis was conducted using the chi-square test, yielding a p -value of $0.000 < 0.05$. The findings indicate a significant relationship between the use of internet-based media and the improvement of premenopausal women's knowledge regarding menopause-related complications.

Keywords: Media, Internet, Premenopause, Knowledge, Complications.

INTRODUCTION

Women go through various stages of growth and development throughout their lives. However, this progression eventually halts at a certain phase, leading to significant changes in bodily functions. These changes occur gradually with age, culminating in a stage known as menopause. During this transition, many women experience anxiety, often driven by the perception that they are no longer attractive [1].

The menopausal phase is generally preceded by the premenopausal phase, which signifies the transition from a woman's reproductive period to a stage where fertility ceases. Premenopausal symptoms typically emerge during a woman's 40s, reaching their peak around the age of 50, when menopause usually occurs [2] [3].

Premenopause is a physiological condition in women entering the aging phase, characterized by a decline in estrogen levels produced by the ovaries, a hormone essential for reproductive and sexual function. This reduction in estrogen often results in symptoms that can disrupt women's daily activities and may even impact household harmony [4]. The average age at which women experience premenopause ranges between 40 and 49 years [5].

Premenopausal women must adjust to life without the physiological stimulation provided by the production of estrogen and progesterone. The decline in estrogen levels often triggers symptoms that can interfere with daily activities, including hot flashes, night sweats, vaginal dryness, memory loss, insomnia, depression, fatigue, reduced libido, and pain during sexual intercourse [6].

Many premenopausal women in Indonesia lack awareness of the potential impacts associated with menopause. This ignorance is largely due to the perception that menopause is simply a natural process. However, as women transition into the post-menstrual phase, they may become more susceptible to physical illnesses that can adversely affect their biological health, depending on the specific symptoms they experience [7].

Menopause also affects women's psychological well-being, as many perceive it as a gateway to old age, often associated with a decline in physical and sexual attractiveness. Additionally, the notion of aging can lead to feelings of unproductivity and increased societal burden. These perceptions may contribute to depression, feelings of unworthiness, irritability, and anger. The psychological effects of menopause can further hinder social interactions, resulting in difficulties relating to others due to heightened suspicion, lack of concentration, and indecisiveness. Therefore, it is essential for women to prepare for menopause, as sufficient knowledge about this transition can help mitigate its psychological impacts [8].

The changes associated with menopause can be mitigated if women possess a comprehensive understanding of the condition. Knowledge about menopause is essential for premenopausal women, encompassing its definition, the causes of early onset, the menopausal process, common signs and symptoms, and strategies for managing associated complaints. An informed understanding of menopause is a crucial factor in fostering positive responses and actions among premenopausal women, ultimately aiming to reduce the severity of complaints experienced during this transition [9].

Knowledge about menopause is crucial for women, particularly for premenopausal mothers, as many women harbor fears regarding the onset of menopause and often hesitate to discuss this transitional phase [8].

A lack of knowledge about menopause prevents premenopausal mothers from adequately preparing for this transition. As a result, these women may be unable to take proactive measures to mitigate the severity of symptoms associated with menopause, hindering their ability to enter this phase of life with minimal discomfort [7]. According to the cognitive approach in psychology, emotional disorders in individuals are significantly influenced by their interpretations of the events they encounter. Several prevalent myths contribute to increased anxiety among women, such as the belief that menopause signals the onset of old age and an impending end to vitality, leads to a loss of sexual attractiveness, and equates the menopausal period with a state of mental distress. Premenopausal women who express concerns about menopause often do so due to a lack of accurate information regarding the transition [6].

The readiness of premenopausal mothers encompasses both physical and psychological aspects. Physical readiness involves accepting the menopausal process by adopting a healthy lifestyle, which includes engaging in regular exercise, consuming nutritious foods, avoiding tobacco and alcohol, and consulting with healthcare professionals. Psychological readiness, on the other hand, emphasizes cultivating positive thinking through acceptance and stress reduction, as well as fostering spiritual well-being by strengthening one's commitment to religious practices, thereby promoting a more positive acceptance of menopause [10].

No woman desires to experience the various complaints associated with premenopause, nor do their families wish to witness such difficulties. The simultaneous occurrence of multiple complaints can significantly diminish a woman's quality of life. In reality, premenopause need not be as daunting as many women perceive it to be, provided that those in this transitional stage possess accurate knowledge about the menopause process. With the right information, women can be better prepared to face the challenges and possibilities that lie ahead [5].

One of the prominent forms of mass media today is Android-based electronic media. The use of Android devices in education is particularly effective, as it can yield positive outcomes through the utilization of smartphones and the internet [11].

The internet serves as a vital medium for accessing health information, enabling adolescents to independently enhance their knowledge and understanding. By utilizing smartphone platforms, websites, and social media, young individuals can readily obtain information about various health topics, with a particular emphasis on reproductive health [12].

Android-based health education has the potential to enhance an individual's knowledge. By providing access to new information, it facilitates an increase in knowledge levels. This knowledge gain is often accompanied by a shift in attitudes, ultimately leading to the implementation of new practices that can improve an individual's quality of life. The integration of innovative media, such as Android and iOS-based health education applications, offers a unique appeal that can further engage users in their health education journey [13]. Based on the problems mentioned above, the author is interested in conducting research to examine how the Relationship of the Use of Internet Electronic Media in Increasing the Knowledge of Premenopausal Women About Menopausal Complications.

METHODS

This study employs a quantitative approach utilizing a cross-sectional design and survey technique to gather data from the sample. The survey aims to collect information on the use of electronic internet media and knowledge regarding menopause and its complications among premenopausal women. The research will be conducted in Bukit Wolio Indah Village, Baubau City, from January to April 2024, with a sample size of 106 respondents.

Respondents will be divided into two groups: Group 1 consists of premenopausal mothers who use electronic internet media, while Group 2 includes those who do not. The sample will be selected using the accidental sampling technique based on the following inclusion criteria: women aged 40-49 years who use electronic internet media (Group 1) and those who do not use electronic internet media (Group 2). Exclusion criteria will include women aged 40-49 years with mental or psychological limitations or serious illnesses.

Each respondent in both groups will complete a questionnaire containing questions about menopause and its complications. To ensure authenticity and honesty, respondents will answer the questionnaire independently.

The research results will be tabulated, followed by data analysis using statistical tests conducted in two stages: (1) a univariate test, where respondent characteristics will be summarized in a frequency table, and (2) a bivariate test, where survey data from each group will be analyzed using the chi-square test to assess the relationship between the studied variables.

RESULTS AND DISCUSSION

3.1 Results

Table 1. Respondent characteristics

Characteristics	Frequency	Percent (%)
Age		
40 years old	25	24
41 years old	18	17
42 years old	11	10
43 years old	9	8
44 years old	7	7
45 years old	10	9
46 years old	5	5
47 years old	6	6
48 years old	11	10
49 years old	4	4
Education		
SD	25	24
JUNIOR HIGH SCHOOL	21	20
SENIOR HIGH SCHOOL	36	34
College	24	23
Work		
Work	40	38
Not Working/Housewife	66	62
Total	106	100

Source: Primary Data

From table 1 above, the respondents aged 40 years were the most, namely 25 people (24%) and the respondents aged 49 years were the least, namely 4 people (4%).

Table 2. Analysis of the relationship between the use of internet electronic media and knowledge

Internet Electronic Media Users	Knowledge				Total		p
	Not enough		Enough		N	%	
	n	%	n	%			
Yes	13	25	39	75	52	100	0.000
No	44	81.5	10	18.5	54	100	
Total	57	53.8	49	46.2	106	100	

Source: Primary Data

Table 2 above shows that there is a relationship between the use of electronic internet media and the knowledge of premenopausal mothers with a p value of 0.000 < 0.05 in the chi-square test results.

3.2 Discussion

The results of this study indicate a significant relationship between the use of electronic internet media and the knowledge of menopause complications among premenopausal mothers. This finding aligns with research conducted by Sambowa et al. (2021), which demonstrates that health education on reproductive health delivered through electronic internet media effectively enhances the knowledge levels of adolescent girls [14], [15]. According to theoretical perspectives, knowledge is the product of human cognition regarding a particular subject or object. It necessitates the presence of a subject who possesses the awareness to seek understanding and an object that is being examined. Knowledge inherently comprises elements of both the knower and the known, along with the awareness of the entity or concept that is the focus of inquiry [16]. Knowledge about menopause is crucial, as it can lead to various complications, including cardiovascular diseases (such as heart disease and hypertension), diabetes mellitus, osteoporosis, and mental health disorders (including depression, anxiety, and mood swings). Other potential complications include urinary incontinence, vision deterioration (such as cataracts and macular degeneration), obesity, breast cancer, joint pain, and oral health issues (such as jaw bone loss, dry mouth, gum disease, etc [17], [18].

Sensory experience serves as a fundamental source of knowledge for humans, playing a crucial role in organizing daily life. Through the use of the senses—eyes, ears, nose, tongue, and skin—individuals can directly perceive their environment and engage in various activities. Additionally, information is a significant factor that influences a person's knowledge. Even individuals with lower educational attainment can enhance their understanding if they access quality information from diverse media sources, such as television, radio, newspapers, and the internet [19], [20]. The results of this study support the theory that one of the primary functions of mass media is to inform. Mass media serves as a platform for disseminating information about significant events and issues that are essential for public awareness. Additionally, mass media has an educational function, as it can foster intellectual development, shape character, and enhance individuals' skills and abilities through its written content and visual presentations [21].

Table 2 indicates that among the 52 respondents who utilize electronic internet media, 39 respondents (75%) possess sufficient knowledge about menopause complications, while 13 respondents (25%) demonstrate insufficient knowledge. In contrast, among the premenopausal mothers who do not use electronic internet media, a total of 54 respondents were surveyed. Within this group, only 10 respondents (18.5%) have sufficient knowledge about menopause complications, whereas 44 respondents (81.5%) exhibit insufficient knowledge. Women with limited knowledge about menopause and its complications should be encouraged to engage in reproductive health management activities and receive better care. Understanding menopause is essential for enhancing women's ability to manage this transition effectively. Therefore, it is crucial to develop educational programs specifically focused on menopause to improve knowledge levels among perimenopausal women [22], [23].

CONCLUSIONS

The purpose of this study was to analyze the relationship between the use of electronic internet media and the knowledge of menopause complications among premenopausal mothers. The findings indicate a significant relationship between the use of electronic internet media and the knowledge levels of premenopausal mothers regarding menopause complications.

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