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Research Article

Analysis of the Relationship of Knowledge with the Level of Readiness for Menopause in Premenopause Women in Pisangan Jaya Tangerang 2022

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Abstract

Aims: menopause is the final stage of the biological processes experienced by women. Hormonal changes during menopause will cause physical and psychological symptoms, with education and knowledge about menopause can encourage ability and readiness aimed especially at premenopausal women. Purpose of this study was to determine and analyze the relationship between knowledge about menopause and the readiness level of premenopausal women.

Methods: this type of research is quantitative with a case control research design. The population is premenopausal women aged 40-48 years and residing in Pisangan Jaya Village. The sampling method used was simple random sampling, and the sample in this study was 73 respondents. Collecting data using a questionnaire about knowledge and readiness for menopause. The statistical test used is Chi-square.

Results: the results of this study indicate that of the 57 respondents the level of readiness to face menopause is in the ready category, mothers with a good level of knowledge about menopause are in the good category (64.4%), in the sufficient category (13.7%), and in the poor category (0.0%). Of the 16 respondents, mothers with a level of readiness to face menopause were in the unprepared category, mothers with a good level of knowledge about menopause were in the good category (2.7%), in the sufficient category (15.1%), and in the poor category (4.1%).

Conclusion: the results of this study also showed that there was a relationship between the level of knowledge of mothers about menopause and the level of readiness to face menopause with a correlation value ($p = 0.000$). Because the significance value is less than the alpha value (<0.05).

Keywords:

Knowledge, Menopause, Premenopausal Mothers, Readiness

INTRODUCTION

Menopause is the ultimate step of a biological process that women encounter in the form of the ovaries producing female sex hormones such as estrogen and progesterone (1). Menopause occurs when a woman has not menstruated for one year. Hormonal changes during menopause will cause physical and psychological symptoms; in fact, it is natural and normal for all women to experience them; however, a variety of

cultures and individual perceptions influence the psychology of menopause, so that the symptoms experienced differ between women experiencing menopause.

The oviduct, uterus, and uterine muscular lining, as well as the suppleness and strength of the genitals, are all affected by a decrease in estrogen hormone synthesis (2). It usually happens around the age of 50. According to WHO (World Health Organization), the number of women undergoing menopause

in the world is predicted to be 1.42 billion in 2013. In 2013, there were 15.5 million menopausal women in Indonesia, and by 2025, it is expected that there will be 60 million menopausal women. The climacteric phase is divided into four stages: premenopause, perimenopause, menopause, and postmenopause, each of which can induce a variety of reported difficulties, both psychological and physiological. Irritability, anxiety, and depression are common psychological symptoms (3). Physical symptoms such as hot flushes, difficulty sleeping, and weariness are caused by changes in the decreased hormone estrogen in a woman's body. Many women are unaware that the signs of menopause appear in their late 30s, when ovulation becomes less common, estrogen levels fall, and levels of Follicle Stimulating Hormone (FSH) rise in an attempt to boost estrogen synthesis. These hormonal alterations lead certain women to have irregular menstruation cycles, breast discomfort, and mood swings well before menopause (4).

Women experience a variety of complaints as a result of changes in the climacteric period, but each woman's experience differs due to biological impacts and unique sensitivities to low estrogen, which create a variety of symptoms. Women become less confident as a result of their experiences with or lack of acceptance of physical and psychological changes. Excessive anxiety and dread can impair preparation, therefore women must be well informed and prepared for the physical and psychological changes they will undergo (2). A woman's readiness to face the climacteric period will substantially assist her in living this period more successfully. preparedness originates within the woman (intrinsic), as do hormonal status and preparedness from without (extrinsic). Extrinsic preparation can be demonstrated in a variety of ways, including eating nutritious foods, avoiding stress, quitting smoking and drinking alcohol, exercising frequently, and contacting a doctor. Aside from that, the

most crucial aspect of preparation for the climacteric stage is nutrition. Calcium supplementation and regular exercise can help prevent osteoporosis. Fractures caused by osteoporosis affect 50% of people over the age of 50. According to research findings, there are more women who are ready to face menopause (87.5%) than those who are not (12.5%) (5).

Knowledge is a crucial aspect in influencing one's actions that result from not knowing and occurs after humans use their senses to sustain and develop life. Sufficient understanding about menopause can assist premenopausal people prepare for menopause, and this knowledge can influence a woman's decision to behave healthily later in life. According to the findings of (3) research, the majority of respondents who had knowledge about menopause were in the sufficient category (53%) and most were not ready to confront menopause (60%) (3). Other findings from (6) research show that the study's results were acquired from 44 respondents, with 17 respondents (39%) having high knowledge, 11 respondents (25%) having sufficient information, and 16 respondents (36%) having low knowledge. The findings revealed that the majority of respondents had a negative attitude, with 24 respondents (55%), and 20 respondents (45%) having a good attitude. Based on this context, the authors intended to conduct a study on the relationship between knowledge and the level of readiness of premenopausal mothers in Pisangan Jaya Village, Kab. Tangerang, in the year 2022.

METHODS

This type of research is quantitative with a case control research design. This study used a total sampling technique with a total sample of 73 respondents. This research was conducted in Pisangan Jaya Village. Sepat District. Tangerang Regency. From October to November 2022. Data was collected using a questionnaire, data analysis was carried out using the chi-square test.

RESULTS

Univariate analysis

1. Age

Table 1. Frequency distribution of Respondents by Age

No	Age	Frequency	Percentage (%)
1	40	11	15,1
2	41	7	9,6
3	42	12	16,4
4	43	7	9,6
5	44	3	4,1
6	45	12	16,4
7	46	1	1,4
8	47	2	2,7
9	48	18	24,7
	Total	73	100,0

Table 1 describes the respondents based on the most age category, namely 48 years with a total of 18 respondents (24.7%).

2. Education

Table 2. Frequency distribution of Respondents by Education

No	Education	Frequency	Percentage (%)
1	Elementary school	3	4,1
2	Junior High School	19	26,0
3	Senior High School	44	60,3
4	Bachelor	7	9,6
	Total	73	100,0

Table 2 illustrates that the most respondents were SMA with a total of 44 respondents (60.3%).

3. Jobs

Table 3. Frequency Distribution of Respondents by Occupation

No	Jobs	Frequency	Percentage (%)
1	Baby Sitter	2	2,7
2	Labor	1	1,4
3	Teacher	2	2,7
4	Housewife	61	83,6
5	Employee	6	8,2
6	Trader	1	1,4
	Total	73	100,0

Table 3 illustrates that the most respondents are in the Job category, namely IRT with a total of 61 Respondents (83.6%).

4. Marital Status

Table 4. Frequency distribution of Respondents based on Marital Status

No	Marital Status	Frequency	Percentage (%)
1	Marry	69	94,5
2	Widow	4	5,5
	Total	73	100,0

Table 4 describes the respondents based on the category of marital status, namely married, 69 respondents (94.5%) and the category of marital status, namely widows, 4 respondents (5.5%).

5. Number of Children

Table 5. Frequency distribution of Respondents based on Number of Children

No	Total	Frequency	Percentage (%)
1	0 Children	3	4,1
2	1 Children	11	15,1
3	2 Children	35	47,9
4	> 2 Children	24	32,9
	Total	73	100,0

Table 5 describes the Respondents based on the Number of Children category, namely 0 Children with 3 Respondents (4.1%), 1 Child with 11 Respondents (15.1%), 2 Children with 35 Respondents (47.9%), and Number of Children, namely > 2 Children with a total of 24 respondents (32.9%).

6. Level of Mother's Knowledge about Menopause

Table 6. Frequency distribution of Respondents based on Mother's Knowledge Level about Menopause

No	Konwledge	Frequency	Percentage (%)
1	Good	49	67,1
2	Enough	21	28,8
3	Not Enough	3	4,1
	Total	73	100,0

Table 6 describes the Respondents based on the category of Mother's Knowledge Level about Menopause, namely Good with 49 Respondents (67.1%), Sufficient with 21 Respondents (28.8%), and Less with 3 Respondents (4.1%).

7. Readiness Level for Menopause

Table 7. Frequency Distribution of Respondents based on Level of Preparedness to Face Menopause

No	Readiness for Menopause	Frequency	Percentage (%)
1	Ready	57	78,1
2	Not ready	16	21,9
	Total	73	100,0

Table 7 describes the Respondents based on the Readiness Level category for Menopause, namely Ready with a total of 57 Respondents (78.1%) and Not Ready with a total of 16 Respondents (21.9%).

Bivariate Analysis

Chi Square Test of Knowledge Level of Mothers about Menopause on the Level of Preparedness to Face Menopause

Table 8. Crosstabulation of the Level of Mother's Knowledge about Menopause on the Level of Readiness to Face Menopause

Meng's readiness to face Menopause	Level of Mother's Knowledge about Menopause								Nilai <i>p</i> -value
	Good		Enough		Less		Total		
	n	%	n	%	n	%	N	%	
Ready	47	64,4	10	13,7	0	0	57	78,1	0,000
Not Ready	2	2,7	11	15,1	3	4,1	16	21,9	
Jumlah	49	67,1	21	28,8	3	4,1	73	100	

Based on Table 8 it is known that of the 57 Respondents in the Readiness Level for Menopause in the Ready category, the Respondents with the Level of Mother's Knowledge about Menopause in the Good category are 47 Respondents (64.4%), the Adequate category is 10 Respondents (13.7%), and the Poor category is 0 Respondents (0.0%). Of the 16 respondents with a level of readiness to face menopause, the category was not ready, respondents with a level of knowledge of mothers about menopause were in the good category, 2 respondents (2.7%), in the sufficient category, 11 respondents (15.1%), and in the poor category, 3 respondents (4.1%). Fisher's Exact Test results obtained a significance value of 0.000. Because the significance value is less than the alpha value (<0.05), this indicates that there is a relationship between the level of knowledge of mothers about menopause and the level of readiness to face menopause.

DISCUSSION

A. Description of Respondent Demographic Data

1. Age

The study's findings depict respondents in the most age categories, namely 42, 46, and 48 years, by as much as 16% and 24.7%, respectively. According to the findings of (7) study on self-management of moms before menopause, 86% of respondents are between the ages of 40 and 45, while 14% are between the ages of 46 and 50. According to the findings of (8) on women's understanding of menopause, 61.7% of respondents are between the ages of 39 and 48. Age is one of the elements that might influence one's level of knowledge; as one grows older, one's age will vary in characteristics and psychology. As a person's comprehension and perspective change with age, women gain a broader and more perceptive understanding of menopause. The older a person gets, the more experience he gains and the more mature his soul becomes. Women will experience menopause at varying ages, according to (9), due to decreased egg cells and a drop in the hormone estrogen. This process takes a long time to complete. Hormonal changes cause greater sensitivity, causing women

to be easily offended, have mood swings, rage, lack of confidence, and have poor recall. This is dependent on each woman's viewpoint; the older they get, the more mature their thinking becomes and the better prepared they are to deal with menopause changes.

2. Education

The findings of this study categorize respondents by education level, notably elementary school (4.1%), junior high school (26.0%), high school (60.3%), and bachelor degree (9.6%). The findings of Diana's research (2021) on the variables of preparation and worry for mothers confronting menopause show that respondents with a high school/MA/SMK education level dominated the distribution of respondents by 60.6%. According to the findings of (10), 44.7% of respondents had a secondary education. When compared to women with lower levels of formal education, women with higher levels of formal education likely to have more knowledge. Women with a greater degree of formal education will have a better awareness of the meaning and relevance of health, particularly during the menopause stage. A decent degree of education influences the growth of one's thinking and analysis; strong reasoning facilitates the acquisition of new knowledge. Women with a greater level of formal education have a better understanding of the meaning and relevance of health, especially during the menopause phase (9).

3. Work

The findings of this study categorize respondents as babysitters (2.7%), laborers (1.4%), instructors (2.7%), housewives (83.6%), and private employees (8.2%). According to the findings of Amalina's (2017) study on menopausal preparation, respondents in the work status group were dominated by the status of housewives (IRT) by 35%. According to the findings of (11) study on

the association between Manarche and menopause age, the majority of respondents (74.6%) were non-working moms (IRT). Work factors will influence the behavior of every individual, especially women, according to (10), where working women generally have a way of thinking that they feel safer because of their work and have confidence in themselves and their abilities so that they have sufficient mental readiness to face anything that comes their way. occur in the future, one of which is menopause. According to (9), the work environment influences a person's experience and knowledge, both directly and indirectly, and is therefore particularly influential in the creation of attitudes, the process of obtaining new information and knowledge, and decision making. Working women have more knowledge since it is easier to gather information and experience in the job, allowing them to be more mature while dealing with something, particularly menopause.

4. Marital Status

According to the findings, the marital status distribution of respondents was 94.5% married and 5.5% widowed. According to the findings of (12) study on self-management of moms before menopause, the distribution of respondents based on marital status was dominated by 96% married status and 4% widow status. According to the findings of (13) research on the factors that influence the age of menopausal moms, the distribution of respondents based on marital status is greater with married status (92.5%) than unmarried (7.5%). The condition of a woman who is not married is supposed to effect a woman's psychological development based on marital status. They will reach menopause at a younger age than unmarried women. Apart from physical changes, psychological alterations have also had an impact on a woman's quality of life after menopause (14). Mothers



who are married will go through a pregnant time. Indirectly, pregnancies passed by married women will effect the reduction in the number of egg cells, which is slower than in unmarried women, so that menopause will occur faster than in women who have not gone through the pregnancy process. The hormones released also undergo variations in secretion after birth, which have a significant impact on the mother's self-management before menopause (12).

5. Number of Children

The distribution of respondents based on the number of children is 0 children (4.1%), 1 child (15.1%), 2 children (47.9%), and the number of children is > 2 children (32.9%). The results of Amalina's research (2017) regarding readiness for menopause showed that most of the participants had more than 3 children (41%). The results of another study by Mail and Yuliani (2021) concerning the relationship between Manarche and the age of menopause show that the majority of respondents had more than 4 children (53.7%) and less than 4 (38.8%). According to (15) the number of children affects the menopause. The more often women give birth, the older or longer they enter menopause. This relates to the female reproductive system, therefore mothers must better prepare themselves for menopause. The number of children (parity) is one of the factors that influence the age of menopause, this factor is quite significant with the age of menopause, namely the more often a woman gives birth, the older or the longer the woman enters menopause (16). A woman who often gives birth will have a significant increase in progesterone so that inhibition of follicle release occurs more often. The more often a woman gives birth, the longer (slower) she will experience menopause. The effect of the amount of parity with the age of

menopause is caused by an increase in AMH receptor expression which will inhibit the initial recruitment process so that it slows down the age of menopause. The increase in AMH receptor expression is caused by a very high increase in progesterone levels at the end of pregnancy and after childbirth, thus frequent childbirth, increased levels of progesterone will often occur, so that it will further slow down the age of menopause (17).

B. The Relationship between Knowledge and the Level of Preparedness for Menopause for Premenopausal Mothers in the Pisangan Jaya Village in 2022

The results of this study indicate that of the 57 respondents with the level of readiness to face menopause in the ready category, mothers with the level of knowledge about menopause are in the good category at most (64.4%) rather than the sufficient category (13.7%), and the poor category (0.0%). Of the 16 respondents, mothers with a level of readiness to face menopause were in the unprepared category, mothers with the least level of knowledge about menopause were in the good category (2.7%), rather than in the sufficient category (15.1%), and in the less category (4.1%). The results of this study also showed that there was a relationship between the level of knowledge of mothers about menopause and the level of readiness to face menopause with a correlation value ($p = 0.000$). This result is in line with the results of (18) which showed that there was a significant relationship between the level of knowledge about menopause and the readiness of mothers to face menopause with a correlation value (0.000).

These results indicate that mothers with good and fairly good knowledge about menopause were more prepared (15.1%) in facing menopause than those who were not ready (0%), while mothers with less knowledge were not ready to face

menopause than those who were. The results of research by (19) also showed the same results, namely that there was a relationship between knowledge of menopause and readiness for menopause with a correlation value ($p = 0.003$), where mothers with good knowledge and good enough were more prepared to face menopause than mothers with less knowledge.

A mother who has a good level of knowledge and is quite knowledgeable about menopause indicates that she is already aware of the reasons, signs, symptoms, and variables that influence menopause and is prepared to face menopause. Menopause readiness can take the form of physical, mental, and spiritual preparation, which is increased by information received in the form of knowledge. If a perimenopausal mother's understanding is moderate to good, it will influence the mother's readiness to face menopause. Adequate management will make it simpler for someone to obtain a better understanding, both about menopause and ways to carry out better preparedness in dealing with menopause, and this should be done as soon as feasible. (20) The amount of education, information regarding premenopause, and experience all influence a person's understanding, resulting in the establishment of varied attitudes in dealing with premenopause. Information can be gained through the eyes and hearing, and experience or knowledge is an important aspect in interpreting the input that someone receives. It can be retrieved, comprehended, applied, analyzed, synthesized, and then evaluated in their own method and understanding so that mothers with a good level of knowledge would know more about the signs and symptoms and changes that occur in themselves before menopause. physically and psychologically to better prepare them for menopause (9).

Someone who has a great desire to utilize knowledge, skills and education in interacting with the environment can shape one's thinking patterns, perception patterns and attitudes in decision making. The

existence of education and knowledge encourages the ability and willingness aimed especially at menopausal mothers. Knowledge is the result of knowing after someone senses a certain object which can form mentally, psychologically and physically ready to face what will happen (8). A person's knowledge is influenced by internal and external factors, namely the level of intelligence, emotional level, education, environment, socio-culture or economic level respectively.

From this knowledge can be retrieved, understood, applied, analyzed, synthesized and then evaluated in their own way and understanding. Sufficient knowledge will help pre-menopausal women understand and prepare themselves for menopause better. By understanding menopause, it is hoped that pre-menopausal women will be able to make prevention efforts as early as possible to be ready to enter menopause without experiencing severe complaints (21)

CONCLUSION

From the results of research conducted in the Pisangan Jaya Village in 2022 and described in the discussion in the previous chapter, several conclusions can be drawn regarding the relationship between knowledge and the level of readiness for menopause in premenopausal women, namely as follows:

1. The level of knowledge of mothers about menopause shows that of the 73 premenopausal mothers as research respondents, that is, 49 respondents (67.1%) have a good level of knowledge about menopause, 21 respondents (28.8%) have a category of knowledge about menopause sufficient, and 3 respondents (4.1%) had a less knowledge level category of menopause.
2. Respondents in the ready category were 57 respondents (78.1%) and in the unprepared category were 16 respondents (21.9%).

3. The results of data analysis on mothers' knowledge about menopause and readiness for menopause, namely that the majority of respondents in the ready category were 57 respondents with the highest level of good knowledge (64.4%). And the unprepared category is 16 respondents with the least level of good knowledge (2.7%).

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