

Available online on 22.02.2022 at <http://jddtonline.info>

# Journal of Drug Delivery and Therapeutics

Open Access to Pharmaceutical and Medical Research

Copyright © 2022 The Author(s): This is an open-access article distributed under the terms of the CC BY-NC 4.0 which permits unrestricted use, distribution, and reproduction in any medium for non-commercial use provided the original author and source are credited



Open Access Full Text Article



Research Article

## Characteristics of Knowledge, Attitudes, and Behaviors of Women Aged 35 - 45 Years in Facing Menopause in Kelurahan Cawang Rw 06 East Jakarta 2016

Wiradi Suryanegara<sup>1\*</sup>, Batara Imanuel Sirait<sup>2</sup><sup>1</sup> Department of Medical Community, Medical Faculty, Universitas Kristen Indonesia, Jakarta, Indonesia<sup>2</sup> Department of Obstetrics and Gynecology, Medical Faculty, Universitas Kristen Indonesia, Jakarta, Indonesia

### Article Info:



#### Article History:

Received 30 December 2021  
Reviewed 02 February 2022  
Accepted 11 February 2022  
Published 22 February 2022

### Cite this article as:

Suryanegara W, Sirait BI, Characteristics of Knowledge, Attitudes, and Behaviors of Women Aged 35 - 45 Years in Facing Menopause in Kelurahan Cawang Rw 06 East Jakarta 2016, Journal of Drug Delivery and Therapeutics. 2022; 12(1-s):105-109

DOI: <http://dx.doi.org/10.22270/jddt.v12i1-s.5217>

### Abstract

Results from the 2010 population census by the department of health show that Indonesia is one of the top 5 countries of older people living in the world, with 18.1 million people or about 9.6% of the population in Indonesia. Based on the data from the WHO, in 2010, the number of women who has menopause in Asia by the year 2025 will reach 373 million people. The average menopause age in Indonesia is around 49 years old, but women above the age of 40 already have irregular menstruation cycles. This research hopes to know the knowledge, attitude, and behaviour of women aged 35-45 years old in the Cawang region RW 06 in 2016. This research is descriptive survey research and was done in September through October with 70 respondents. In this research, 17.1% of the respondents know about menopause well, 60% knows about menopause quite well, and 22.9% do not know about menopause very well. 51.4% of the respondents respond well towards menopause, and 48.6% does not respond well to menopause. Facing menopause, 64.3% of the respondents are ready for menopause, and 35.7% are not ready for menopause.

**Keywords:** knowledge, attitude, behaviour, menopause

\*Address for Correspondence: Wiradi Suryanegara, Department of Medical Community, Medical Faculty, Universitas Kristen Indonesia, Jakarta, Indonesia

## INTRODUCTION

The 2010 Ministry of Health's Population Census results show that Indonesia is currently included in the top five countries with the most significant number of older people globally, namely 18.1 million people or 9.6% of the total population. Based on Bappenas projections, the number of older people aged 60 years or over is expected to increase from 18.1 million (2010) to 29.1 million (2020) and 36 million (2025) <sup>1</sup>. With the increase in the number of elderly, of course, it will be followed by an increase in health problems in the elderly, one of which is the problem of menopause/andropause <sup>2</sup>.

Based on WHO data (2010), the number of menopausal women in Asia in 2025 will reach 373 million people. Currently, in the United States, there are more than 32 million postmenopausal women. The average age for women to experience menopause in the United States is 50-52 years, but it may occur earlier or later in some cases. Most women will experience it at the age of 50, but it is possible if it occurs sooner or later <sup>3</sup>.

Menopausal age in Indonesia is ± 49 years, but usually, since women over 40 years of age have irregular menstruation, cycles often occur without releasing an egg, which means that the possibility of getting pregnant is slight. However, if a pregnancy occurs at this age, there is a high probability of having a defective/poor quality child. Menopause is the last

episode of a woman's menstrual cycle. Menopause is divided into four periods, namely pre-menopause, perimenopause, menopause, and post-menopause. Pre-menopause begins when women are 40 - 49 years old <sup>3,4</sup>.

Menopause is a natural and normal thing in women, but women feel many complaints and disturbances. Complaints and disturbances women going through menopause are usually only perceived as a process of "ageing" or are thought to be symptoms of other diseases, so the treatment given is not appropriate. The ageing process has occurred since humans were born into the world, which occurs continuously throughout life. Especially in women, this ageing process impacts the menstrual cycle. Every month, the menstrual cycle will start to be disturbed and eventually disappear altogether <sup>5</sup>.

At menopause, a woman must read just her life from a life that is physiologically stimulated by the production of estrogen and progesterone to a life that is empty without these hormones. The loss of estrogen often causes significant physiological changes in body function. Furthermore, there is an increase in the hormones FSH and LH, which causes various changes in physical and psychological <sup>6</sup>. Women who experience menopause mostly experience anxiety and a decrease in productivity and quality of life. Adjustment to menopause can be influenced by the level of knowledge, attitude, personality, and the severity of the symptoms

encountered. Menopause should be faced with a calm attitude, feel that he is still needed, have a more mature and realistic view of life, and continue to work and be productive <sup>7</sup>.

Based on the description above, the authors are interested in further researching the characteristics of knowledge, attitudes, and behaviours of women aged 35-45 years in dealing with menopause in Cawang RW 06 East Jakarta, and the behaviour of women aged 35-45 years in dealing with menopause in Cawang Village, RW 06 East Jakarta in 2016?" with the aim of the study was to determine the characteristics of knowledge, attitudes, and behaviour of women aged 35 - 45 years in dealing with menopause in Cawang Village RW 06 East Jakarta in 2016.

## LITERATURE REVIEW

Menopause is the last menstrual period in women. It occurs when the hormones that control the menstrual cycle are so low that menstruation is no longer possible. Menopause, according to WHO, is defined as the permanent cessation of the menstrual cycle for women who previously had menstruation as a result of the loss of ovarian follicular activity. Menopause is defined as the absence of menstruation for 12 consecutive months in which the ovaries have progressively failed to produce estrogen. The number of follicles experiencing atresia continues to increase until, at some point, there are no longer enough follicles. During the menopausal transition, women experience various physical, psychological, and social changes that can affect women's quality of life <sup>8</sup>.

The average age of women experiencing menopause is 51 years, and if a woman had her last menstrual period at the age range of 45 and 55 years, it is still considered normal. What can happen to women in the face of menopause is that there are often gradual changes and symptoms over the years before and after the last menstrual period. The climacteric phase is a more accurate term for the transition from reproductive life to non-reproductive life. Climacteric is the transitional phase between premenopause and postmenopause, and it is called postmenopausal if you have experienced menopause 12 months to the Senium. Senium is late postmenopausal, i.e. after the age of 65 years. It is called precocious climacteric if the ovaries are no longer functioning at the age of <40 years. The climacteric is divided into several phases, namely premenopause, perimenopause, menopause, postmenopause, and precocious climacteric <sup>9</sup>. The menstrual cycle is controlled by two hormones produced in the pituitary gland in the brain, namely FSH and LH, and two hormones produced by the ovaries, estrogen and progesterone. When women are nearing menopause, FSH and LH usually produce the pituitary gland. However, as the ovaries get older, both ovaries cannot respond to FSH and LH as they should. As a result, less estrogen and progesterone are produced <sup>9</sup>.

Menopause occurs when both ovaries can no longer produce enough hormones to maintain a menstrual cycle. When women enter menopause, estrogen and progesterone levels drop dramatically because the ovaries stop responding to the FSH and LH produced by the pituitary gland in the brain. The brain secretes more FSH and LH to keep both ovaries functioning correctly, but it does not work correctly because both ovaries cannot function normally <sup>9</sup>. However, the tendency of the brain to produce more FSH provides one advantage: high levels of FSH can be detected in the blood or urine and can be used as a simple test to detect menopause. Approximately 70% of perimenopausal and postmenopausal women experience vasomotor complaints, depression, and other psychic and somatic complaints. The severity of the lightness of complaints varies from woman to woman. These complaints reach their peak before and after menopause,

and with increasing age, these complaints are less and less common <sup>9</sup>.

Postmenopausal women found abnormalities in the skin in the form of thinning skin, wrinkles, itching, brittle and yellow nails, dry mouth, and a burning tongue. Other complaints are dry eyes and difficulty using contact lenses, thinning hair, and often found hair growth around the lips, nose, and ears. Urogenital complaints may include painful intercourse, vaginal dryness, vaginal discharge, post-coitus bleeding, recurrent urinary tract infections, vaginal/vulvar itching, irritation, uterine/vaginal prolapse, and urinary incontinence. Metabolic disorders can occur in increased cholesterol levels, increased LDL levels, and decreased serum HDL levels <sup>9</sup>. Some other complaints often occur vasomotor, somatic, psychological, sleep disturbances, cognitive and sensory functions, sex and libido, psychiatric and neurologic disorders, other neurologic disorders, skin, muscles and joints, breasts, and osteoporosis.

Giving estrogen can improve cognitive function, improve memory, and improve learning abilities and concentration. Estrogen can also improve sensory and sensorimotor abilities. Sexuality disorders caused by abnormalities in the vagina such as pain, dryness, and burning are very effectively treated with local estrogen in creams. Its effectiveness does not depend on the dose but is very dependent on the duration of administration. The maximum effect is only seen after a few months (6-12 months). Administration of systemic estrogen and combination with progesterone can also relieve the complaints caused by these vaginal abnormalities. However, the effect was only seen after 12 months <sup>9</sup>. Currently, menopausal hormone replacement therapy is still considered the most effective way to control mild to severe symptoms of menopause, such as hot flashes and night sweats. However, some women are still reluctant to use hormone therapy because of possible side effects <sup>10</sup>.

Factors related to Menopause Readiness, namely a) knowledge - Knowledge is the result of "knowing" and this occurs after people have sensed a particular object; b) Education level-Educated women will have better health knowledge; c) readiness-A woman's readiness to face menopause will significantly help a woman to live this period better; d) socio-economic-Socio-economic conditions affect physical factors, health and education; and e) age-As a person gets older, his experience increases, so he will be better at dealing with menopause <sup>11; 12</sup>.

## RESEARCH METHOD

Descriptive survey research is a data processing procedure by describing and scientifically summarizing data to determine the characteristics of knowledge, attitudes, and behaviour of women aged 35 - 45 years in dealing with menopause in Cawang Village RW 06 East Jakarta 2016. In descriptive survey research, research is directed to describe or describe a situation in a community or society. The research population is an object under study. In conducting research, researchers only take part of the object whose results can represent or cover all of the objects studied. The population in this study were all women aged 35 - 45 years in Cawang Village, RW 06, Kramat Jati District, East Jakarta, amounting to 230 people. The sample is part of the overall object under study, which represents the entire population. The size of the sample will affect the results obtained. The sampling method in this study was carried out by probability sampling with a simple random sampling technique. The specified sample is as many as 70 samples. This research was conducted from September to October 2016. The researcher chose the research location in RW 06, Cawang Village, Kramat Jati District because the location was closer to the researcher's residence. Research

ethics was carried out by filling out informed consent and anonymity when filling out the questionnaire sheet. The research instrument used in this study was a questionnaire with a list of questions created and developed referring to the concepts and theories that have been described in the literature review. Data collection was carried out in RW 06, Cawang Village. The data collected is processed through several stages, namely a) editing-The results of interviews obtained or collected through questionnaires need to be edited first; b) Coding-Classifying respondents' answers into categories using marking/code in the form of numbers for each answer; c) Data Entry-Answers - answers that have been coded and then entered into a table through computer processing SPSS (Statistical Product and Service Solution) Version 24 and Microsoft Excel 2010; d) Cleaning-Cleaning data is carried out if there is an error in data entry. After processing the data, data analysis will be carried out; and e) Tabulation-namely creating data tables, according to the research objectives of codes according to the answers to each question. Data analysis is to be carried out in the form of univariate analysis or descriptive analysis. This univariate analysis aims to describe the characteristics of the research variables. The variables in this study were age, education level, type of work, level of knowledge, attitudes and behaviour.

## RESULT AND DISCUSSION

Based on the research title regarding the Characteristics of Knowledge, Attitudes, and Behaviors of Women Aged 35 - 45 Years in Facing Menopause in Kelurahan Cawang RW 06 East Jakarta 2016. From September to October 2016, data was collected using a questionnaire given to 70 respondents.

**Table 1: Distribution of Respondents by the age of Women facing menopause in 2016**

Variable	Frequency (n)	%
35 - 37	22	31.4
38 - 40	11	15.7
41 - 43	14	20.0
44 - 45	23	32.9
<b>Total</b>	<b>70</b>	<b>100.0</b>

The results showed that there were 22 female respondents aged 35 to 37 years old (31.4%), 11 people (15.7%) aged 38 to 40 years, while the respondents aged 41 to 43 years were 14 people (20%) and as many as 23 people (32.9%) aged 44 to 45 years.

**Table 2: Distribution of Respondents Based on Women's Education Level in Facing Menopause in 2016**

Variable	Frequency (n)	%
Primary School	14	20.0
Junior High School	13	18.6
Senior High School	27	38.6
Diploma	12	17.1
Bachelor	4	5.7
<b>Total</b>	<b>70</b>	<b>100.0</b>

The results showed that 14 women graduated from Primary School (20%), 13 people graduated from Junior High School (18.6%), 27 people graduated from Senior High School (38.6%), graduated from Diploma college as many as 12 people (17.1%) and graduated from Bachelor's college as many as four people (5.7%).

**Table 3: Distribution of Respondents Based on Women's Jobs in Facing Menopause in 2016**

Variable	Frequency (n)	%
Housewife	42	60.0
Employee	11	15.7
Household Assistant	4	5.7
Private Employee	2	2.9
Entrepreneur	8	11.4
Teacher	3	4.3
<b>Total</b>	<b>70</b>	<b>100.0</b>

The results showed that the majority of respondents as homemakers were 42 people (60%), while respondents who worked as employees were 11 people (15.7%), respondents who worked as household assistants were four people (5.7%)., respondents who work as private employees only two people (2.9%), respondents who work as entrepreneurs as many as eight people (11.4%), and respondents who work as teachers only three people (4.3%).

**Table 4: Distribution of Respondents Based on Knowledge Level of Women in dealing with menopause in 2016**

Variable	Frequency (n)	%
Good	12	17.1
Enough	42	60.0
Less	16	22.9
<b>Total</b>	<b>70</b>	<b>100.0</b>

The results showed that respondents who had a good level of knowledge were only 12 people (17.1%), 42 people (60%) had sufficient knowledge, and some of the respondents, namely 16 people (22.9%), had knowledge that belonged to the category less category.

**Table 5: Distribution of Respondents Based on Women's Attitudes in Facing Menopause in 2016**

Variable	Frequency (n)	%
Positive	36	51.4
Negative	34	48.6
<b>Total</b>	<b>70</b>	<b>100.0</b>

The results showed that 36 respondents (51.4%) and 34 people (48.6%) had negative attitudes about menopause.

**Table 6: Distribution of Respondents Based on Women's Behavior in Facing Menopause in 2016**

Variable	Frequency (n)	%
Good	45	64.3
Bad	25	35.7
<b>Total</b>	<b>70</b>	<b>100.0</b>

The results showed that the behaviour of respondents in dealing with menopause were 45 people (64.3%) with good behaviour and 25 people (35.7%) with wrong categories in dealing with menopause.

Based on table 1, it can be seen that the age group with the category 44 years to 45 years has the highest number of respondents from other age categories. Increasing a person's



age can affect the increase in his knowledge. The older you are, the wiser you are, the more information you find and the more things you do, which will add to the experience of women and will affect women's attitudes<sup>13</sup>.

Based on table 2, it can be seen that 27 respondents (38.6%) have a high school education background. The low level of education impacts women's readiness to face menopause. It is because women with low levels of education will impact attitudes and behaviour less in dealing with menopause<sup>14</sup>. A high level of education helps women deal with menopause, so the higher the education achieved by a person, the easier it will be to receive information because, with education, a person can reason and be open to new ideas for change<sup>15</sup>. Respondents with low levels of education do not know about physical changes during menopause, do not accept physical changes and consider the ageing process to be something that must be avoided. On the other hand, respondents with higher education levels understand that at the time of menopause, there are physical changes that occur. The respondents are supportive and accept the physical changes during menopause<sup>16</sup>.

One of the predisposing factors that influence health behaviour is economic status, including preparing after menopause and physical changes, so that with financial adequacy, respondents can carry out health visits related to the physical changes they experience<sup>17</sup>. Based on the table above, most respondents' occupations are homemakers, as many as 42 people (60%). For women who do not work, their homework is enough to make them busy, so they do not have time to think about what will happen during menopause<sup>15</sup>. According to researchers, women who take care of the household and do not work have sufficient time to seek information about menopause, attend seminars or public health education, especially women and health programs that are carried out free of charge by certain social institutions.

Knowledge is the result of human sensing or someone knowing about objects through their senses<sup>11</sup>. The level of knowledge of women aged 35 - 45 years in Cawang Village, RW 06, East Jakarta in 2016, the majority of which were 42 people (60%) whose knowledge was included in the sufficient category regarding menopause. The results of this study are not in line with research conducted by Ilafi and Siti (2014) at the elderly posyandu in Gumpang village for women aged 45-55 years that the majority of knowledge levels are in the good category of 24 respondents (57.1%) and the sufficient category is 18 respondents (42.9%)<sup>13</sup>.

It is due to several factors, namely, the lack of information through seminars on women's health, especially menopause, and the lack of use of electronic media and so on regarding menopause. An understanding of how menopause can help women cope with the changes<sup>6</sup>. Those who have good knowledge will go through menopause calmly. On the contrary, women who have less knowledge will worry about menopause. Knowledge about menopause is influenced by several factors, including information, culture, environment, and experience<sup>13</sup>.

The final educational background influences the respondent's level of knowledge<sup>18</sup>. So that respondents with low levels of education do not know about physical changes during menopause, do not accept physical changes and consider the ageing process to be something that must be avoided. On the other hand, respondents with higher education levels understand that at the time of menopause, there are physical changes that occur. The respondents are supportive and accept the physical changes during menopause<sup>19</sup>. Therefore, it is crucial to provide correct information about menopause to women entering menopause soon. In addition, so that women

are not confused and doubtful about the various symptoms they are experiencing, women should also be made aware that serious health consequences should not be ignored during menopause.

Based on table 5 shows that the level of knowledge of women aged 35 to 45 years in Cawang RW 06, East Jakarta, respondents who had a positive attitude in this study were 36 people (51.4%), and 34 people (48.6%) had a negative attitude in dealing with menopause. The results of this study are in line with research conducted by Meilina and Citra (2014) in Sekar Jaya Village, namely, 71 respondents (73.1%) who had a positive attitude and 26 (26.9%) pessimistic respondents<sup>14</sup>. The positive attitude of women who have good knowledge can lead women to be more prepared and accept physical and psychological changes and not think that the ageing process must be avoided. This positive attitude can also help women aged 35 - 45 years, especially in Cawang Village, to undergo menopause be more physically and mentally prepared so that postmenopausal women can remain productive and work.

Behaviour is a person's response due to an external stimulus. Behaviour is divided into two, namely closed behaviour (covert behaviour) and overt behaviour (overt behaviour)<sup>20</sup>. The results showed that the respondents' actions in menopause were as many as 45 people (64.3%) with good behaviour and 25 people (35.7%) with bad behaviour in dealing with menopause. The results of this study are in line with research conducted in Kendal, the respondents who have bad behaviour, are three people (3.3%), and respondents with good behaviour are 31 people (34.4%)<sup>21</sup>.

Knowledge is a critical domain for forming one's behaviour because if the behaviour is based on sufficient knowledge, the better and ready women are to face menopause than women who have less knowledge<sup>22</sup>. Menopause in women must be adequately prepared. If not prepared with good behaviour will lead to problems in physical and mental health. The expected behaviour of the community is to be proactive to maintain and improve health status, prevent the risk of disease, protect themselves from the threat of disease and actively participate in disease prevention. In this case, an ideal health worker is needed who is expected to invite the community to enforce "prevention is much better than cure"<sup>15</sup>.

## CONCLUSION

From the data analysis and discussion results, the authors can make several conclusions, including a) Characteristics of respondents based on the majority age in the 44 years to 45 years category as many as 23 people (32.9%). The education level of the majority of respondents is high school graduates as many as 27 people (38.6%), and the type of occupation of the most respondents are as housewives as many as 42 people (60%) of the total number of respondents; b) Characteristics of respondents based on knowledge as many as 42 people (60%) whose knowledge is included in the excellent category in dealing with menopause; c) Characteristics of respondents based on attitudes as many as 36 people (51.4%) have a positive attitude in dealing with menopause; and d) Characteristics of respondents based on behaviour, as many as 45 people (64.3%) were categorized as good behaviour in dealing with menopause. Thus, it is hoped that all women aged 35 - 45 years who are facing menopause with insufficient and sufficient knowledge categories will increase their knowledge by seeking as much information as possible about health, especially menopause. Those can be gained from experienced women, seminars or counselling activities held in the area, and electronic and print media. In menopause, women do not experience anxiety and can overcome the symptoms that arise when entering menopause.

## REFERENCES

- [1] Healthy and Active in Old Age [Internet]. Ministry of Health of the Republic of Indonesia. November 2012 [cited November 8, 2016]. Available from: <http://www.depkes.go.id/index.php/berita/press-release/2143-sehat-dan-aktif-di-age-lanjut.html>.
- [2] Health Services and Improvement of the Elderly [Internet]. Ministry of Health of the Republic of Indonesia. May 2015 [cited November 8, 2016]. Available from: <http://www.depkes.go.id/article/view/15052700010/pelayanda-peningkatan-kesehatan-usia-lanjut.html>.
- [3] Shuster, Lynne T., Deborah J. Rhodes, Bobbie S. Gostout, Brandon R. Grossardt, and Walter A. Rocca. "Premature menopause or early menopause: long-term health consequences." *Maturitas*. 2010; 65(2):161-166. <https://doi.org/10.1016/j.maturitas.2009.08.003>
- [4] Ginting, Sahna Ferdinand, Sumaryati Syukur, Sanusi Ibrahim, Djong Hon Tjong, and Edy Fachrial. "Lipid profile and estradiol analysis between pre-menopause and post-menopause women in Medan areas of North Sumatera, Indonesia." *Journal of Chemical and Pharmaceutical Research* 2015; 7(10):505-508.
- [5] Reilly, Thomas. "The menstrual cycle and human performance: an overview." *Biological rhythm research* 2000; 31(1):29-40. [https://doi.org/10.1076/0929-1016\(200002\)31:1;1-0;FT029](https://doi.org/10.1076/0929-1016(200002)31:1;1-0;FT029)
- [6] Bruce, Deborah, and Janice Rymer. "Symptoms of the menopause." *Best practice & research Clinical obstetrics & gynaecology* 2009; 23(1):25-32. <https://doi.org/10.1016/j.bpobgyn.2008.10.002>
- [7] Fausto-Sterling, Anne. "Menopause: The storm before the calm." In *Feminist Theory and the Body*, pp. 169-178. Routledge, 2017. <https://doi.org/10.4324/9781315094106-21>
- [8] Avis, Nancy E., Alicia Colvin, Joyce T. Bromberger, Rachel Hess, Karen A. Matthews, Marcia Ory, and Miriam Schocken. "Change in health-related quality of life over the menopausal transition in a multiethnic cohort of middle-aged women: Study of Women's Health Across the Nation (SWAN)." *Menopause (New York, NY)* 2009; 16(5) 860. <https://doi.org/10.1097/gme.0b013e3181a3cdaf>
- [9] Baziad, A. "Menopause dan Andropause. Cetakan pertama. Jakarta: Yayasan Bina Pustaka Sarwono Prawirohardjo. hlm." 2003: 177-185.
- [10] Brunner, Robert L., Aaron Aragaki, Vanessa Barnabei, Barbara B. Cochrane, Margery Gass, Susan Hendrix, Dorothy Lane et al. "Menopausal symptom experience before and after stopping estrogen therapy in the Women's Health Initiative randomized placebo-controlled trial." *Menopause (New York, NY)* 2010; 17(5):946. <https://doi.org/10.1097/gme.0b013e3181d76953>
- [11] Kwak, Eun Kyung, Hyun Soon Park, and Nam Mi Kang. "Menopause knowledge, attitude, symptom and management among midlife employed women." *Journal of menopausal medicine* 2014; 20(3):118-125. <https://doi.org/10.6118/jmm.2014.20.3.118>
- [12] Johari, Asmah, and Rosnah Sutan. "Assessing stages of readiness to lose weight among overweight and obese adolescents using trans-theoretical model." *Obes Control Ther* 2016; (4):1-6. <https://doi.org/10.15226/2374-8354/4/1/00130>
- [13] Morrison, Lynn A., Daniel E. Brown, Lynnette L. Sievert, Angela Reza, Nichole Rahberg, Phoebe Mills, and Amber Goodloe. "Voices from the Hilo Women's Health Study: talking story about menopause." *Health care for women international* 2014; 35(5):529-548. <https://doi.org/10.1080/07399332.2013.829067>
- [14] Ayers, Beverley, Mark Forshaw, and Myra S. Hunter. "The impact of attitudes towards the menopause on women's symptom experience: a systematic review." *Maturitas* 2010; 65(1):28-36. <https://doi.org/10.1016/j.maturitas.2009.10.016>
- [15] Dien, Riedel Jiemly, Lucky Kumaat, and Reginus Malara. "Pengaruh Penyuluhan Kesehatan Terhadap Kesiapsiagaan Menghadapi Bencana Gempa Bumi Pada Siswa Smp Kristen Kakaskasen Kota Tomohon." *Jurnal Keperawatan* 2015; 3(2).
- [16] Moilanen, Jaana M., Anna-Mari Aalto, Jani Raitanen, Elina Hemminki, Arja R. Aro, and Riitta Luoto. "Physical activity and change in quality of life during menopause-an 8-year follow-up study." *Health and quality of Life Outcomes* 2012; 10(1):1-7. <https://doi.org/10.1186/1477-7525-10-8>
- [17] One of the predisposing factors that influence health behaviour is economic status, including preparing after menopause and physical changes, so that with financial adequacy, respondents can carry out health visits related to the physical changes they experience.
- [18] Petrovici, Dan A., and Christopher Ritson. "Factors influencing consumer dietary health preventative behaviours." *BMC Public Health* 2006; 6(1) 1-12. <https://doi.org/10.1186/1471-2458-6-222>
- [19] Simon, James A., Rossella E. Nappi, Sheryl A. Kingsberg, Ricardo Maamari, and Vivien Brown. "Clarifying Vaginal Atrophy's Impact on Sex and Relationships (CLOSER) survey: emotional and physical impact of vaginal discomfort on North American postmenopausal women and their partners." *Menopause* 2014; 21(2):137-142. <https://doi.org/10.1097/GME.0b013e318295236f>
- [20] Ajzen, Icek. *Attitudes, personality and behaviour*. McGraw-Hill Education (UK), 2005.
- [21] Waluyo, Akademi Kebidanan Ngudi. "Hubungan Tingkat Pengetahuan Menopause Dengan Perilaku Ibu Dalam Menghadapi Masa Menopause Di Desa Randusari Kecamatan Rowosari Kabupaten Kendal."
- [22] Wawan, Ahmad, and Maria Dewi. "Teori dan pengukuran pengetahuan, sikap dan perilaku manusia." *Yogyakarta: Nuha Medika* 2010; 12.