

Examination of Physical Changes and Counselling Premenopausal Women In Cilayung Village, Jatinangor District

Sefita Aryuti Nirmala*, Nadia Khansa Fauziyyah, Sharon Gondodiputro

Departement of Public Health, Faculty of Medicine, Universitas Padjadjaran, Sumedang, Indonesia

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Abstract Perimenopause is the period always starts with an irregular menstrual cycle to the last menstrual period. The World Health Organization estimates that by 2030, 1.2 billion women worldwide will reach menopause. In Indonesia, in 2025, there will be around 60 million menopausal women. Cilayung Village is one of the villages in the Jatinangor district which is 4 KM from district center and the campus area. Although not far from the district center, Cilayung Village does not care about the changes that have occurred. Information given by village midwives on perimenopausal women showed that, in a month there could be 2 to 5 women found to be in their perimenopausal period. Also there were no health data about perimenopausal women. The methods of this community service were carried out in stages: 1) analysis of the situation of perimenopausal women, 2) problem identification, 3) determining work goals, 4) problem solving planning, 5) close social interaction, 6) implementation of activities, and 7) evaluation. Village midwives and cadres assisted with the activities mentioned above. A total of 106 perimenopausal women participated, and they were examined to physical changes, and there were collected as data. The data collected showed vasomotor instability or hot flashes (at least 54.70%), not experiencing vaginal dryness (90.60%), low osteoporosis or OSTA status (45.30%), and cholesterol status (the most common was 78.30%). Health promotion and counselling were given, and a presentation followed by a Q and A session on perimenopausal women was also organized.

1. INTRODUCTION

One of the cycles of a woman's life is menopause. In general, people understand that menopause is a time when a woman does not get her period back. Before menopause, the transition period experienced is perimenopause, which is period from the start of an irregular menstrual cycle to the last. During perimenopause, a woman generally feels physical and psychological changes. This happens because the hormone estrogen begins to decrease so that it has an impact on other body systems. Not many women know the impact of these physical and psychological changes and consider it a regular thing.

Data from the World Health Organization (WHO) the

number of women worldwide who enter the menopause period is estimated at 1.2 billion people. In Indonesia, in 2025, there will be 60 million menopausal women (Badan Pusat Statistik, 2013). The 2017 Indonesian Health Data Survey data showed that the percentage of women aged 48-49 ranks first in the incidence of menopause at 43.1%, and aged 46-47 rank second at 26.7% (Kementerian Kesehatan Republik Indonesia, 2018).

National Statistic Centre in 2010 released that life expectancy in Indonesia increase from 70.1 years in the 2010-2015 period to 72.2 years in the 2030-2035 period (Badan Pusat Statistik, 2013). As life expectancy increases,

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*Corresponding author: Sefita Aryuti Nirmala

Department of Public Health, Faculty of Medicine, Universitas Padjadjaran, Jl. Raya Bandung Sumedang KM 21, Jawa Barat 45363, Indonesia

Email: sefita@unpad.ac.id

it is predicted that the majority of women will experience symptoms of menopausal discomfort more than 30 years after going through the menopause phase and spend about a third of their life in a state of estrogen deficiency which can have an impact on various health problems and affect the quality of life.

As one of the Tri Dharma Higher Education program activities and for the existence of the University, especially The Midwifery Study Program in the campus area, community service activities were carried out in Cilayung village, Jatinangor district. The location of Cilayung Village is in the northernmost area of the Jatinangor District, directly adjacent to the Sukasari and Tanjungsari districts. It is about 4 kilometers from the city centre, the same distance as location of the Padjadjaran University campus. Cilayung Village is one of the villages with the smallest population density among the villages in Jatinangor District. There are 1,563 households male population of 2,526 and a female of 2,403 people. Topographically, the Cilayug Village area is a hilly area at the foot of Mount Manglayang the highest area in Jatinangor district, about 845 meters above sea level. Cilayung village is not touched by the changes that has been occurring in the district center. This is due to the geographical location with hilly areas and internet signals which are sometimes difficult to obtain (Imanuddin, 2016).

According to research conducted by Asriati et al. (2019) in Soreang Regency on 80 women of childbearing age (aged 40-45 years) that the physical preparation for menopause is in the sufficient category 67.5% and psychological preparation 65%. Information obtained from the Cilayung village midwife, routine examination physical for perimenopausal women every month was 2 to 5 people who come. Perimenopausal women will do to examination physical if they have found discomfort and interfere with daily activities. So sometimes the village midwife has to refer because the need for more adequate health facilities is outside the village midwife's authority. This condition should be prevented by early education for perimenopausal women. Based on these problem, it is necessary to do community service to examine physical changes and counselling perimenopausal women in Cilayung Village. This community service activity aims to determine the physical changes and counselling perimenopausal women.

2. METHOD

This Community Service activity was carried out by lecturers and students of the Midwifery Study Program, Faculty of Medicine Universitas Padjadjaran in collaboration with the Jatinangor Health Center and the Head of Cilayung Village. The method of activity after obtaining permission from the Jatinangor Health Center and the Cilayung Village Head, meeting with the Midwife and Village Cadres to:

1. Analyzed the situation of perimenopausal women in Cilayung village
2. Identified existing problems; there was no data on perimenopausal womens health in Cilayung village

3. Determined work goals were obtaining perimenopausal womens health data, designing a working committee
4. Problem-solving plan by conducting physical examinations, health promotion and counselling for perimenopausal women. Determined the implementation date in the first and second weeks of January 2021. In order to comply with the health protocol, the schedule of activities in each RW
5. A social approach was carried out together with cadres to invite perimenopausal women to come to activities
6. The implementation of these activities was carried out according to plan. The team, together with village midwives and cadres, carried out activities. The division of tasks regulated the technical implementation, so the process ran well. Cadres were required to provide invitations to perimenopausal women, prepare places according to health protocols, remind participants to comply with health protocols, and assist with recording. Teams from the Midwifery Study Program and village midwives prepare equipment, consumables and physical examination forms, check for physical changes and provide counselling. The participants were given informed consent before the examination and asked to complete the questionnaires. The examination of physical changes was done by: 1) weight measurement using a digital scale, 2) measurement of physical changes using the Menopause Symptom Questionnaire (MSQ) to determine the incidence of hot flashes, 3) menopause rating scale (MRS) to assess the incidence of vaginal dryness, and 4) OSTA scores to determine the incidence of osteoporosis risk and cholesterol measurement tools to determine total cholesterol. Perimenopause women were given counselling.
7. Evaluation of activity results. Our hundred six perimenopausal women were present, and the data were collected through examination, asking the participants to complete a questionnaire.

3. RESULT AND DISCUSSION

The results of the examination in perimenopausal women obtained data in the form of characteristics in Table 1 and physical changes which are presented in Table 2. Perimenopause is a phase experienced by women, and this phase is reached during the period before menopause (when endocrinological, biological, and clinical features approach menopause) until the first year after menopause. Perimenopause consists of premenopause (age 45-48 years), menopause (age 49-51 years) and postmenopause age (52-55 years) (Berek, 2012). By referring to Table 1, it is found that the characteristics of most respondents in postmenopause were 83.96%.

Table 1 . Characteristics of Perimenopausal Women in Cilayung Village

Characteristics	Total (n=106)	
	F	%
Perimenopause		
Premenopause	13	12.26
Menopause	4	3.77
Postmenopause	89	83.96
Menarce		
≤ 10 years	0	0
11-13 years	51	48.11
≥ 14 years	51	48.11
Education		
No School	7	6.60
Primary School	85	80.18
Elementary School	6	5.66
High School	6	5.66
University	2	1.88
Marital Status		
Married	75	70.75
Divorced	4	3.77
Single/ Couple Died	27	25.47

Many factors are associated with menopause, including the number of the ovum. The formation of a woman’s ovum has started since pregnancy. From the 20th week to the 25th week of pregnancy, about 7 million prospective candidates of ovum have been formed through various processes. At female baby will have about 2 million at birth, and the number will continue to decrease with age. About 400,000 cells are owned during puberty and will be released, one or several of which become mature ova each month (Permadi, 2012).

Puberty is marked by the first menstruation (menarche) and can be interpreted as a functioning reproductive system. The earlier the age of menarche is associated with the earlier the age of menopause. In Table 1, the age of menarche is mostly at the age of 14 years, amounting to 51.88%, and there is no early menarche. Menarche at the age of 11-13 years is 48.11%, and there is no early menstruation, it can be categorized that the perimenopausal women group obtained in this community service activity were normal limits. However, this is still debated, because there are many factors that influence including nutritional status, lifestyle, genetics, use of certain hormones or drugs, diseases and others (Senolinggi et al., 2015).

Menopause occurs due to increased levels of Luteinizing hormone (LH) and Follicle Stimulating Hormone (FSH) followed by decreased levels of estrogen and progesterone. This is related to the decrease in inhibin B as the main initiator of menopause pathophysiology. The function of inhibin B is to send a negative signal to the anterior pituitary to secrete Follicle Stimulating Hormone (FSH) in the menstrual cycle. As women age, the level of inhibin B decreases due to a decreased number of follicles or a lack of function, causing an increase in Follicle Stimulating Hormone (FSH). The ovaries receive this response by secreting estradiol because the level of

Follicle Stimulating Hormone (FSH) increases, causing the number of mature follicles to increase. Based on this, it causes the number of follicles to decrease and the ovaries become unresponsive to increases in Follicle Stimulating Hormone (FSH) and estradiol (Birkhaeuser & Genazzani, 2018). These changes also have an impact on physical changes such as vasomotor, urogenital symptoms, palpitations, breast tenderness, menorrhagia, muscle aches, sleep disturbances and fatigue (Berek, 2012).

Table 2 . Physical Changes Perimenopausal Women in Cilayung Village

Characteristics	Total (n=106)	
	F	%
Instability of Vasomotor (Hot Flashes)		
Never	58	54.70
Seldom	21	19.80
Sometimes	17	16.00
Often	9	8.50
Always	1	0.9
Vaginal Dryness		
There is not any	96	90.60
Light	9	8.50
Medium	1	0.80
Osteoporosis (Status OSTA)		
Low	48	45.30
Medium	30	28.30
High	28	26.40
Cholesterol Status		
Normal	83	78.30
High	23	21.70

In Table 2, the most vasomotor instability (hot flashes) was never 54.70%. Hot flashes are associated with a decrease in estrogen levels in women’s body where estrogen plays a role in stimulating the production of serotonin and endorphins. When estrogen levels decrease at the age of menopause, about 50% of serotonin levels in the body also decline (Dalal & Agarwal, 2015). Other physical changes are shown in Table 2. Namely, most vaginal dryness is not present at 90.60%. The effects of hormonal changes that occur cause urogenital atrophy, causing vaginal dryness. Administration of estrogen therapy can effectively help reduce vaginal dryness or by topical administration (Dalal & Agarwal, 2015).

Examination for osteoporosis by looking at OSTA status, in Table 2 showed that most OSTA status is low (45.30%). However, some show a high (26.40%). Estrogen has a role increasing the osteoblast process and inhibiting osteoclasts. In menopausal women, reduced estrogen certainly impact osteoporosis, a bone disorder characterized by a decrease in bone mass and microarchitecture that causes bones to become brittle and break easily (Mustofa et al., 2019). In the treatment of osteoporosis, it is important to review the risk factors for osteoporosis because not the only effect of estrogen levels in the body but several studies have also found heredity, lifestyle, consumption of vitamin

D and calcium and diseases that require the use of systemic corticosteroids (Cutson & Meuleman, 2000).

As can be seen in Table 2, the obtained normal cholesterol status was 78.30%. Several studies have shown that menopause increases the risk of cardiovascular disease, but requires clarity with certainty, because the cardiovascular disease has many contributing factors. Estrogen is not just a hormone, but also has a function as an antioxidant. LDL cholesterol will easily penetrate the plaque in the blood vessels' walls when it is oxidized. The role of estrogen as an antioxidant is to prevent LDL oxidation so that the ability of LDL to penetrate plaque is reduced. Another function is the role of estrogen as a dilator of the heart's blood vessels so that blood flow becomes smoother and the heart gets an adequate supply of oxygen (de Kat et al., 2017a, 2017b).

Each participant was given an explanation of the results of the examination that had been carried out. Participants within normal limits were given health promotion about a healthy lifestyle. Participants with abnormal results or conditions that require special attention were given counselling according to their individual needs and problems using leaflets. A meeting with the village midwife and Jatinangor public health center was also carried out for follow-up for perimenopausal women whose examination results were outside normal limits. Although a postmenopausal woman has to go through a life cycle, she always knows what is going on, causing anxiety. Anxiety is an unpleasant emotional state characterized by fear and physical symptoms that are stressful and unwanted. Many factors affect a person's anxiety, including the level of education, work and physical activity (Saimin et al., 2016). Providing menopause counselling helps understand and recognize the conditions that are being experienced, recognize the problems they are facing, and try to help overcome the problems (Ariani et al., 2021). Health promotion activities to determine participants' understanding were carried out by asking several questions and randomly asking participants to answer questions. The counseling activities were done by asking questions based on the counselling material to understand the participants' psychological state. Counselling aids use leaflets. This activity was not measured changes in the knowledge level of perimenopausal women before and after receiving health promotion or counselling.

4. CONCLUSION

One hundred six perimenopausal women attended community service activities in Cilayung Village, Jatinangor District, Sumedang Regency. Through this activity, it was hoped that perimeopause women would be able to be aware of the changes in their body, adapt to and reduce uncomfortable pains, and healthily go through their perimenopause period. The examination was carried out in the form of examination of physical changes with the result of vasomotor instability (hot flashes) at most never 54.70%, not experiencing vaginal dryness at 90.60%, low osteoporosis (OSTA status) at 45.30% and cholesterol

status being the most normal 78.30%. The result of health promotion and counselling were not changes in the knowledge level of perimenopausal women before and after receiving health promotion or counselling.

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CONFLICT OF INTERESTS

Authors state that there is no conflict of interests in this article.

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