

BEHAVIOR OF RURAL WOMEN OF SPECIAL REGION OF YOGYAKARTA (DIY) IN AN EFFORT TO PREVENT MENOPAUSAL COMPLAINTS AND WEIGHT GAIN

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ABSTRACT

Periodically, a woman's reproductive function will experience significant changes with age. Various complaints are experienced at this time ranging from mild to severe somatic complaints and even an increase in Body Mass Index (BMI). This study aims to identify increases in weight, blood pressure, menopausal complaints and complaint control behaviors experienced during menopause in 70 menopausal women in DIY in 2020. It was found that as many as 65.7% of women had menopause in the age group of 53-55 years, the highest level of education (72.8%) in the low category (elementary, junior high), working mothers (84.3%), the age of marriage was ≤ 20 years (81.4%) and had children > 2 people (72.9%). It was found that as many as 28 people (40%) had BMI in the fat and obesity categories, 42 people (60%) had blood pressure in the prehypertensive to hypertensive categories, had the heaviest menopausal complaints in complaints of discomfort in the joints and muscles (pain in the joints, rheumatic complaints) and behavior towards efforts to control menopausal complaints in the form of frequency and regular eating patterns until physical activity was considered still low. Ongoing health education efforts are needed for women in rural areas related to the impact of menopause and efforts to prevent complaints and weight gain experienced after menopause.

ABSTRAK

Secara periodik fungsi reproduksi seorang wanita akan mengalami perubahan yang bermakna seiring dengan penambahan usia. Berbagai keluhan dialami pada masa ini mulai dari keluhan somatis ringan hingga berat bahkan terjadinya peningkatan Indeks Massa Tubuh (IMT). Penelitian ini bertujuan untuk mengidentifikasi peningkatan berat badan, tekanan darah, keluhan menopause dan perilaku pengendalian keluhan yang dialami di masa menopause terhadap 70 orang wanita menopause di DIY tahun 2020. Ditemukan sebanyak 65,7% wanita yang telah diteliti, menopause pada kategori usia 53-55 tahun, kategori tingkat Pendidikan terbanyak adalah SD dan SMP (72,8%), bekerja (84,3%), sudah menikah pada usia ≤ 20 tahun (81,4%) dan memiliki anak > 2 orang (72,9%). Ditemukan sebanyak 28 orang (40%) mempunyai IMT kategori gemuk dan obesitas, 42 orang (60%) mempunyai tekanan darah pada kategori prahipertensi hingga hipertensi, mempunyai keluhan menopause terberat pada keluhan rasa tidak nyaman pada persendian dan otot (sakit pada persendian, keluhan rematik) dan perilaku terhadap upaya pengendalian keluhan menopause berupa frekuensi dan pola makan teratur hingga aktivitas fisik dinilai masih rendah. Dibutuhkan upaya pendidikan kesehatan yang berkelanjutan bagi wanita di pedesaan terkait dampak menopause dan upaya prevensi keluhan dan peningkatan berat badan yang dialami setelah menopause.

INTRODUCTION

Weight gain in postmenopause is very easy and may be unavoidable. After menopause, estrogen levels will begin to drop and metabolism will slow down. Weight loss will be more difficult at this time, especially fat accumulated around the abdomen and buttocks. Various research results show that fat in the abdomen increases the risk of heart disease, diabetes, cancer, and premature death.

Hormonal changes in the perimenopausal period cause more abdominal obesity, which can be a problem, because it will have the opportunity to cause physical and mental disorders that negatively affect health and greatly affect the quality of life and sexual function (Davis et al., 2012); (Aibar-Almazán et al., 2019); (Knyazkova, 2021). Weight gain at this time can also be supported by the condition of women who have begun to enter old age, where physical activity has begun to decline, so that this increasingly supports weight gain. Decreased hormones cause the process of inhibition of physical activity because the stability of hormones in the brain will make exercise better (Baynard et al., 2012); ((Knyazkova, 2021).

Hormonal imbalance will cause the ovaries to produce less estrogen, causing the body to look for other sources of estrogen. The body will try to convert fat cells to produce estrogen. This process causes the body to work harder to convert calories into fat. This situation triggers weight gain where fat cells do not burn calories as well as muscle cells (Harpaz M, 2011).

Women in the period of climacterium and menopause contribute to the increase in cases of weight gain. Hormonal imbalance is the trigger. Achie, 2012, found in Zaria, a number of postmenopausal women were more likely to be overweight when compared to menopausal women, and found as many as 79% of menopausal women with obesity. The study also found waist circumference measurements in assessing obesity and the risk of cardiovascular disorder events in postmenopausal women (Achie, et al., 2014).

Obesity cases in Indonesia are currently increasing. A total of 16 regions in Indonesia are distributed with this case (one of which is Yogyakarta) and the increase in central obesity in Indonesia has reached 26.6%, experienced by women over the age of 18 years (Ministry of Health of the Republic of Indonesia, 2018). Previous research has also been conducted by researchers on menopausal women in the city of Pematangsiantar, researchers found that as many as 98.9% of menopausal women experienced an increase in weight and 79% experienced somatic complaints (Simangunsong D.E, 2020).

Attention to the increase in weight of menopausal women needs to be wary of, considering that at an older age, physical activity has also begun to decline, so the chances of weight gain will be even greater. Being overweight and obese can be a risk factor for the incidence of degenerative diseases.

Rohkuswara et.al (2017), found the proportion of obesity was 54.9% in the population aged 20-50 years from 206 samples studied. Obesity has a risk of 1.7 times the incidence of grade 1 hypertension. Framingham's study mentions that overweight and obesity, as contributors to cases of increased blood pressure by 26% in men and 28% in women (Rohkuswara & Syarif, 2017). Women's quality of life is considered to have decreased in connection with the increase in weight, higher body mass index affects the increase in menopausal complaint scores. In addition, the incidence of chronic diseases in the form of changes in blood pressure can also occur (ISRCTN91141124, 2021). The incidence of increased blood pressure is considered to be associated with an increase in body mass index, where weight classified as obesity has a probability of 2.05 times the incidence of increased blood pressure when compared to those who have a normal body mass index (Rosdiana et al., 2017).

Conventional efforts are made in overcoming menopausal complaints, including physical activity or regular exercise, this intervention is considered significant in reducing physical and psychological complaints due to menopausal complaints (Simangunsong & Marlisa, 2022); (Simangunsong, D. E. Rika Subarniati Triyoga, Muhammad Fidel Ganis Siregar, 2017);(Simangunsong, 2019b). Muscle and bone strength training that has been carried out on menopausal women in the city of Pematangsiantar, found that there was a difference in the average score of menopausal complaints after the application of muscle and bone strength training with a duration of 30 minutes each exercise three times a week (Simangunsong D.E, 2020).

It takes awareness and independence of women in overcoming problems that will arise in the period before menopause, menopause and after menopause. The changes that will be experienced need to be socialized in order to accept the conditions that will occur. Ignorance of complaints that will be experienced in connection with the decrease in the hormone estrogen will be able to cause anxiety, fear and even hesitation in responding to health conditions that will be experienced. Maintaining healthy living behavior with a regular diet accompanied by regular and regular physical activity, can maintain body condition and weight balance.

Seeing the many impacts caused by menopause, researchers are interested in identifying, identifying increases in weight, blood pressure, menopausal complaints and complaint control behaviors experienced by menopausal women in rural areas in the Yogyakarta region against efforts to prevent menopausal complaints and weight gain during menopause in Special Region of Yogyakarta (DIY).

METHOD

Types of Research

This type of research is descriptive research, to obtain data on the characteristics and behavior of menopausal women about efforts to prevent menopausal complaints and weight gain at menopausal age.

Location and Time of Research

The location of the study was conducted in the village of Petir Village, Gamping District, Special Region of Yogyakarta (DIY), in June 2020.

Population and Sample

The population is all menopausal women in Petir village, Gamping District, DIY. Purposive sampling technique with criteria for women aged 50-55 years, have experienced menopause for 3 years, have no history of uterine removal, when the study took place did not take hormonal drugs and undergo a diet program. There were 70 menopausal women identified in this study.

Data Collection

Data Source Type

Data were obtained from interviews which included data on the characteristics of menopausal women, the results of physical examination of menopausal complaints, behavior (knowledge, attitudes and actions) of menopausal women in an effort to prevent menopausal complaints and weight gain.

Research and Measurement Instruments

Data collection and measurement tools in this study can be described as follows:

1. Checklist sheet containing respondents' biodata (age, education, occupation, menopausal age, length of menopause and physical examination).
2. Menopausal Rating Scale (MRS) Instrument (Schneider et al., 2000).
3. Menopausal women's behavioral instruments (aspects of knowledge, attitudes and actions), which have been validated with validity tests and reliability tests are carried out with the Cronbach Alpha Coefficient Technique.

Data Processing and Analysis

- a. Data on respondents' characteristics, menopausal complaints and menopausal women's behavior were grouped by scoring each variable.
- b. Variables of age, education and occupation, obstetric and gynecological history, were grouped and summed according to predetermined categories and the data were further analyzed frequency distribution.
- c. The menopausal age variable is calculated Mean and standard deviation
- d. Body Mass Index (BMI) and blood pressure assessment variables, grouped based on predetermined categories and data are further analyzed frequency distribution
- e. Menopausal complaint variables measured by Menopausal Rating Scale (MRS), making the total score of each component and determining the mean value and Standard Deviation (SD).
- f. Menopausal women's behavior which includes assessment of knowledge, attitudes and actions is assessed by counting right and wrong answers, attitudes are assessed with the Likert scale (ranging from strongly agree, agree and disagree) and actions are assessed by doing or not doing. Each variable is determined by its average value and categorized, then analyzed.

RESULTS

The table below, shows the frequency distribution of age, education, occupation of menopausal women when the study was conducted.

Table 1. Frequency distribution characteristic of menopausal women (n = 70)

Characteristic	n	Percent (%)
Age (years)		
50-52	24	34,3
53-55	46	65,7
Education		
Lower education (SD,SMP)	51	72,8
Higher Education (SMA,PT)	19	27,2
Occupation		
Work	59	84,3
Housewives	11	15,7

The table above shows that the majority of menopausal age is in the range of 51-54 years (65.7%), with 72.8% of elementary and junior high school graduates and 84.3% of working mothers. The age distribution of menopause in the respondents studied was at an average age of 47 years to 51.2 years.

Table 2. History of obstetrics and gynecology of menopausal women (n = 70)

History of obstetrics and gynecology	n	%
Menstrual cycle		
Normal	42	60
Abnormal	28	40
Marriageable age (years)		
≤ 20	57	81,4
> 20	13	18,6
Parity		
≤ 2	19	27,1
> 2	51	72,9

The table above shows the history of menstrual cycles of menopausal women, the majority with normal menstrual cycles are 60%, the most marriageable age is at the age of ≤ 20 years 81.4% and the highest parity of more than 2 people, there are as many as 72.9%.

Table 3. Physical examination results of menopausal women (n = 70)

Physical examination	n	%
Body Mass Index (BMI)		
Normal	42	60
Fat	20	27
Obesity	8	13
Blood Pressure		
Normal	28	40
Pra hypertension	20	28,6
Hypertension (1)	12	17,1
Hypertension (2)	10	14,3

The results of measuring the body mass index of menopausal women, obtained data, as many as 60% have a normal BMI while the other 40% are already in obese and obese BMI; The results of blood pressure measurements carried out when the study obtained data, there were as many as 40% had normal blood pressure and the rest (60%) already had abnormal blood pressure.

Table 4. Frequency Distribution of Menopausal symptoms (n = 70)

No	Menopause symptoms	Mean ± SD
1	Hot flushes/sweating	2.1 ± .705
2	Heart discomfort	2.06 ± .796
3	Sleep problems	2.54 ± 1.112
4	Depressive symptoms	2.61 ± .967
5	Irritability	2.63 ± .745
6	Anxiety	2.87 ± .779
7	Physical problems/mental exhaustion	2.61 ± .937
8	Sexual problems	2.73 ± .833
9	Bladder problems	2.2 ± .894
10	Vaginal dryness	2.20 ± .964
11	Joint and muscular discomfort	3,14 ± .772

The heaviest menopausal complaints experienced by menopausal women (the 4 biggest complaints) were physical complaints (MRS 11), namely joint and muscular discomfort (pain in the joints, rheumatic complaints) with an average score of 3,912; followed by (MRS 6) complaints of anxiety (anxiety, panic) with an average score of 3,649; Changes in sexual activity (not lustful, and dissatisfied and changes in sexual activity) (MRS 8), with an average score of 3.563; Physical and mental fatigue (decreased performance in general, reduced memory), decreased concentration, forgetfulness / senile dementia (MRS 7) with an average score of 3,547.

Table 5. Frequency Distribution of Behavior (Knowledge, Attitudes and Actions) of Menopausal Women (n = 70)

Perilaku	n	%
Knowledge		
Low	62	82,9
High	8	17,1
Attitudes		
Disagree	64	97,1
Agree	6	2,9
Actions		
Not done	50	77,1
Done	20	22,9

The table above shows the level of knowledge of menopausal women is in the low category about efforts to prevent menopausal complaints and weight gain during menopause (82.9%), menopausal women's attitudes towards efforts to prevent menopausal complaints and weight gain during menopause show disapproval there are as much as 97.1% and do not take action on efforts to prevent menopausal complaints and weight gain during menopause there are as much as 77.1%.

DISCUSSION

The age of menopause in respondents in Petir Village, Gamping District was 49.11 ± 2.1 years (Mean \pm SD), with the highest age of menopause being 51 years 2 months. This age is not much different from the average age of menopausal women in Indonesia in general. Until 2018, the average age of menopause in Indonesia is 52 years, while the life expectancy of Indonesian people is 72 years.

Many factors cause the age shift of menopause including nutritional status, parity, age of menarche, smoking history. Nutrition is one of the factors that determine sooner or later a person experiences menopause. Women with good nutritional status will experience menopause at a normal age while women with obesity are slower menopause. This situation is related to the amount of fat in his body which affects his reproductive hormone levels (Kupcewicz et al., 2021); (Soliman & El-Zeftawy, 2021). The results of previous studies found, the relationship between nutritional status and

menopausal age, women who are overweight will experience menopause delays who are at risk for breast cancer (Meneses et al., 2020); (Shang & Xu, 2022).

Menopausal women are estimated to have a long life span of 20 years, without the hormone estrogen produced by their bodies. This long time must be passed by a woman with all the consequences of health problems that can occur due to loss of the hormone estrogen. Guyton and Hall (2019), the hormone estrogen is a hormone, which has a major influence on the survival of a woman. This hormone is able to protect women from heart disease and maintain healthy blood vessels and and control cholesterol levels. In addition, this hormone also plays an important role in healthy bone development and regulates adult bone turnover and protects future bone loss. Another impact of estrogen loss is that it has a significant effect on brain health that affects how brain structures are connected, brain cells communicate which play a role in regulating the mood or mood of a woman's day ((Hall & Guyton, 2019).

Menopausal women in rural DIY receive messages from their parents, "that old age will come for everyone, and various complaints or health problems will be felt one after another and the body begins to weaken, this message reminds that everyone must be able to accept old age with all the consequences it causes besides that a woman will also get advice about, Food ingredients that are often consumed in the daily menu that are useful later until old age. Women in DIY are advised to consume food ingredients made from soybeans such as tofu, tempeh or other processed food products. The results of previous studies have found many advantages of the content of nuts as phytoestrogen ingredients that can help a woman who has begun to experience a reduction in estrogen production in her body.

But there are various opinions that state that this ingredient can cause an increase in uric acid in the body, so women ignore it more. It is very necessary to socialize health about this product, and the dose needed so that there is no increase in uric acid, because this ingredient is very helpful in adding estrogen that has begun to decline due to old age.

The administration of phytoestrogens is used as hormone replacement therapy which is used when estrogen decreases. Phytoestrogens are phytochemicals that have estrogenic activity. Isoflavones and lignans are phytoestrogen compounds. Isoflavones that have estrogenic effects include genistein, daidzein and glycosides which are found in legumes (Leguminosae) such as soy beans and red clover. In addition to phytoestrogens, calcium and vitamin D can also be hormone replacement therapy (Bapir et al., 2023).

Consumption of estrogen in large quantities can reduce the incidence of several diseases such as the risk of coronary heart disease, osteoporosis, hot flushes and this can be a strategic effort in making prevention efforts due to estrogen deficiency in elderly women. Phytoestrogens are substances found in plants and seeds with a chemical structure similar to estrogen, have weak estrogenic effects and act on estrogen receptors (Ceccarelli et al., 2022).

Phytoestrogens can be given as prevention against:

- a. Cardiovascular diseases include Hypercholesterolemia, Hypertriglyceridemia, High Low Density Lipoprotein (LDL).
- b. Menopause Problems (Premenstrual Syndrome)
- c. Breast carcinoma, cervical cancer, endometrium cancer.
- d. Osteoporosis

The picture of the level of education that has been taken and the work owned by rural women, is still relatively low, this causes them to only be employed as farm laborers and some only as housewives. The educational factor is closely related to behavior change. The higher the education level of menopausal women, the easier it will be for women to recognize the problems they will face. So that the countermeasures and prevention efforts that will be carried out will be easy to understand and do.

Judging from the characteristics of work, menopausal women in this area work more as farm laborers, the work activities they do every day, limiting them in getting information about what can be experienced during menopause. It was found that 77.2% experienced physical complaints, namely muscle and joint disorders (pain in the joints, rheumatic complaints) with an average score of 3,912 followed by complaints of anxiety (anxiety, panic) as much as 65.7% with an average score of 3,649; Changes in sexual activity (not lustful, and dissatisfied and changes in sexual activity) as much as 60% with an average score of 3,563.

The results of a study conducted in Turkey on menopausal women, found 83.5% experienced hot flushes and sweating, 63.2% experienced heart discomfort (feeling of tightness in the heart, sweating, palpitations that are not usually felt), 86% had sleep problems, 83.8% had depressive mood, 75.6% were irritable, 65.7% had anxiety/worry, 82.4% had physical and mental fatigue, 70.1% had sexual problems, 75.8% had urinary problems, 66.3% had vaginal dryness, and 55.4% had joint and muscle pain ((Arar & Erbil, 2023).

The menstrual cycle history of menopausal women in this rural area, the majority have normal menstrual cycles, and have been married at the age and before 20 years, besides that they also have a parity (number of children born alive) of more than 2 people. Normal menstrual cycle, is a menstrual cycle that lasts for 28 days, where this can be associated with various reproductive system disorders in the menstrual process and pregnancy and the climacterium period she experiences, The number of parities a mother can predict her menopausal age, the more parity, the longer the menopausal age (Grasiah et al., 2022).

Analysis of the body mass index of menopausal women in DIY found 28 people (40%) menopausal women who were in the category of obese to obese. The tendency to increase weight occurs due to changes in hormonal balance that affect weight control. In women who are in the perimenopausal period, weight gain mainly comes from fluctuating estrogen levels. The body of women who experience perimenopausal complaints due to reduced estrogen production from the ovaries will try to find a second source of estrogen in the body such as body fat, skin. The tendency of weight gain can be controlled by increasing metabolism and this state can be achieved by means of proper nutrition, regular eating habits and increased activity.

Weight gain in menopausal women needs to be watched out for and become a concern. Many menopausal women don't understand the weight gain they experience as they age. Further research needs to be done on weight gain along with molecular hormone fluctuations, so that alternative prevention of early weight gain can be carried out with the right target.

Identification of blood pressure measurements, menopausal women studied in DIY, there were as many as 42 people (60%) who were assessed to have increased blood pressure. The chance of developing non-communicable diseases in menopausal women is very large, this is related to estrogen production that has begun to decline in the body. Increased blood pressure needs to be watched out for as early as possible to prevent complications of disease development that can lead to stroke ((Izzah et al., 2022). Obese people have a risk of developing grade I hypertension of 1,681 times compared to those who are not obese. There is a 2.05 times greater risk for the incidence of increased blood pressure in women with above-normal BMI compared to women who have a normal body mass index ((Rohkuswara & Syarif, 2017).

Physical, mental changes experienced by menopausal women can have an impact on their quality of life, where at this time even women who have stopped menstruating, still experience climacterium complaints up to 5 years post-menopause. So that the postmenopausal period also needs to be a concern from health workers, in order to support the quality of life of women after menopause so that these women can live their days healthily and productively until the senium period.

Assessment of menopausal complaints using the Menopause Rating Scale questionnaire, describes that all menopausal women feel/experience complaints included in the Menopause Rating Scale (MRS) assessment, the heaviest complaints are physical complaints (MRS 11) discomfort in joints and muscles (pain in the joints, rheumatic complaints), anxiety (anxiety, panic), sexual problems (changes in sexual desire, sexual activity and sexual satisfaction), and physical and mental fatigue (decreased general performance, reduced memory), decreased concentration, forgetfulness/senile dementia. Menopausal complaints that can be assessed with MRS often cause problems for women, both before menopause and after menopause. Various studies suggest that women should visit health care facilities to overcome their complaints, because it interferes with their daily activities. Research conducted in 2018, in the city of Pematangsiantar on 140 menopausal women found complaints of menopause felt with an average score; 32.14 ± 2.07 (Mean \pm SD), meaning that menopausal women are found to experience menopausal complaints in the weight category (Simangunsong, 2019b).

It needs socialization efforts about menopause complaints and research in a wider scope to find the right way to overcome the complaints experienced so that the quality of life of menopausal women is even better. The results of research that have been done to overcome the complaints experienced by

menopausal women, but still only limited to doing physical activity regularly and with a minimum duration of 30 minutes each exercise. Regular physical activity with a duration of 30 minutes each exercise is very useful in reducing menopausal complaints (Simangunsong D.E, 2020). Physical activity or exercise with regular duration was able to improve four domains of women's quality of life, which were assessed with Health Related Quality Of Life (HRQOL) (Hooper et al., 2022). Likewise, research conducted in Pematangsiantar City in 2019, there was a decrease in menopausal complaints after regular physical activity for 30 minutes (Simangunsong, 2019b) ; (Simangunsong D.E, 2020).

Identification of assessed behavior of menopausal women is an assessment of knowledge, attitudes and actions about efforts to overcome perceived menopause complaints and also efforts that can be made to reduce weight gain. The results of this study found that as many as 82.9%, had low knowledge, 97.1%, had a lack of attitude and 77.1%, had not had action in making efforts to overcome perceived menopausal complaints and also efforts that could be made to reduce weight gain.

Socialization about health, can direct humans to be aware of the abilities they have and utilize the strengths that already exist so that they become empowered and can be used for meaningful activities even to meet the needs of life independently. Health education about a healthy lifestyle needs to be emphasized in efforts to prevent disease. A healthy lifestyle is a lifestyle by paying attention to certain factors that affect health, including food and exercise. Healthy living is living with physical, psychological, environmental and financial health, sufficient and good. An individual's lifestyle, characterized by an individual's behavior patterns will have an impact on the health of the individual and subsequently on others. People who regularly practice life habits tend to be healthier and live longer.

Regulation of regular eating patterns and frequency needs to be socialized in menopausal women, considering the changes in hormone production they experience (Simangunsong, 2019a; Simangunsong, D. E. Rika Subarniati Triyoga, Muhammad Fidel Ganis Siregar, 2017) (Simangunsong et al., 2021). Lack of estrogen hormone in the body will result in changes in carbohydrate, protein and fat metabolism. Hormonal changes during perimenopause substantially contribute to an increase in abdominal obesity leading to physical and psychological morbidity. Being overweight in midlife in addition to being associated with an increased risk of cardiovascular and metabolic diseases, also affects quality of life and sexual function (Grisotto et al., 2022) ; (Izzah et al., 2022).

Physical activity is any body movement produced by skeletal muscles that increase energy expenditure, which is categorized as sufficient if a person does physical exercise or exercise for 30 minutes every day or at least 3-5 days a week. Lack of physical activity is an independent risk factor for chronic disease, and overall is estimated to cause mortality globally (Bondarev et al., 2018). Regular physical activity and becoming a habit will increase physical endurance. Physical exercise when done properly, correctly, regularly and measurably can improve physical endurance, health and fitness.

The Lancet 2012, stated that less physical activity causes 6-10% of non-communicable diseases such as coronary heart disease, type 2 diabetes, colon cancer, so it is expected to do a brisk walk of 15-30 minutes every day (Vogel et al., 2021). The wrong view if you assume that you no longer need to exercise because in everyday life you are actively moving or have done a lot of household work. It is recommended to do physical activity for 3-5.5 hours in one day. While the recommended portion is to exercise at least 150 minutes in 1 week or 3 times in 1 week for 50 minutes or five times in 1 week for 30 minutes and even better if routine every day (Cahyani et al., 2020).

CONCLUSION AND RECOMMENDATION

A total of 70 menopausal women in rural DIY have experienced menopause between the ages of 47 – 51.2 years (Mean±SD; 49.11 ± 2.1 years). Work as a farm laborer, and have the highest level of education graduated from elementary and junior high school. They have a normal history of menstrual cycles and have more than 2 live children. Examination of BMI and blood pressure conducted at the time of the study, 40% had a BMI of > 23 kg (above normal) and as many as 60% had blood pressure above 120/80 mmHg.

The most common complaints of menopause are discomfort in the joints and muscles (pain in the joints, rheumatic complaints); complaints of anxiety (anxiety, panic); sexual problems (changes in sexual arousal, sexual activity and sexual satisfaction). Assessment of the behavior of prevention efforts to overcome menopausal complaints and weight gain after menopause is considered lacking, so it is

necessary to recommend efforts to disseminate information about the changes experienced by women before and after menopause.

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