

## Clinical Profile of Menopause Women in Batam, Makassar, and Surabaya

Nadira Zahra Maulidya Permana,<sup>1</sup> Pudji Lestari,<sup>2</sup> Muhammad Ilham Aldika Akbar,<sup>3</sup>  
Indra Yulianti<sup>3</sup>

<sup>1</sup>Medical Programme, Faculty of Medicine, Universitas Airlangga, Surabaya

<sup>2</sup>Department of Public Health, Faculty of Medicine, Universitas Airlangga, Surabaya

<sup>3</sup>Department of Obstetrics and Gynecology, Faculty of Medicine, Universitas Airlangga  
Surabaya,

Corresponding : Pudji Lestari, Email : pudjilestari70@fk.unair.ac.id

### Abstract

**Objective:** This study aimed to find out the clinical profile of menopause women aged 45-65 years old in Batam, Makassar, and Surabaya.

**Methods:** This study was an observational descriptive study using total sampling. This research was obtained from primary data, which obtained from women aged 45-65 years using an instrument in the form of a questionnaire. During the data collection period from February to July 2022 with a total of 75 menopause sample. The clinical changes data collected was menopause symptoms which assessed using Menopause Rating Scale (MRS). The data analyzed using Microsoft® Excel 2021 and presented in a form of table and diagram.

**Result:** The most prevalent symptoms experienced by the sample of menopause women in Batam, Makassar, and Surabaya were physical and mental exhaustion as much as 63 samples (84%), followed by joint and muscular discomfort as much as 61 samples (81,33%), and sexual problems with a total of 52 samples (69,33%).

**Conclusions:** The starting age of menopause of most of the sample were 45-55 years old. Most of the sample experienced physical and mental exhaustion and they experienced mild symptoms due to sociodemographic factors. Based on this research, it was found that education plays an important role to increase the awareness of menopause women regarding the symptoms and how to cope with it.

**Key words:** Menopause, Menopause quality of life, Menopause Rating Scale (MRS), Menopause symptoms, Perimenopause

## Profil Klinis Wanita Menopause di Batam, Makassar, dan Surabaya

### Abstrak

**Tujuan:** Penelitian ini bertujuan untuk mengetahui profil klinis dari wanita perimenopause dan menopause berumur 45-65 tahun di Batam, Makassar, dan Surabaya.

**Metode:** Penelitian ini merupakan penelitian deskriptif observasional dengan menggunakan total sampling. Penelitian ini diperoleh dari data primer yang diperoleh dari wanita usia 45-65 tahun dengan menggunakan kuesioner. Selama periode pengumpulan data dari Februari sampai Juli 2022, terdapat 75 sampel menopause. Data perubahan klinis yang digunakan adalah gejala menopause yang dinilai menggunakan Menopause Rating Scale (MRS). Data dianalisis menggunakan Microsoft® Excel 2021 dan disajikan dalam bentuk tabel dan diagram.

**Hasil:** Gejala yang paling banyak dialami sampel wanita menopause di Batam, Makassar, dan Surabaya adalah kelelahan fisik dan mental sebanyak 63 sampel (84%), diikuti ketidaknyamanan sendi dan otot sebanyak 61 sampel (81,33%), dan masalah seksual sebanyak 52 (69,33%) sampel.

**Kesimpulan:** Usia dimulainya menopause pada sebagian besar sampel adalah 45-55 tahun. Sebagian besar sampel mengalami gejala kelelahan fisik dan mental dan gejala yang dialami ringan karena faktor sosiodemografi. Berdasarkan penelitian ini ditemukan bahwa pendidikan berperan penting dalam meningkatkan kesadaran wanita menopause terkait gejala yang muncul dan cara mengatasinya.

**Kata kunci:** Menopause, Kualitas hidup menopause, Skala Penilaian Menopause, Gejala menopause, Perimenopause

## Introduction

In 2025 it is estimated that in Indonesia there will be 60 million menopausal women and in 2016 currently Indonesia has reach 14 million menopausal women or 7.4% of the total population.<sup>1</sup> Analysis of 2010 Indonesian Population Census, people in certain ethnic or tribal groups may have their own different habits and traditions regarding fertility, decisions regarding age at first marriage, ideal number of children, sexual preferences, and methods to avoid pregnancy.<sup>2</sup> This is the reason why this study chose three big cities on different islands because later on the results will also be vary.

Menopause is a physiological condition when the ovary stops producing estrogen hormone which leads to the cessation of menstrual cycle. Menopause can disrupt the adaptability of biological systems even though it is a natural event. Therefore, women must be aware of its signs and symptoms.<sup>3</sup>

Each individual will experience symptoms differently since they are influenced by many factors, such as lifestyle, socioeconomic condition, and how individuals perceive menopause.

## Methods

This study was an observational descriptive study using total sampling, conducted in Batam, Makassar, and Surabaya in February to July 2022. This research was obtained from primary data, and the primary data was data obtained from women aged 45-60 years with middle to high income. The data were taken by distributing the questionnaire to Komunitas Kumpulan Ibu PNS Batam (Batam) which is a community of civil servant women in Batam, Koperasi Nusantara Makassar (Makassar) a business entity, Dharma Wanita Persatuan Surabaya which is a community organization, PKK RT 3 and 4 Wisma Permai Tengah (Surabaya) which is a

family welfare empowerment community in housing complex.

During the data collection period from February to July 2022, a total data of 75 menopause sample were obtained. The data taken from the questionnaire were age, menopausal age, education, occupation, and symptoms of menopause based on Menopause Rating Scale (MRS). The data analyzed and distributed using Microsoft® Excel 2021 and presented in a form of table and diagram.

## Results

The demographics of menopause samples were dominated by women aged 45-55 years old with a total of 40 samples (53.33%) as shown on table 1. Table 1 shows that as many as 35 samples (46.67%) do not experience menopause yet. There were a total of 3 people (4%) who started their menopause at an early onset, 70 people (93.33%) who experienced menopause at normal onset, and people with late menopause as many as 2 people (2.67%).

Table 1 also presents that the highest level of education was master degree education as many as 13 samples (17.33%), bachelor degree education as many as 34 (45.33%), diploma 3 with 8 samples (10.67%), high school and equivalent as many as 19 samples (25.33%), and elementary schools and junior high schools with 1 sample (1.33%). Majority of the samples were employed, with most of them were government employees (PNS) as much as 35 samples (46.67%).

Table 2 shows that the amount of menopause sample that experienced very severe hot flushes and sweating was 1 sample (2,5%). There was 0 sample experienced very severe heart discomfort. The amount of samples that experienced very severe sleep problems were 3(6,38%). It was found that 2 samples (4,65%) experienced very severe depressive mood and for irritability symptoms there were 2 (4,65%) with very severe irritability symptoms. A total of 2 samples

**Table 1 Demographic Data on Menopause Sample Based on Sociodemographic Characteristics**

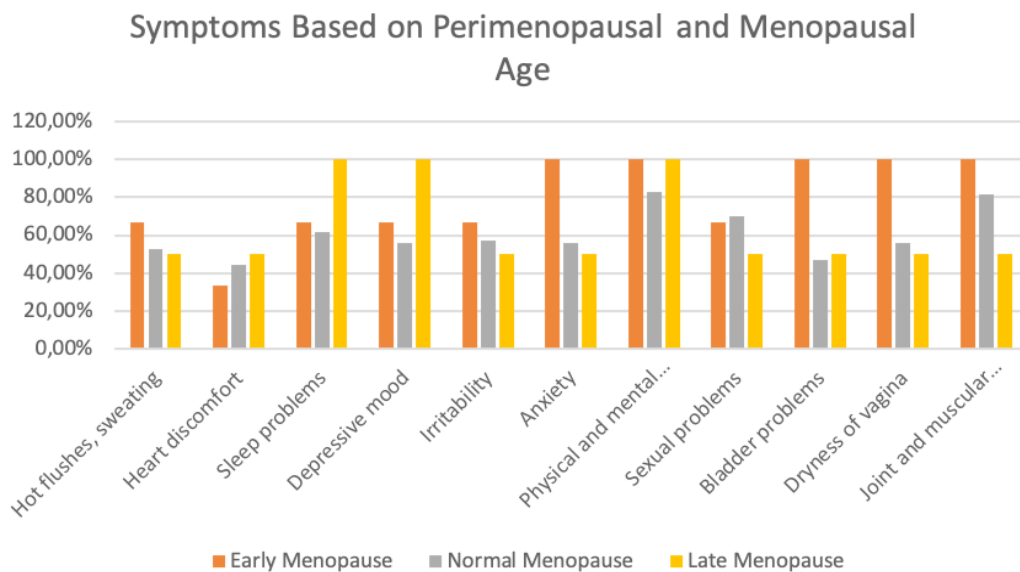
	Categories	Amount, n (%)
Age	45-55 years old	40 (53.33)
	56-65 years old	35 (46.67)
Menopausal Age	Early Menopause (<45 years old)	3 (4)
	Normal Menopause (45-55 years old)	70 (93.33)
	Late Menopause (>55 years old)	2 (2.67)
Education	SD	1 (1.33)
	SMA/SLTA/SMEA	19 (25.33)
	Diploma 3 (D3)	8 (10.67)
	Bachelor Degree (S1)	34 (45.33)
	Master Degree (S2)	13 (17.33)
Occupation	Housewife	21 (28)
	Entrepreneur/Self Employed	2 (2.67)
	Government Employees	35 (46.67)
	Teacher	14 (18.67)
	Private Sector Employee	2 (2.67)
	Others	1 (1.33)

**Table 2 Demographic Data on Menopause Symptoms and Severity**

Categories	Severity			
	Mild (%)	Moderate (%)	Severe (%)	Very Severe (%)
Hot flushes, sweating	24 (60%)	11 (27,5%)	4 (10%)	1 (2,5%)
Heart discomfort	21 (63,63%)	9 (27,27%)	3 (9,09%)	0
Sleep problems	25 (53,19%)	13 (27,65%)	6 (12,76%)	3 (6,38%)
Depressive mood	21 (48,83%)	12 (27,9%)	8 (18,6%)	2 (4,65%)
Irritability	25 (58,13%)	10 (23,25%)	6 (13,95%)	2 (4,65%)
Anxiety	26 (60,46%)	11 (25,58%)	4 (9,3%)	2 (4,65%)
Physical and mental exhaustion	34 (53,96)	20 (31,74%)	5 (7,93%)	4 (6,34%)
Sexual problems	28 (53,84%)	13 (25%)	8 (15,38%)	3 (5,76%)
Bladder problems	18 (50%)	13 (36,11%)	4 (11,11%)	1 (2,78%)
Dryness of vagina	23 (53,48%)	11 (25,58%)	5 (11,62%)	4 (9,3%)
Joint and muscular discomfort	22 (36,06%)	24 (39,34%)	11 (18,03%)	4 (6,55%)

**Table 3 Symptoms Based on Menopausal Age**

Symptoms	Menopausal Age		
	Early Menopause n=3	Normal Menopause n=70	Late Menopause n=2
Hot flushes, sweating	2 (66,67%)	37 (52,85%)	1 (50%)
Heart discomfort	1 (33,33%)	31 (44,28%)	1 (50%)
Sleep problems	2 (66,67%)	43 (61,42%)	2 (100%)
Depressive mood	2 (66,67%)	39 (55,71%)	2 (100%)
Irritability	2 (66,67%)	40 (57,14%)	1 (50%)
Anxiety	3 (100%)	39 (55,71%)	1 (50%)
Physical and mental exhaustion	3 (100%)	58 (82,85%)	2 (100%)
Sexual problems	2 (66,67%)	49 (70%)	1 (50%)
Bladder problems	2 (66,67%)	33 (47,14%)	1 (50%)
Dryness of vagina	3 (100%)	39 (55,71%)	1 (50%)
Joint and muscular discomfort	3 (100%)	57 (81,42%)	1 (50%)



**Figure 1 Graph of the Most Symptoms Experienced in Menopausal Women.**

(4,65%)experienced very severe anxiety and 4 samples (6,34%) experienced very severe physical and mental exhaustion. There were 3 (5,76%) of them who experienced very severe sexual problems. Only 1 sample (2,78%) had very severe bladder problems. There were 4 (9,3%) of them who had very severe dryness of vagina. And 4 (6,55%) of them experienced very severe joint and

muscular discomfort.

Table 3 shows that the most symptoms experienced by early menopause women were anxiety, physical and mental exhaustion, dryness of vagina, and joint and muscular discomfort as much as 3 samples (100%). It was found in women who experienced normal menopause that the most experienced symptoms were physical and mental

exhaustion as many as 58 samples (82,85%) and joint and muscular discomfort as much as 57 (81,42%). And it was found for late menopause the most experienced symptoms were sleep problems, depressive mood, and physical and mental exhaustion with a total of 2 samples (100%). From the graph below also shows the distribution of symptoms using column chart to see the graph of the symptoms.

## Discussion

Based on this study, the age of the sample is categorized into two groups, namely the age of 45-55 which is the normal age of menopause, and 55-65 which is the age of late menopause. Menopause age <45 years old is defined as early menopause and 45-55 years old as normal menopausal age.<sup>5</sup> Most of the samples in this study experienced menopause at normal age. Based on table 1 it shows that the education level of this menopause sample is very diverse, most of the sample were those with Bachelor Degree (S1) education levels. A study in Bantul showed that the higher the education level, the menopause knowledge will be better and between those two shows a strong relation.<sup>6</sup>

Based on table 1 most of the samples were employed and the others were a housewives. From research conducted in Medan, it is stated that women who work have better knowledge than women who do not work, because working women will easily get new knowledge and experiences outside the home that can be obtained in their workplace environment.<sup>7</sup> However, this does not rule out the possibility that housewives also have extensive knowledge about menopause, because they tend to stay at home and they have many time to learn through the internet regarding menopause.

This is also related to the learning capability of older women in this digital era knowing that now is the open information era

where everyone can easily access anything on the internet.<sup>8</sup> It was found that the most common reported symptoms by menopause samples were physical and mental exhaustion and the symptoms were mild. This is in accordance with the study in Arabic women in Sydney which stated that they experienced 'feeling tired or worn out' which refers to physical and mental exhaustion. About 47,1% of the sample were housewives which most of them are required to take care of the demand of the family and social tasks yet they lack both financial and social empowerment which made them suffered from psychological burnout.<sup>9</sup> This is also in accordance with the study in Macau, China, which stated that the first prevalent symptoms of menopause were physical and mental exhaustion.<sup>10</sup> Most of the samples lived in urban residence and 28% of the sample were housewives which most of them are required to take care of the demand of the family and social tasks yet they lacked both financial and social empowerment which made them experienced psychological burnout. From a research conducted using the MENQOL (Menopause-Specific Quality of Life) questionnaire showed that emotional exhaustion was positively and highly correlated with menopausal symptoms despite other variables such as work ability and age.<sup>11</sup>

The second predominant symptoms of menopause women were joint and muscular discomfort and the symptoms were moderate. This is corresponding with research conducted in Bantul, Yogyakarta, which stated that the predominant symptoms by menopausal women are joint and muscular discomfort and the symptoms were mild.<sup>12</sup> In Aljouf region, Saudi Arabia it was also found that joint and muscular discomfort as the predominant symptoms due to lack of exercise and vitamin D deficiency of Saudi women.<sup>13</sup> The decrease in estrogen during the menopausal transition phase causes greater bone resorption than production, which

results in osteoporosis.<sup>14</sup> Estrogen deficiency is highly related to primary osteoporosis which makes menopausal women more vulnerable to the condition. The decrease in estrogen during the menopausal transition phase causes greater bone resorption than production, which results in osteoporosis.<sup>14</sup> The joint and muscular discomfort may also be caused by psychological stresses due to work because the majority of the samples for this research were employed or could be caused by the repetitive household tasks because the other samples were housewives.

Followed by the third most prevalent symptoms of menopause women which is sexual problems and the symptoms were mild. According to a study in Bali, Indonesia, the prevalence of sexual problems was found to be high.<sup>15</sup> Sexual dysfunction occurred due to the reduction in estrogen production, which alters the vasoconstriction and lubrication of genital organs and stimulates the decrease of sexual function.<sup>16</sup> due to a decrease in the function of reproductive organs such as the ovaries as a sex steroid hormone (estrogen and progesterone Sexual problems or dysfunctions is worsen with the increasing of age and also very common in menopausal women.

Table 4 shows that the most common symptoms experienced by women who are still in the early menopause were dryness of vagina and anxiety. Low estrogen levels are associated with symptomatic vulvovaginal atrophy, characterized by thin, pale, and dry vaginal and vulvar surfaces. Vaginal atrophy is caused by the decreasing of estrogen level causing the walls of the vagina loss its collagen. The vaginal wall will be thinner and flatten rugae. The loss of the fibrous layer on the surface epithelium of the vagina is characterized by the decrease in the ratio of basal cells to superficial cells. Vagina will be more prone to bleeding even though only caused by minimum trauma. The amount of lactobacillus decrease due to the

alkali environment of vagina which makes the vagina more susceptible to urogenital infection and fecal pathogen. This infection can spread into the upper part which causing urinary system disorder such as urethritis, urinary tract infection, and cystitis. The symptoms experienced include frequent itching, irritation, and burning sensation even in women who are no longer sexually active.<sup>3</sup>

The most symptoms experienced by women with normal menopause are physical and mental exhaustion. Similar to the study of Arabic women in Sydney which stated that the most frequent symptom reported was 'feeling tired or worn out'.<sup>17</sup> 47.9+/- 5.0 years Women are more likely to have psychological symptoms during this phase in life, which might result in depression when they experience bothersome menopausal symptoms including hot flushes, night and day sweats, and sleeping issues.<sup>18</sup>

The prevalent symptoms experienced by women with late menopause were sleep problems and depressive mood. Whereas in a study in India, it was found that physical and mental exhaustion were the symptoms reported by women of age 56–60 years old.<sup>19</sup>

Literature stated that depressive symptoms that could be caused by physical and mental exhaustion were associated with different sleep disturbance patterns. They experience sleep problems that affect their ability to function during the day and ruin their quality of life, which can have long-term effects on their mental and physical health and can lead to depressive mood.<sup>20</sup>

## Conclusion

Menopausal women in Batam, Makassar, and Surabaya experienced physical and mental exhaustion the most and the symptoms were mild. A high level of education can make an individual more aware of the symptoms felt. The starting age of menopause commonly reported were 45-55 years old. That is why



education is needed for women aged 45-55 years or even less regarding menopause symptoms so that they become more aware of the symptoms and understand how to overcome them. Women who are starting to enter or who have entered menopause are recommended to do a lot of physical activity like walking or aerobic movements to reduce the menopause symptoms. Social support is needed for women who are entering menopause or who have entered menopause to overcome the stress due to the symptoms experienced during menopause. However further research is needed regarding the quality of life of menopausal women in certain community.

### Conflict of Interest

The authors have no conflict of interest.

### References

1. Ayu SM, Sofiana L, Triwulandari I. The relationship between anxiety and sexual activity in climacteric women in facing menopause in Soropadan Posyandu and Sleman district. *Int J Community Med Public Health*. 2020 Feb 27;7(3):837–40.
2. Raharja MB. FERTILITAS MENURUT ETNIS DI INDONESIA: ANALISIS DATA SENSUS PENDUDUK 2010. *J Kependud Indones*. 2017 Jun 30;12(1):69–78.
3. *Ginekologi praktis komprehensif*. Airlangga University Press; 2020.
4. Buku ajar Boedhi-Darmojo : geriatri (ilmu kesehatan usia lanjut) [Internet]. Universitas Indonesia Library. Balai Penerbit; 2009 [cited 2022 Oct 13]. Available from: <https://lib.ui.ac.id>
5. Malek AM, Vladutiu CJ, Meyer ML, Cushman M, Newman R, Lisabeth LD, et al. The association of age at menopause and all-cause and cause-specific mortality by race, postmenopausal hormone use, and smoking status. *Prev Med Rep*. 2019 Jul 14;15:100955.
6. Megawati M, Yunita W. Hubungan Tingkat Pendidikan dengan Tingkat Pengetahuan Ibu tentang Menopause di Dusun Kresen Bantul Tahun 2012 [Internet] [s1\_sarjana]. STIKES 'Aisyiyah Yogyakarta; 2012 [cited 2022 Oct 14]. Available from: <http://lib.unisayogya.ac.id>
7. Febrianti R. Persepsi Wanita Tentang Kecemasan dalam Menghadapi Menopause di Wilayah Kerja Puskesmas Padang Bulan Kota Medan. *Menara Ilmu* [Internet]. 2019 Jul 15 [cited 2022 Oct 13];13(8). Available from: <https://jurnal.umsb.ac.id/index.php/menarailmu/article/view/1485>
8. Li L, Ding H, Li Z. Does Internet Use Impact the Health Status of Middle-Aged and Older Populations? Evidence from China Health and Retirement Longitudinal Study (CHARLS). *Int J Environ Res Public Health*. 2022 Jan;19(6):3619.
9. Smadi E. Psychological Burnout of Women Working and Housewives at the Menopausal Stage in Amman City / Jordan. *Asian Soc Sci*. 2019 Jan 30;15:124.
10. Chou MF, Wun YT, Pang SM. Menopausal symptoms and the menopausal rating scale among midlife chinese women in Macau, China. *Women Health*. 2014;54(2):115–26.
11. Converso D, Viotti S, Sottimano I, Loera B, Molinengo G, Guidetti G. The relationship between menopausal symptoms and burnout. A cross-sectional study among nurses. *BMC Womens Health*. 2019 Dec;19(1):1–12.
12. Subagya AN, Artanty W, Hapsari ED. Hubungan Harga Diri dengan Kualitas Hidup Wanita Menopause. *J Persat Perawat Nas Indones JPPNI*. 2018 Aug 31;2(3):177–93.
13. Alzaheb RA, Al-Amer O. Prevalence and

- Predictors of Hypovitaminosis D Among Female University Students in Tabuk, Saudi Arabia. *Clin Med Insights Womens Health*. 2017;10:1179562X17702391.
14. Ji MX, Yu Q. Primary osteoporosis in postmenopausal women. *Chronic Dis Transl Med*. 2015 Mar 21;1(1):9–13.
  15. Diyu IANP. Gambaran Karakteristik Wanita Postmenopause Yang Tinggal Di Wilayah Pedesaan Indonesia. *J Ris Kesehat Nas*. 2019 Oct 31;3(2):46–50.
  16. Arini LA. Differences of Sexual Function: A Study in Two Menopause Groups. *Indones J Midwifery IJM*. 2020 Sep 29;3(2):109–21.
  17. Lu J, Liu J, Eden J. The experience of menopausal symptoms by Arabic women in Sydney. *Climacteric J Int Menopause Soc*. 2007 Feb;10(1):72–9.
  18. Hybholt M. Psychological and social health outcomes of physical activity around menopause: A scoping review of research. *Maturitas*. 2022 Oct 1;164:88–97.
  19. Khatoon A, Husain S, Husain S, Hussain S. An Overview of Menopausal Symptoms Using the Menopause Rating Scale in a Tertiary Care Center. *J -Life Health*. 2018;9(3):150–4.
  20. Baker FC, Zambotti M de, Colrain IM, Bei B. Sleep problems during the menopausal transition: prevalence, impact, and management challenges. *Nat Sci Sleep*. 2018 Feb 9;10:73–95.