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Poor sleep quality in post menopause woman

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ABSTRACT

Generally, women after having menopause are less satisfied with their sleep and as many 61% report insomnia symptoms. Sleep quality is an important constituent and an essential part of someone`s quality of life. The worsening quality of sleep in women after having menopause is affected by several factors, such as age, marital status, history of hypertension, and BMI status. This research aims to find out the depiction of grievances and sleep quality in women after having menopause in Panti Werdha Wisma Mulia and Panti Werdha Berea, West Jakarta. This is descriptive research that was conducted on December 23rd at Panti Werdha Wisma Mulia and Panti Werdha Berea West Jakarta, with the sampling was 44 women. PSQI was the instrument used to get the depiction of sleep quality. The result of the research showed that there are 40 respondents (90,91%) that have bad sleep quality while only 4 people (9, 09%) who have good sleep quality.

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INTRODUCTION

Menopause is a normal change in a woman's life when menstruation stops. A woman experiences menopause when she does not have menstruation for 12 consecutive months (Talaulikar, 2022). The menopausal transition, also known as perimenopause, typically begins between the ages of 45 and 55. However, it can start earlier or later than this range. During perimenopause, a woman's body undergoes hormonal changes that lead to the cessation of menstrual periods and the end of reproductive capacity. This transition can take several years, and women may experience a range of symptoms during this time, including hot flashes, mood changes, and sleep disturbances. Once a woman has gone 12 consecutive months without a menstrual period, she is considered to have reached menopause (Shea et al., 2020). Menopause occurs when the ovaries stop producing the hormones estrogen and progesterone (CDC, 2017). Many women experience complaints after experiencing menopause. One of the effects of menopause is a decrease in sleep quality. With age the quality of sleep generally worsens (Nanette et al., 2016). In addition to being influenced by the hormones estrogen and progesterone, sleep quality in women is also influenced by gonadotropic hormones (Jehan et al., 2015; G. Bin Lee et al., 2021; Smith et al., 2018).

A data obtained from the Seattle Midlife Women's Health Study showed the prevalence and severity of sleep symptoms in women during the menopausal transition and early postmenopause

(Woods & Mitchell, 2010). In this case, Woods & Mitchell (2010) showed that poor sleep quality was a common symptom, with 61% of women reporting difficulty falling asleep, staying asleep, or waking up too early. Meanwhile, the most common menopausal symptoms reported by Zhang et al. (2016) were hot flashes (69.2%), sweating (60.9%), and insomnia (43.6%). Women in the postmenopausal stage had significantly worse sleep quality than women in the menopausal transition stage. In addition, they found that the severity of menopausal symptoms, especially hot flashes and sweating, was significantly associated with poor sleep quality.

According to Hsu & Lin (2005), menopausal women experienced poor quality of sleep, with a mean score of 6.22 on the Pittsburgh Sleep Quality Index (PSQI). In this case, several factors that were significantly associated with poor sleep quality, including depression, anxiety, hot flashes, and physical symptoms such as joint pain and urinary incontinence. Likewise, regular exercise was associated with better sleep quality, while caffeine consumption was associated with poorer sleep quality. Finally, Hsu & Lin (2005) suggested that providing menopausal women with education about sleep hygiene and offering interventions to address their physical and emotional symptoms could improve their overall sleep quality.

Sleep duration of less than 7 hours a night can increase mortality, cardiovascular disease, mood disorders and obesity in postmenopausal women (AMS, 2014). Sleep problems are often accompanied by depression and anxiety. In general, postmenopausal women are dissatisfied with their sleep and as many as 61% report symptoms of insomnia (National Sleep Foundation, 2022).

Sleep disturbance in general is a condition where there is a change in the quantity and quality of sleep which can cause discomfort and impact on quality and lifestyle (Zolfaghari et al., 2020). Sleep disturbances can range from mild, occasional disruptions to chronic, severe problems that can significantly impact a person's quality of life (Berkley et al., 2020). Some common causes of sleep disturbance include stress, anxiety, depression, physical illness, medication side effects, and environmental factors such as noise or light (Khachatryan et al., 2020; Maiolino et al., 2021). Treatment for sleep disturbance may involve addressing underlying health conditions, making lifestyle changes, or using medication or other therapies to promote better sleep. This can refer to any difficulty with sleep, including insomnia, but may also refer to other sleep-related issues such as sleep apnea or restless leg syndrome (T.-H. Lee et al., 2019). Insomnia is one of the most common sleep disorders and it is characterized by difficulty falling asleep, staying asleep, or both, despite having the opportunity to get enough sleep (Pavlova & Latreille, 2019). As such, a research result has found that postmenopausal women who practiced yoga had significantly better sleep quality compared to those who did not practice yoga (Susanti et al., 2022).

Based one the issue above, education and intervention could be provided to address physical and emotional symptoms that are associated with poor sleep quality, such as depression, anxiety, hot flashes, joint pain, and urinary incontinence. This could involve educating menopausal women about sleep hygiene and lifestyle changes that can promote better sleep, as well as offering therapies or medication to alleviate symptoms that are impacting sleep quality (Zolfaghari et al., 2020).

Another potential strategy is to encourage regular exercise, which has been shown to be associated with better sleep quality in menopausal women. Additionally, reducing caffeine consumption could also lead to improved sleep quality (Pavlova & Latreille, 2019).

Given that poor sleep quality is a significant problem for many postmenopausal women and can lead to serious health consequences, it is important to continue researching potential solutions and interventions. For example, further studies could be conducted on the potential benefits of yoga or other relaxation techniques for improving sleep quality in menopausal women (Susanti et al., 2022). Overall, by addressing the various factors that can contribute to poor sleep quality in postmenopausal women, it may be possible to improve their overall quality of life and health outcomes.

The quality of an individual's sleep is an essential component of his or her quality of existence. Several factors, including age, marital status, hypertension history, and body mass index,

contribute to the decrease of sleep quality in postmenopausal women. Based on this background, this study aims to describe sleep complaints and quality in postmenopausal women at Panti Werdha Wisma Mulia and Panti Werdha Berea, West Jakarta.

RESEARCH METHOD

This research is descriptive in nature. This research was conducted at Panti Werdha Wisma Mulia and Panti Werdha Berea, West Jakarta. The number of samples in this study were 43 samples. The calculation of the sample size of this study used the sample size formula to estimate the proportion of a population.

In this study, the data was obtained through direct observation and interviews with the elderly residents at Panti Werdha Wisma Mulia and Panti Werdha Berea in West Jakarta. The researchers visited the facilities and observed the daily routines of the residents, as well as their interactions with staff members and other residents. In addition, the researchers conducted interviews with the residents to gather more detailed information about their experiences and opinions.

The data collection process was carried out over a period of two months, during which time the researchers made multiple visits to the facilities to gather information from a diverse group of elderly residents. The data was recorded using both written notes and audio recordings, which were then transcribed and analyzed by the research team.

Overall, the data collection process was conducted systematically and with great attention to detail, in order to ensure the accuracy and reliability of the findings. The researchers took care to maintain ethical standards throughout the study, obtaining informed consent from all participants and ensuring that their privacy and confidentiality were protected. The results of this study provide valuable insights into the experiences and needs of elderly residents in institutional care settings, and can help inform future efforts to improve the quality of care for this population.

RESULTS AND DISCUSSIONS

The research results obtained by researchers were 44 people. Data was taken at Panti Werdha Wisma Mulia and Panti Werdha Berea, West Jakarta by distributing questionnaires on December 23 2019. The characteristics of the respondents can be seen in table 1.

Table 1. Characteristics of Respondents

Characteristics	Amount (n)	Percentage (%)
Age		
≥80 Years	17	38,6
70-79 Years	18	40,9
60-69 Years	8	18,2
< 60 Years	1	2,3
Marital status		
Married	30	68,2
Not Married	14	31.8
Parity History		
>3 Children	13	29.5
<3 Child	31	70.5
Smoking History		
Yes	2	4,5
No	42	95.5
History of Alcohol Use		
Yes	3	6,8
No	41	93,2
History of Ovarian/Uterus Surgery		
Once	1	2,3

Never	43	97.7
BMI		
Obese	10	22,7
Overweight	16	36,4
Normal	13	29.5
Underweight	5	11,4
History of Hypertension		
Yes	26	59,1
No	18	40,9

Description of Sleep Complaints in Postmenopausal Women at Wisma Mulia Nursing Home and Berea Nursing Home

Description of Sleep Quality Based on Subjective Opinions of Respondents

Based on the results of the study, it was found that 29 people (65,9%) of the 44 respondents had good sleep quality, and 11 people (25,0%) respondents had poor sleep quality.

Overview of Sleep Duration

Based on research results from 44 respondents, it was found that the most sleep duration was 5-6 hours with 20 respondents (45,4%). Then, the average sleep duration is 5 hours, with the shortest sleep duration being 2 hours and the longest sleeping duration being 9 hours.

Sleep Latency Overview

From the research results of 44 respondents, the highest sleep latency was 16-30 minutes with 20 respondents (45,4%). Then, the average sleep latency is 48 minutes, with the shortest sleep latency number being 10 minutes and the longest sleep latency number the respondent has a sleep efficiency of 75-84%.

Sleep Efficiency Overview

Based on the results of the study, it was found that 15 people (34,1%) respondents had a sleep efficiency of 75-84%.

Sleep Disorders Overview

Based on the results of the study, it was found that 30 people (68,2%) respondents experienced sleep disturbances < 1 time a week, and 13 people (29,5%) respondents experienced sleep disturbances 1-2 times a week.

An overview of the use of sleeping pills

Based on the results of the study, it was found that 42 people (95,4%) of the 44 respondents did not use sleeping pills for the last 1 month.

Features of Daytime Dysfunction

Based on the research results, it was found that 21 people (47.7%) respondents did not experience dysfunction during the day in the last 1 month.

Table 2. Description of Sleep Quality Based on Subjective Opinions of Respondents

	Interpretation	Σ	%
Sleep Quality	Very good	3	6,8
	Good	29	65,9
	Bad	11	25,0
	Very bad	1	2,3

Table 3. Overview of Sleep Latency

	Interpretation	Σ	%	Average	Min	Max
Sleep Latency	≤ 15 minutes	5	11,4	48 minutes	10 minutes	90 minutes
	16-30 minutes	20	45,4			
	31-60 minutes	8	18,2			
	> 60 minutes	11	25,0			

Table 4. Overview of Sleep Duration

	Interpretation	Σ	%	Average	Min	Max
Sleep Duration	> 7 Hours	3	6,8	5 Hours	2 hours	9 hours
	6-7 Hours	9	20,5			
	5-6 Hours	20	45,4			
	< 5 Hours	12	27,3			

Table 5. Overview of Sleep Efficiency

	Interpretation	Σ	%
Sleep Efficiency	> 85%	13	29,5
	75-84%	15	34,1
	65-74%	8	18,2
	< 65%	8	18,2

Table 6. Description of Sleep Disorders

	Interpretation	Σ	%
Sleep Disorders	None for 1 month	0	0,0
	< 1 time a week	30	68,2
	1-2 times a week	13	29,5
	2-7 times a week	1	2,3

Table 7. Description of the use of sleeping pills

	Interpretation	Σ	%
Use of sleeping pills	None for 1 month	42	95.4%
	< 1 time a week	1	2,3
	1-2 times a week	0	0.0
	3-7 times a week	1	2,3

Table 8. Description of Dysfunction During the Day

	Interpretation	Σ	%
Daytime Dysfunction	None for 1 month	21	47,7
	< 1 time a week	10	22,7
	1-2 times a week	8	18,2
	3-7 times a week	5	11,4

Description of Sleep Quality in Postmenopausal Women at Wisma Mulia Nursing Home and Berea Nursing Home

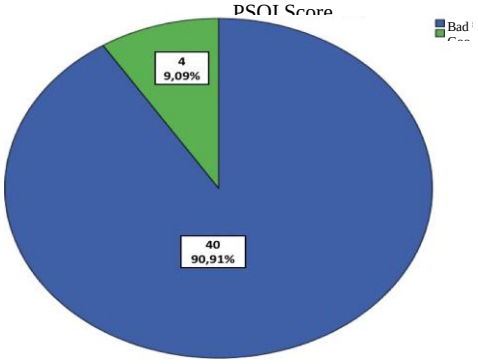

Figure 1. Graph of Sleep Quality in Postmenopausal Women at Wisma Mulia Nursing Home and Berea Nursing Home

The results obtained from the study were that as many as 40 people (90,91%) had poor sleep quality, while those who had good sleep quality were 4 people (9,09%).

Discussion

Description of Sleep Complaints in Postmenopausal Women at Wisma Mulia Nursing Home and Berea Nursing Home

Description of Sleep Quality Based on Subjective Opinions of Respondents

From the results of the study, it was found that according to the subjective opinion of 29 people (65.9%), sleep quality complaints were good. Then, 11 people (25.0%) of respondents complained of having poor sleep quality. According to the research results of Madrid-Valero et al. (2017) found that 72.2% of postmenopausal women rated the quality of their sleep as good.

Sleep Latency Overview

Based on the results of the study, the highest sleep latency was 16-30 minutes with 20 respondents (45.4%), according to a study by Madrid-Valero et al. (2017) obtained a sleep latency of >15 minutes for 53.1% of respondents. Then the average sleep latency is 48 minutes, with the shortest sleep latency number being 10 minutes and the longest sleep latency number being 90 minutes.

Sleep Duration Overview

Based on research results from 44 respondents, it was found that the most sleep duration was 5-6 hours with 20 respondents (45.4%). According to the research results of Madrid-Valero et al. (2017) obtained a sleep duration of <7 hours by 52.8%. Then, the average sleep duration is 5 hours, with the shortest sleep duration being 2 hours and the longest sleeping duration being 9 hours. According to research by Ayrim et al. (2014) obtained sleep duration < 6 hours in 48 people (23.3%) respondents.

Sleep Efficiency Overview

Based on the results of the study, it was found that 15 people (34.1%) respondents had a sleep efficiency of 75-84%. Based on research obtained by Madrid-Valero et al. (2017) 39% of respondents had a sleep efficiency of < 85%.

Sleep Disorders Overview

Based on the results of the study, it was found that 30 people (68.2%) respondents experienced sleep disturbances < 1 time a week, and 13 people (29.5%) respondents experienced sleep disturbances 1-2 times a week. According to research by Madrid-Valero et al. (2017) found that 14.5% of respondents experienced sleep disturbances 1-2 times a week.

Overview of the use of sleeping pills

Based on the results of the study, it was found that 42 people (95.4%) of the 44 respondents did not use sleeping pills during the last 1 month and it was found that 1 person (2.3%) used sleeping pills <1 time a week, and 1 respondent was found to use sleeping pills 3-7 times a week. According to research by Madrid-Valero et al. (2017) found that 24.9% of respondents used sleeping pills. Based on research by Ayrim et al. (2014) found that 23 people (11.2%) respondents used sleeping pills <1 time a week. However, study also noted that there were some potential side effects associated with the use of sleeping pills, including dizziness, headache, and gastrointestinal symptoms. The study concluded that while sleeping pills may be effective for improving sleep quality in postmenopausal women with insomnia, their use should be carefully monitored due to potential risks and side effects (Machado et al., 2020).

Features of Daytime Dysfunction

Based on the research results, it was found that 21 people (47.7%) respondents did not experience dysfunction during the day in the last 1 month. Then, it was found that 23 people (52.3%) respondents experienced dysfunction during the day in the last 1 month. According to research by Madrid-Valero et al. (2017) found that 18.4% of respondents experienced dysfunction during the day.

Description of Sleep Quality in Postmenopausal Women at Wisma Mulia Nursing Home and Berea Nursing Home

The results obtained from the study were postmenopausal women at the Wisma Mulia Nursing Home and Berea Nursing Home who had deteriorating sleep quality as many as 40 people (90.91%).

According to previous research conducted by Astria & Ariani (2016), out of 26 respondents, 19 people (73.1%) had poor sleep quality, while 7 people (26.9%) had good sleep quality. In the postmenopausal phase, sleep disturbances such as hot flushes, mood disturbances and breathing disturbances during sleep appear which can affect sleep quality. Decreased estrogen levels in postmenopausal women cause disruption of the regulation of synthesis and release of neurotransmitters which will affect the work of the brain and decreased estrogen causes the control of blood flow to become unstable which will affect sleep quality (Astria & Ariani, 2016).

CONCLUSION

The results obtained from research conducted by researchers by taking questionnaires at Panti Werdha Wisma Mulia and Panti Werdha Berea, West Jakarta on December 23 2019. Escription of sleep complaints in postmenopausal women at the Wisma Mulia Nursing Home and Berea Nursing Home, namely subjective sleep quality according to 29 people (65.9%) respondents was good, then the most sleep latency was 16-30 minutes from 20 people (45.4%) Respondents with the most sleep duration were 5-6 hours out of 20 people (45.4%) respondents. Then sleep efficiency is the most between 75-84% of 15 people (34.1%) respondents. 30 people (68.2%) respondents had sleep disturbances < 1 time a week, 42 people (95.4%) respondents did not use sleeping pills for 1 month and 23 people (52.3%) respondents experienced dysfunction during the day during 1 month. Sleep quality in postmenopausal women at the Wisma Mulia Nursing Home and Berea Nursing Home found 40 people (90.91%) respondents had poor sleep quality and 4 people (9.09%) had good sleep quality.

In conclusion, our study found that postmenopausal women at the Panti Werdha Wisma Mulia and Panti Werdha Berea experience varying degrees of sleep complaints. While subjective sleep quality was reported as good for the majority of participants, poor sleep quality was still prevalent among a significant minority. Future research could explore the factors that contribute to poor sleep quality in this population, such as environmental factors and psychological distress. Additionally, interventions aimed at improving sleep quality, such as cognitive-behavioral therapy for insomnia, could be investigated to improve the well-being of postmenopausal women living in nursing homes.

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