Research Article

Women in the Rural Areas Experience more Severe Menopause Symptoms

Perempuan Menopause di Pedesaan Mengalami Gejala Menopause yang Lebih Berat

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Abstract

Objective: The aim of this study is to compare the severity of menopausal symptoms between menopause women who lived in urban area with those who lived in rural area.

Methods: The study is conducted by comparing the scores of Menopause Rating Scale (MRS) and World Health Organization Quality of Life (WHOQOL) questionnaires of menopause women who lived in the City of Makassar with those who lived in rural areas of Selayar.

Results: The results of the study revealed that menopausal symptoms are more severe on menopause women who lived in rural areas than those who lived in urban area. Less educated menopause women have more severe menopausal symptoms than those who have more education. Their Quality of Life show no significant difference. There is a correlation between the severity of menopausal symptoms with the quality of life of menopause women, the more severe the symptoms, the less the quality of life are.

Conclusion: Menopausal symptoms are more severe on menopause women who lived in rural areas than those who lived in urban area.

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Keywords: menopausal symptoms, rural area, urban area

Abstrak

***Tujuan**: Penelitian ini bertujuan membandingkan tingkat beratnya gejala menopause dan kualitas hidup antara perempuan menopause yang hidup di perkotaan dengan perempuan menopause yang hidup di pedesaan.*

***Metode**: Penelitian ini dilakukan dengan membandingkan nilai kuestioner Menopause Rating Scale (MRS) dan World Health Organization Quality of Life (WHOQOL) perempuan menopause di Kota Makassar dengan nilai MRS dan WHOQOL dari perempuan menopause di desa-desa pada Kabupaten Selayar.*

***Hasil**: Hasil penelitian menunjukkan bahwa gejala menopause di pedesaan lebih berat dibanding di perkotaan. Gejala menopause ditemukan lebih berat pada mereka yang berpendidikan rendah dibanding pada mereka yang berpendidikan tinggi. Kualitas hidup antara perempuan menopause di perkotaan dengan di pedesaan tidak berbeda secara signifikan. Terdapat korelasi antara beratnya gejala menopause dengan kualitas hidup perempuan menopause, semakin berat gejala menopause, semakin rendah kualitas hidup perempuan menopause.*

***Kesimpulan**: Gejala menopause di pedesaan lebih berat dibanding di perkotaan.*

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***Kata kunci**: gejala menopause, pedesaan, perkotaan*

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INTRODUCTION

The development in medicine and a better economic standard causes higher life expectancy for humans, including for women. Life expectancy in the developing countries is 65-73 years, while in developed countries, it is 78-84 years.[1]

Women will enter the transformation from reproductive age to menopausal age. It is estimated in 2005 that the number of women aged over 50 years old is ± 50 million people worldwide. Thus if the average of age menopausal women in indonesia is 50 years old and the life expectancy is 70 years old, then approximately 50 million women in Indonesia will experience menopause for 20 years, nearly a third of her life.[1-3]

Natural menopause according to WHO is the permanent cessation of menstruation as a result of the loss of ovarian activity. Natural menopause is recognized if there is amenorrhea for 12 consecutive months, without finding other pathological or physiological cause.[4]

Menopause is a universal phenomenon of reproduction. A number of physical and psychological symptoms caused by hormonal changes will occur during menopause. The symptoms of menopause include psychical phenomena, somato vegetative, and urogenital complaints. The symptoms may include impaired memory, lack of concentration, anxiety, depression, insomnia, body feels hot, sweating, joint pain, impaired libido, vaginal dryness, urinary incontinence, and others. All of these

symptoms may interfere with the quality of life of menopausal women.[5,6]

The symptoms that occur are not always the same in all women in all cultures. The prevalence of menopausal symptoms varies not only at the level of individuals in a population, but also differ between each populations.[2]

Many factors including social background, education, physical and mental health can affect the knowledge and views of women about the menopause. As we know, the socio-cultural factors can influence the behavior of women and their experiences in dealing with the symptoms of menopause.[2,7]

In the western society, beauty is very exalted, while aging and maturity is not. Therefore, evidence of skin aging such as wrinkles and diminished libido can be a psychological trauma. All this can lead to depression, anxiety, and irritability.

There are still many areas in Indonesia, which puts the status of elderly women in a respectable position in society. Women who have this view when experiencing menopause tend to not experience the turmoil of clinical symptoms, psychological, and social concern.[4]

The purpose of this study is to compare the severity of menopausal symptoms and the quality of life between the postmenopausal women who live in urban area with the menopausal women living in rural area.

METHOD

This study is an observational, cross-sectional study that measures the severity of menopausal symptoms and quality of life of menopausal women using a questionnaire, and then compares the variables between the menopausal women in rural and urban areas. The study was performed in the city of Makassar and the villages in the district of Selayar from July to September 2011.

The sample population was postmenopausal women between the ages of 45-70 years who hadn't had their menstrual period more than one year after the last menstrual period. Samples were postmenopausal women who met the inclusion criteria and were willing to participate in the study by signing the consent. Samples were taken from the population as a purposive sampling with sample size of 61.

RESULT

The questionnaire used was MRS (Menopause Rating Scale), with a range of MRS total score from 0 (asymptomatic) to 44 (highest value) and divided into 3 subscales of psychology, somatovegetative, and urogenital. The second questionnaire was WHOQOL (WHO Quality of Life), divided into 4 areas: physical, psychological, social, and environmental. In addition to both of them, this study also includes the characteristics of the respondents who participated in this study. Sample characteristics include the average age, the average age at menopause, ethnicity, parity, education, and occupation of both spouses.

The average age of all respondents was 57.25 years and the average age of when the menopause started was 49.98 years. The menopausal women in rural areas tend to have higher parity, but there was no significant difference. Significant finding is the education level of the respondents, showing that women in urban area had a higher level of education.

Nationality is more heterogeneous in the urban than in the rural population. Menopausal women in rural areas have a more homogeneous composition, which are Bugis 20 (52.6%), Makassar 6 (15.8%), and Selayar 12 (31.6%).

Those living in rural areas also showed a higher spirit and a greater work load than those in urban areas as there were 11 people (28.9%) who choose to self-employed in rural areas, while there were only 3 people in urban (9.7%).

Table 1 illustrates that the MRS total score of the two populations is higher in menopausal women living in rural areas (63.8% versus 25.8%). When specified, this difference also occurs in all subscales both psychic, somato-vegetative, and urogenital subscales. Comparison of test results also showed that there is a significant difference between psychological, somatovegetative, and urogenital symptoms, and the total value of MRS between the women in urban and rural areas ($p < 0.05$).

Table 1. Menopause Rating Scale in the Urban and Rural Area.

Symptoms	Rural		Urban		p value
	n=38	%	n=31	%	
None	3	7.9	3	9.7	
	2	5.3	8	25.8	
Moderate	9	23.7	12	38.7	0.01
Severe	24	63.1	8	25.8	
Psychology					
None	4	10.5	7	22.5	
	4	10.5	12	38.7	
Moderate	12	31.6	6	19.4	0.007
Severe	18	47.4	6	19.4	
Somatic					
None	4	10.5	9	29.1	
	4	10.5	7	22.5	
Moderate	16	42.1	12	38.7	0.020
Severe	14	36.9	3	9.7	
Urogenital					
None	2	5.3	2	6.5	
	2	5.3	5	16.1	
Moderate	4	10.5	11	35.5	0.014
Severe	30	78.9	13	41.9	

Note p: Chi-Square test

Table 2. MRS Symptoms in Urban and Rural Area.

Menopause Symptoms	Urban		Rural	
	n=31	%	n=38	%
Hot Flush	17	54.8	27	71.1
Palpitation	21	67.7	23	60.5
Insomnia	19	61.3	31	81.6
Depression	13	41.9	29	76.3
Excitable	19	61.3	33	75.4
Anxiety	17	54.8	30	78.9
Fatigue	22	71.0	36	94.7
Sexual problem	25	80.6	36	94.7
Dysuria	15	48.4	27	71.1
Vaginal dryness	23	74.2	31	81.6
Joint/muscle discomfort	27	87.1	36	94.7

Table 2 presents the distribution of the symptoms experienced by menopausal women in urban and rural area. As the results of the questionnaire of MRS, the percentage of all symptoms experienced by women in rural areas is always higher than those living in urban areas.

Symptoms that are most commonly experienced by respondents in urban areas was discomfort in the joints and muscles (87.1%). In the rural area, there were three prominent symptoms, amounting to 94.7% for symptoms, namely the physical and mental fatigue, sexual problems, and discomfort in the joints and muscles. The least common symptom in urban women was depression, which is only experienced by 41.9% of the women. Meanwhile, the least common symptom experienced by women in rural areas was the hot flush and urinary disorders, which amounted to 71.1%, though the percentage is still higher than those in urban areas.

This study also shows that the value of MRS tends to rise in the group of respondents with less education, and conversely, in the group with higher education the symptoms were less experienced. MRS categorized as severe is found mostly in the group with elementary education and no formal education in the amount of 75% and 60%. The test results showed a significant difference ($p < 0.05$), meaning that the higher the education of the menopausal woman, the less she feels the symptoms of menopause.

The results showed that there was no difference in the quality of life between the postmenopausal women in both areas. Even in the urban areas, all respondents' quality of life was rated as satisfactory.

Table 3. Correlation between MRS with WHOQOL.

	r	p value
Psychological	–0.60	0.000
Somatovegetative	–0.55	0.000
Urogenital	–0.61	0.000
Total MRS	–0.66	0.000

Note p: Spearman Correlation test

Table 3 examines the relationship between MRS with WHOQOL, it was found that both are associated with a significant ($p < 0.05$). This suggests that the more severe menopausal symptoms perceived, diminishing the quality of life of menopausal women. And vice versa, the less the perceived menopausal symptoms, the better the quality of life of menopausal women.

DISCUSSION

This study compared urban and rural women regarding menopausal symptoms and quality of life between the two, using the MRS and WHOQOL.

This study found the average age of respondents was 57.25 years, while the median age of which the menopause started for the respondents was

49.98 years. Women usually starts menopause at the age of 50-52 years old.[8] Urban women have menopause at an average age of 51.09 years old, while women in the rural area have menopause at the average age of 49 years old. This could be because women in rural areas tend to have lower level of education with also a lower level of knowledge and awareness of contraception, thus ovulation will occur more often and the ovarian reserve is reduced faster.[9]

Characteristics distribution between the two groups showed that the subjects are more heterogeneous in the urban group than in rural group, in accordance with the characteristics of urban and rural.[10]

Women from the rural area have higher parity. This is because of the lower level of education and health knowledge, the motto saying that a lot of kids bring a lot of luck, and more difficult access to health services including family planning facilities. As mentioned, the level of education in rural women is lower than in urban menopausal women, the data showed 5 (13%) are not educated, and 15 (39.6%) finish primary school, while 13 (41.9%) of the the urban women graduated college.

MRS was developed to (a) assess menopausal symptoms in a group with different conditions, (b) assess the development of menopausal symptoms from time to time and to (c) assess changes in the severity of symptoms before and after TSH.[11]

Utilizing this, based on that research with varied severity of menopausal symptoms and the impact on any individual or population, make comparisons among postmenopausal women in urban areas with rural. MRS itself is divided into three subscales, namely psychological, somatovegetative, and urogenital.[11]

The total score of MRS is 0 (asymptomatic) to 44 (highest). The score is then categorized into four categories, which are minimal, mild, moderate, and severe. Table 2 shows that the percentage of menopausal symptoms is greater in women in rural areas compared to women in urban areas, and even the test results show that there are significant differences of the MRS between the women in urban and rural areas ($p < 0.05$).

These results are contrary to the hypothesis of the study, which is expected to see more severe menopausal symptoms in urban women. The hypothesis is based on the assumption that menopausal women in the rural area have more support of family and society, tend to still feel like working as to create a diversion from the symptoms experienced, and have positive values of life and the culture in which she grew up.[12]

Information flow and easier access than urban communities allows them to be more influenced by western culture, compared with their rural communities.

A number of studies suggest that the fixation of western culture to beauty and youth, tend to think of menopause as a disease or a problem. Instead menopausal symptoms tend to be minimal in the community who view menopause as a positive situation, such as in Iran where menopause was thought as the opportunity that gives them more time to worship. Research in other non-western countries with a more positive orientation toward menopause and aging also showed that the symptoms found were less severe.[12]

Apart from the above discrepancy, where there were significant differences of menopause symptoms in rural areas and in urban areas, there are other factors in this study, which supports the results, which are education and parity. The result of this study indicated that the education level among menopausal women in urban areas is much higher than those in rural area. Meanwhile the women in rural area tend to have higher parity.

The analysis of the relationship between education and MRS values indicated significant differences between the low-educated respondents with those with higher education ($p < 0.05$). Women with higher parity also showed more severe symptoms but the difference was not significant.

These results are consistent with other studies by Nusrat Nisar and Nisar Ahmed on menopausal women in rural Pakistan. MRS showed significantly higher values for somatovegetative and psychological symptoms in the study subjects with lower economic and education level, and had high parity.[3,13]

Menopausal women with a background like the one above will get less calorie intake, have less awareness and access to health care and have an excessive physical activity in maintaining and caring for her family, especially her children.[3]

In this particular study, educational factors seemed to exert more influence compared to social background and living situations. Women in the

urban area with higher education have the basic knowledge to find solutions for menopause symptoms they are feeling, and their urban environment also supports the availability of access to information, health facilities, or other facilities. In contrast, for those living in rural areas, low education will be further complicated by the limited access to information and health facility.

Moon Soo Lee et al in their study found that women with a good education have a better response to menopause regardless of cultural background. Study in Korea reported milder menopausal symptoms in women with a higher education.[12]

The urogenital symptoms was also more severe in the rural area, possibly because the women there tend to not have sexual arousal and intercourse, whereas the urban women apparently still had sexual desire and the knowledge to cope with it. Once they hit menopause, most of the attention on the rural menopausal women are turning in maintaining and caring for their grandchildren and further enhance their spiritual lives.

The most prominent menopausal symptom of this study was discomfort in muscles and joints. This phenomenon is not only prevalent in the population, but in the menopausal women both in urban and rural areas. Percentage reached 87.1% in urban and 94.7% in rural. This is consistent with studies from Syed Alwi et al in Sarawak, Malaysia, where the symptoms of discomfort in the joints and muscles was experienced by 80.1% of the subject, much higher than the other symptoms on the Menopause Rating Scale.[14]

Comparison of quality of life (WHOQOL) between the two populations suggested that there was little difference of satisfaction between the women in both populations, with urban women in menopause were all satisfied with the life they now even have entered menopause. This result can be explained by the possibility that the same value in the eastern culture is still held by the public both in rural and urban areas. Thus, despite the severity of menopausal symptoms they experience, still menopause is a natural thing that must be passed every woman is an even better chance to improve their spiritual lives.

Table 3 shows that there is a significant relationship between the WHOQOL and MRS ($p < 0.05$). This means that the more severe menopausal symptoms experienced, the lower the quality of life of menopausal women and vice versa. This finding is consistent with other studies that relate to the value of MRS and WHOQOL value, suggesting that menopause symptoms experienced by women affect their quality of life. This influence is found in all WHOQOL domains, either psychological, physical, social, and environmental.[15]

Regardless of the quality of life that is not much different, it gives an overview of the rural communities. Satisfactory quality of life in urban society where the symptoms experienced were less severe is normal and understandable. However, a satisfactory quality of life despite having severe menopause symptoms reported by women in the rural communities was hard to understand. This may be because of the character and culture of rural communities that are more accepting to the differences they have experienced since menopause, the idea that menopause is a natural thing that must happen in every menopausal woman and not just a peruses aging or loss of beauty, but also a process of maturation.[4]

CONCLUSION

Women in rural area had more severe menopausal symptoms. The only factor that seems to have a significant difference is education women with lower level of education tend to have more severe symptoms. There is little difference in the quality of life of menopausal women in rural than in urban areas with no significant difference in either the quality of the physical, psychological, social, and environmental.

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