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Comparison of Menopause Healthcare Considerations between Japanese and Filipino Women Living in Local Communities

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To investigate the involvement of psychological/social factors in the condition of climacteric disturbance in Japan and the Philippines, we examined the menopausal symptoms and psychological/social factors in menopausal women living in local communities and compared among both countries whether differences in culture, lifestyle, etc. affected the condition of climacteric disturbance.

High percentages of Japanese women reported mental symptoms, while relatively high percentages of Filipino women also experienced motor neurological symptoms in addition to psychoneurological symptoms. Japanese and Filipino women were found to have different stressors: a high percentage of the Japanese women had problems involving human relationships, such as providing nursing care, while a high percentage of the Filipino women had household problems, including husband's health and financial problems. Stress severity was associated with SMI scores in both countries. A poorer marital relationship in Japan than in the Philippines and an association between marital relationship and SMI scores were found.

The present study suggests the association of differences in psychological/social factors between Japanese and Filipino women with differences in menopausal symptoms.

INTRODUCTION

Climacteric disturbance is defined as various indefinite complaints that develop during menopause and interfere with activities of daily living (16) (17) (20). In Japan, about 80% of menopausal women are aware of menopausal symptoms, and about one-third of them have climacteric disturbance that interferes with activities of daily living (15). However, only about 20% of them take appropriate measures, such as seeking medical attention (13) (18). This low consultation rate seems to be associated with Japanese cultural factors, including public awareness and the health care system. Although the types of menopausal symptoms and the association between climacteric disturbance-related factors and menopausal symptoms in outpatients have been demonstrated, no studies have investigated the assessment of menopausal symptoms or the involvement of psychological/social factors using an objective scale in menopausal women living in local communities.

On the other hand, Philippine studies on climacteric disturbance have reported on the types of menopausal symptoms (5) (14) (16), but none of them have elucidated the association between menopausal symptoms and QOL or the involvement of psychological/social factors in the condition. From the perspective of the possibility that differences in culture, lifestyle, health care system, etc. may affect the condition of climacteric disturbance, it would be very interesting to compare health problems during menopause between Japanese and Filipino women living in local communities.

The present study was therefore conducted to accurately grasp the menopausal symptoms and psychological/social factors using objective scales in menopausal women living in local communities in Japan and the Philippines, and also to investigate the involvement of psychological/social factors in the condition of climacteric disturbance. In addition, the results obtained in these countries were compared to investigate whether differences in culture, lifestyle, etc. affected the condition of climacteric disturbance. Clarification of these issues will lead to establishment of appropriate health guidance for persons suffering from menopausal symptoms in these countries (3) (6) (7) (12).

SUBJECTS AND METHODS

1. Subjects

Subjects comprised 247 Japanese women living in the Kita-suma area in Kobe City, Hyogo Prefecture, Japan and 81 Filipino women living in Manila, Muntinlupa and Cagayan de Oro Cities. The subjects' ages ranged between 40 and 60 years. In both countries, a residential area in the suburbs of a big city was selected. The two cities were selected in consideration of the similarity in living conditions. Women with mental disorders or under treatment for climacteric disturbance were excluded from the study.

2. Method of survey

The survey was conducted using an anonymous self-reporting questionnaire. In Japan, questionnaires were directly distributed to the subjects through the Women's Club in the Kita-suma area and were collected by regular postal mail. In the Philippines, questionnaires were directly distributed to the subjects and collected. The present study was conducted after obtaining the approval of the Ethics Committees of Kobe University Graduate School of Health Sciences and the University of the Philippines. The survey was conducted between June and November 2010.

3. Details of survey

1) Questionnaire survey

The questionnaire consists of three components, (1) subject characteristics (Age, height, body weight, age at menopause, occupation, family structure and menopausal symptoms the

subject is aware of), (2) perception of menopause (Interest in menopause, knowledge of menopause and menopause-related needs), and (3) psychology/stress/social problems experienced by menopausal women: Stressors, stress severity and stress coping).

2) Measurement scales

(1) Simple Menopausal Index (SMI) (8)

The SMI is a simple scale with demonstrated validity for measuring general menopausal symptoms in consideration of the peculiarities of the Japanese. The scale consists of the following 10 items: Items (1) to (4) mainly assess physical symptoms (hot flushes, perspiration, cold feeling and palpitations); items (5) to (8) chiefly evaluate mental symptoms (insomnia, irritation, depression and headaches); and items (9) and (10) assess general symptoms, including shoulder/joint pain and fatigue. The answer to each question was described using a 4-point scale as absent, mild, moderate, or severe. Scores of 0 to 14 were then assigned to each answer. The SMI score was calculated as the sum of these scores, ranging between 0 and 100. Subjects with scores of 0–25 points were classified as “no problem” those with scores of 26–50 points as requiring caution in activities of daily living, those with scores of 51–65 points as requiring hospital visits, those with scores of 66–80 points as requiring long-term planned treatment, and those with scores of 81 points or more as requiring workup and long-term planned care. In the present study, on the basis of the SMI score and the severity of climacteric disturbance, women with scores of 0–25 points were classified as healthy women, those with scores of 26–50 points as having mild climacteric disturbance (requires caution in activities of daily living), and those with scores of 51–100 points as having severe climacteric disturbance (requires hospital visits), and analysis was undertaken.

(2) State-Trait Anxiety Inventory (STAI)

The STAI, a scale for measuring anxiety and depression, is composed of two subscales: the state anxiety inventory and the trait anxiety inventory. The former is a measure of temporary and situational anxiety associated with autonomic excitement, while the latter is a measure of the tendency of an individual to have state anxiety in response to a stressful situation, and is regarded as a relatively stable intrapersonal trait.

(3) Marital-Adjustment Test (9)

The Marital-Adjustment Test (15 items) developed by Locke & Wallace is a scale for assessing marital relationship. Its reliability has also been demonstrated in Japan (11). In the present study, the Japanese version was used for Japanese subjects, while the English version was used for Filipino subjects. This scale consists of happiness, a couple’s ways of thinking and the feeling of being a couple. The questions about happiness concerned the degree of general marital happiness. The subjects were asked to choose one of the seven points on a Likert scale indicating very unhappy to very happy. The questions about a couple’s ways of thinking concerned the degree of agreement between the couple about management of the family budget, expression of love, friends, sex life and conventions. The subjects were asked to choose the most appropriate one on a 6-point scale from “always agree” to “disagree.” To assess the feeling of being a couple, the subjects were asked to choose an appropriate option for each question. The theoretical range of scores for this test was 2–158 points. According to Locke *et al.*, scores of 100 points or more may be interpreted as fairly good marital adjustment. In the present study, the total scores on the Marital-Adjustment Test were classified into the following three groups according to the classification system of Misumi *et al.* for analysis: a low-score group (2–87 points), medium-score group (88–135 points) and high-score group (136–158 points).

4. Analytical method

SPSS17.0J software was used for statistical analysis. In analyses, independence was tested with the chi-square test and Mann-Whitney *U* test, while differences in the mean between the two groups were determined with the *t* test. Correlation was assessed with the Pearson product-moment correlation coefficient. In all cases, *P* values of < 0.05 were considered statistically significant.

RESULTS

In Japan, questionnaires were distributed to 400 couples and collected from 247 couples, with a collection rate of 61.7%. In the Philippines, questionnaires were distributed to 105 couples and collected from 81 couples, with a collection rate of 77.1%. From the collected questionnaires, those with missing data were excluded. As a result, 236 Japanese women and 79 Filipino women were included in the study.

1. Subject characteristics

Table I shows the subject characteristics. Filipino women had a significantly larger number of children and a significantly larger number of family members living together than Japanese women. The proportion of women with a job was 28.1 percentage points lower in Japan than in the Philippines. Similarly, the proportion of women having a stress reliever was 11.1 percentage points lower in Japan than in the Philippines. However, no great differences were detected between the two countries regarding age at menopause, experience in providing nursing care, or the status of having or not having an adviser.

Table I. Characteristics of subjects

Data are given as mean $\pm$ standard deviation or number(%)			
Background	Japan (N=236)	Philippine (N=79)	<i>p</i>
Age(years)	53.2 $\pm$ 6.7 (41-60)	53.9 $\pm$ 6.2 (41-60)	n.s
Menopause age (years)	49.5 $\pm$ 5.8(40-61)	48.9 $\pm$ 4.3(36-57)	n.s
Still experiencing periods	Yes: 57(24.2) No: 155(65.7) Non-res: 24(10.2)	Yes: 18(22.8) No: 61(77.2)	
Number of children	1.82 $\pm$ 0.89	2.71 $\pm$ 1.61	*
Number of family	2.08 $\pm$ 1.32	3.54 $\pm$ 1.78	*
Work	Yes: 95(40.3) No: 110(46.6) Non-res: 31(13.1)	Yes: 54(68.4) No: 25(31.6)	
Experience of nursing care	Yes: 104(44.1) No: 104(44.1) Non-res: 28(11.9)	Yes: 38(48.1) No: 41(51.2)	
Hobby	Yes: 172(72.9) No: 35(14.8) Non-res: 29(12.3)	Yes: 53(67.1) No: 26(32.9)	
Close confidant	Yes: 200(84.7) No: 6(2.5) Non-res: 30(12.7)	Yes: 68(86.1) No: 11(13.9)	
Method to cope stress	Yes: 162(68.6) No: 26(11.0) Non-res: 48(20.3)	Yes: 63(79.7) No: 16(20.3)	

* *p* < 0.01

2. SMI scores in Japan and the Philippines

Menopausal symptoms were rated using scores on the SMI. The total SMI score was 31.2 ± 18.9 points in Japan and 28.4 ± 18.4 points in the Philippines (mean $\pm$ SD), with no significant difference between the two countries. The distribution of the scores in the two countries is shown in Fig. 1. In Japan, healthy women accounted for 39.8% of the total, women with mild climacteric disturbance 43.2%, and women with severe climacteric disturbance 14.7%. In the Philippines, healthy women accounted for 46.8% of the total, women with mild climacteric disturbance 32.9%, and women with severe climacteric disturbance 10.1%. The proportion of healthy women tended to be higher in the Philippines than in Japan ($p=0.09$), while those of women with mild climacteric disturbance and women with severe climacteric disturbance tended to be higher in Japan ($p=0.07$, $p=0.10$, respectively).

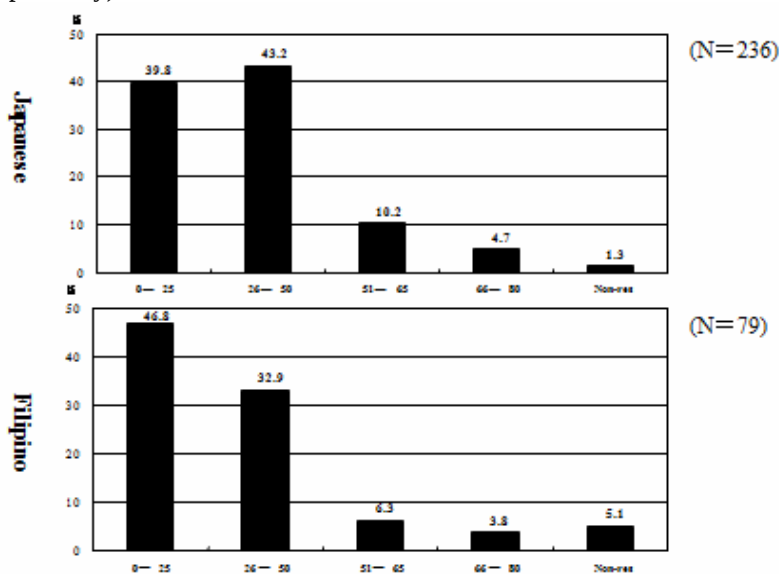


Fig. 1. The distribution of SMI scores in Japanese and Filipino menopausal women

3. Menopausal symptoms observed in Japan and the Philippines

The menopausal symptoms observed in the two countries are presented in Fig. 2. In Japan, hot flushes (42.2%), easy perspiration (38.9%), shoulder stiffness (26.2%), irritation (25.8%), fatigability (23.8%) and depressed moods (19.7%) ranked high. In the Philippines, hot flushes (48.1%), easy perspiration (31.6%), shoulder stiffness (31.6%), lower back pain (31.6%), sleep disorders (27.8%), irritation (26.6%) and headaches (26.6%) ranked high.

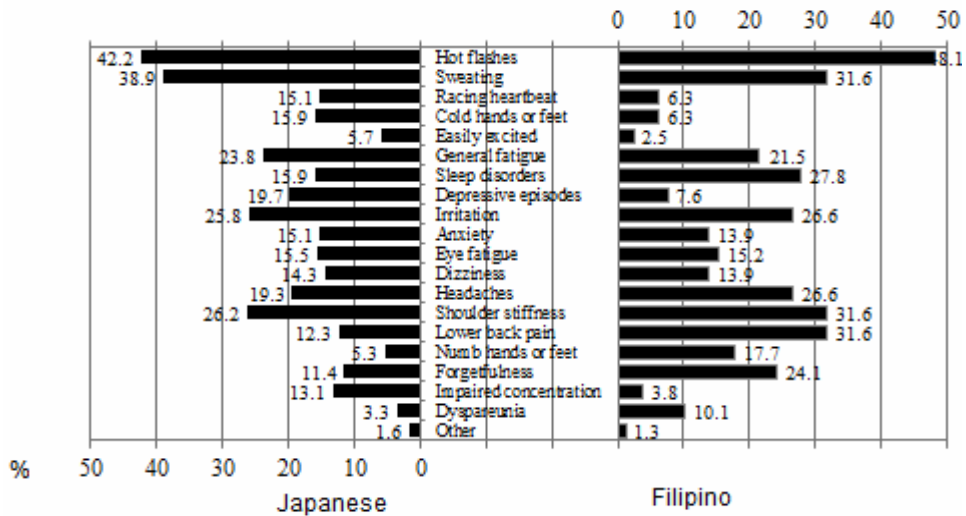


Fig. 2. Menopause symptoms in Japanese and Filipino menopausal women

4. Stressors found in Japan and the Philippines

The stressors found in the two countries are shown in Fig. 3. In Japan, subject's health (21.7%), husband's health (16.4%), providing nursing care (16.0%), human relationships (15.6%) and planning for old age (15.1%) ranked high. In the Philippines, husband's health (35.4%), subject's health (34.2%), children's health (34.2%), financial problems (34.2%) and planning for old age (21.5%) ranked high.

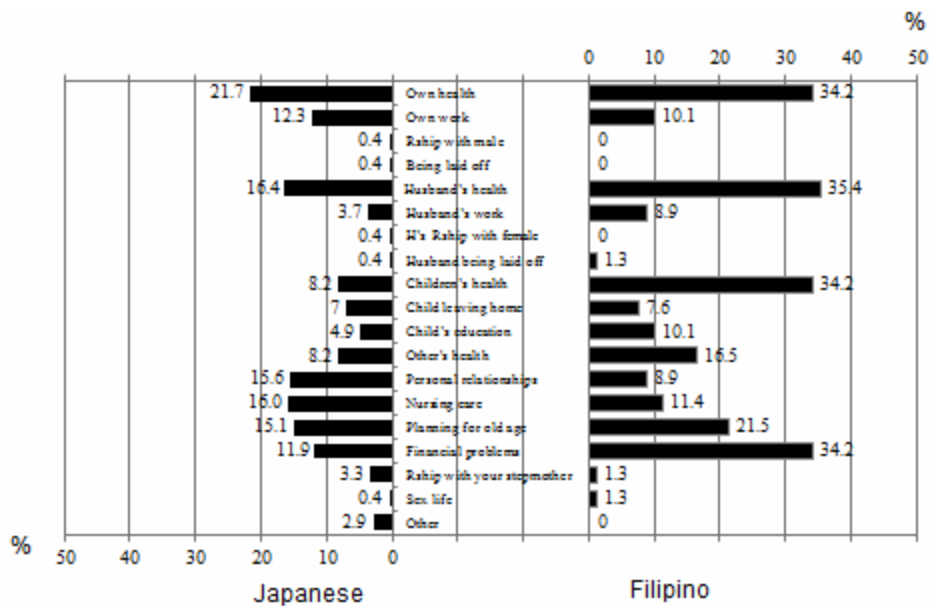


Fig. 3. The stressors in Japanese and Filipino menopausal women

5. Relationship between SMI scores and stress in Japan and the Philippines

The subjects were asked to rate their stress severity on a 4-point scale (no stress, slight stress, severe stress and very severe stress) and were divided into three groups as follows: the subjects who chose “no stress” were classified into the no-stress group, those who chose “slight stress” into the moderate-stress group, and those who chose “severe stress” or “very severe stress” into the severe stress group. The SMI scores were then analyzed among the three groups in the two countries (Table II). In Japan, significant differences were noted between the no-stress and severe stress groups and between the moderate-stress and severe stress groups ($P < 0.05$). In the Philippines, a significant difference was seen between the moderate-stress and severe stress groups ($P < 0.01$).

Table II. The Relationship between SMI and Stress in Japanese and Filipino women

Feel stressed	SMI points	
	Japanese	Filipino
No stress group	22.6 ± 24.9 (N=14)	34.1 ± 30.9 (N=9)
Moderate stress group	27.8 ± 16.7 ** (N=113)	30.2 ± 22.9 (N=54)
Severe stress group	38.2 ± 20.0* (N=66)	53.0 ± 31.6 *** (N=16)

* $p < 0.05$ vs No stress group, ** $p < 0.05$ vs Severe stress group ,

*** $p < 0.01$ vs Moderate stress group

6. Relationship between Marital-Adjustment Test scores and SMI scores in Japan and the Philippine

Marital relationship was rated using the marital-adjustment test. The total score was 90.7 ± 29.0 points in Japan and 107.2 ± 26.7 points in the Philippines, with a significant difference between the two countries ($P < 0.01$). The distribution of the scores in Japan was as follows: low-score group, 42.3%; medium-score group, 53.7%; high-score group, 4.0%. The distribution of the scores in the Philippines was as follows: low-score group, 28.6%; medium-score group, 59.5%; high-score group, 11.9% (Fig. 4).

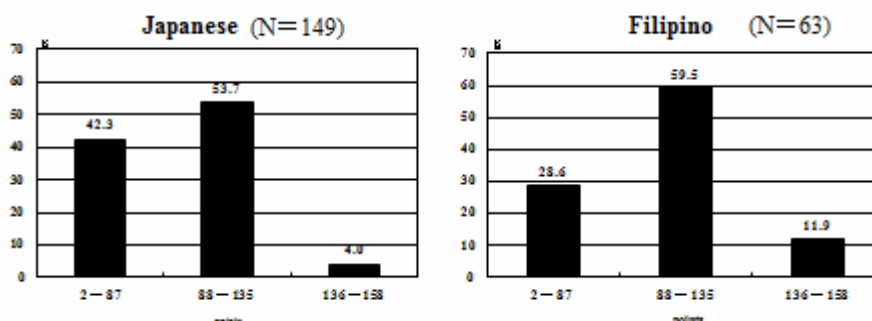


Fig. 4. The distribution of marital-adjustment test scores in Japanese and Filipino menopausal women

The subjects were classified into three groups according to the SMI score, and the marital-adjustment test scores were analyzed among the three groups. In Japan, a significant difference was detected in the marital-adjustment test score between the mild climacteric disturbance group and the severe climacteric disturbance group ($P < 0.05$). In the Philippines, no significant differences were found between any of the groups (Table III).

Table III. The Relationship between SMI and Marital-Adjustment Test scores in Japanese and Filipino women

SMI group	Marital-Adjustment Test Points	
	Japanese	Filipino
No symptoms group	91.3 ± 28.2	109.4 ± 22.1
Not severe group	94.8 ± 29.3	106.7 ± 29.7
Severe group	78.0 ± 27.3 *	100.9 ± 33.3

* $p < 0.05$ vs Not severe group

7. Perception of menopause by Japanese and Filipino menopausal women

The responses to questions about interest in menopause, method of gathering information, an advisor whom the subject talked to when she was in trouble and menopause-related needs obtained in the two countries. With regard to interest in menopause, 81% of the Japanese women had some interest (9% were very interested, 40% were fairly interested, and 32% were somewhat interested), while 88% of the Filipino women had some interest (33% were very interested, 33% were fairly interested, and 22% were somewhat interested). A higher percentage of Filipino women were more interested in menopause than that of Japanese women ($p=0.09$). Regarding the method of gathering information, the highest percentage of subjects gathered information through word of mouth in both countries. As an advisor whom the subject talked to when she was in trouble, the highest percentage of the Japanese women chose their friends, while the highest percentage of the Filipino women chose their husbands. The menopause-related needs that ranked high among the Japanese women were as follows: “want to know how to improve menopausal symptoms” (22.5%), “want to know about the physical changes during menopause” (18.6%), “want to know how to self-diagnose menopausal symptoms” (17.4%), “want to know what menopausal symptoms are” (15.8%) and “want to know about treatment methods” (13.5%). The menopause-related needs that ranked high among the Filipino women were as follows: “want to be tested for osteoporosis” (41.8%), “want to know how to relieve menopausal symptoms” (39.2%), “want to know what menopausal symptoms are” (26.6%), “want to know about the physical changes during menopause” (25.3%) and “want to know about treatment methods” (25.3%).

DISCUSSION

With regard to the characteristics of Japanese and Filipino menopausal women living in local communities, significant differences were noted in the number of children and that of family members living together. A lower percentage of Japanese women were found to have a job and a stress reliever than that of Filipino women, while no great differences were seen

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in age at menopause, experience in providing nursing care, hobbies, or the status of having or not having an adviser.

First, distribution of the SMI scores in the two countries shows that 57.9% of the Japanese women and 43.0% of the Filipino women require attention in activities of daily living or require hospital visits. This finding indicates that many menopausal women suffer discomfort from menopausal symptoms in local communities in both countries and suggests the need for appropriate measures.

Next, when menopausal symptoms were classified into four groups (autonomic symptoms, mental symptoms, sensory neurological symptoms and motor neurological symptoms), Japanese and Filipino women were found to have reported similar menopausal symptoms. A previous study also reported that Japanese people were more likely to complain of psychoneurological or motor system symptoms, such as shoulder stiffness, headaches, lower back pain and malaise, rather than hot flushes or similar symptoms, compared with Westerners (10). Therefore, the present study indicates that Filipino women's menopausal symptoms are closer to those experienced by Japanese people than those by Westerners. However, high percentages of Japanese women reported mental symptoms, while relatively high percentages of Filipino women also experienced motor neurological symptoms in addition to psychoneurological symptoms. Further analysis of mental symptoms revealed a high percentage of Japanese women with depressed moods and a high percentage of Filipino women with sleep disorders. This finding shows that Japanese and Filipino women experience different types of mental symptom.

Japanese and Filipino women were found to have different stressors: A high percentage of the Japanese women had problems involving human relationships, such as providing nursing care, while a high percentage of the Filipino women had household problems, including husband's health and financial problems. The differences in stressors revealed by the present study may affect menopausal symptoms experienced by women in the two countries. In providing support for menopausal women, an important key to coping with their health problems is what kind of life the woman has with what kind of family members in what kind of society. We believe that more detailed studies on stressors will lead to development of more appropriate measures to reduce menopausal symptoms.

The present study showed that stress severity was associated with SMI scores in both countries. The distribution of the Marital-Adjustment Test scores showed that the percentage of women in the low-score group (2–87 points) was much higher and that of women in the high-score group (136–158 points) was much lower in Japan than in the Philippines. A previous study also reported that the Marital Adjustment Test score was 92.4 ± 28.4 points among Japanese menopausal women and that the low-score group accounted for 40.6% and the high-score group 5.3%(14). The present study has also reported similar results in Japanese women. These studies suggest a poorer marital relationship in Japan than in the Philippines and an association between marital relationship and SMI scores. Comparison of the results between the Filipino and Japanese women revealed that a poor marital relationship was associated with high SMI scores. This finding suggests that a poor marital relationship is a factor of severe climacteric disturbance.

With regard to an advisor whom the subject talked to when she was in trouble, the highest percentage of Japanese women chose friends as advisors, while the highest percentage of Filipino women chose their husbands. A previous study reported that conversation between husband and wife and a good marital relationship were effective in alleviating menopausal symptoms. Based on this finding, it seems that Filipino women have a good marital relationship because they talk to their husbands when they are in trouble,

having a great deal of conversation with them. If menopausal women could not receive support from their husbands or family members, it would cause marked stress and affect their menopausal symptoms. Yet another previous study reported that husbands tended not to understand their wives' burden. Then the question may arise as to whether divorced women without husbands have reduced menopausal symptoms. Divorced women are likely to experience some menopausal symptoms more severely than married women.¹⁶⁾ Therefore, establishing a good marital relationship seems to be effective for alleviating menopausal symptoms. First of all, this seems to require an environment where wives can easily talk to their husbands. According to a previous report, a husband's understanding of or concern for his wife was effective in alleviating menopausal symptoms. This finding also suggests the importance of spreading knowledge and awareness of climacteric disturbance among husbands. Moreover, intervention involving friends (Japan) or husbands (Philippines) seems to lead to more effective measures against climacteric disturbance.

Comparison of interest in menopause between the two countries revealed strong interest in a higher percentage of Filipino women than that of Japanese women. All menopause-related needs were expressed by a higher percentage of Filipino women than that of Japanese women. Filipino women seem to be very interested in menopause and have a strong need for knowledge of menopause. In particular, higher percentages of Filipino women selected items "hope that a lecture meeting will be held" and "want someone to talk to" than that of Japanese women. This finding suggests that Filipino women are not informed or aware of menopause or are not in an environment allowing consultation about menopause. It seems necessary in the Philippines in the future to spread knowledge and awareness of menopause and, at the same time, train specialists who can give advice on menopause. The present study showed that high percentages of women in both countries gathered information on menopause through word of mouth. This finding indicates the possibility that implementation of an education program in local communities may lead participants to convey information to non-participants, suggesting the importance of providing support in local communities (1) (19).

The present study suggests the association of differences in psychological/social factors between Japanese and Filipino women with differences in menopausal symptoms. This indicates the need for providing more effective support in the two countries in the future in consideration of differences in culture and customs. The present study was conducted in subjects living in similar conditions in Japan and the Philippines, but there is a wide gap between the rich and the poor, and living conditions vary greatly in the Philippines. The possibility cannot be ruled out that a study conducted of subjects living in different conditions may produce results on menopausal symptoms and psychological/social factors that are different from those of the present study. Future studies conducted in consideration of differences in living conditions may identify what kind of support is effective for more people.

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