Original Paper

Study on the Sexuality of Menopausal Women and Related Factors

Akiko KAMEZAKI* and Hisako SAITO**

(Accepted December 16, 2005)

Key words: menopausal women, menopause, sexuality, Quality of Life (QOL)

Abstract

While sexuality is one of the important components of Quality of Life (QOL), few studies have been conducted on the sexuality of menopausal women. Therefore, the objective of the present study was to ascertain the sexuality of menopausal women and identify related factors in order to enrich the QOL of menopausal women.

The results showed that the impact of menopause on sexuality was greater for postmenopausal women when compared to premenopausal women. In addition, in terms of the elements of sexuality, the impact of menopause on two elements, "activeness of sexual behaviors" and "intensity of sexual excitement", was markedly greater for postmenopausal women when compared to premenopausal women. For both postmenopausal and premenopausal women, the higher a woman's score on the Simplified Menopausal Index, the greater the impact on her sexuality, and the higher a woman's intimacy score, the lower the impact on her sexuality.

The results suggest that it is necessary for nurses to actively provide accurate knowledge and information so that women can better assess their own problems. Furthermore, to improve the QOL of menopausal women, nurses with special knowledge of female sexuality, who can provide support in a wide variety of areas, must play an important role.

Introduction

During the perimenopausal period, the level of estrogen production rapidly decreases in women. A rapid decrease in estrogen production is caused by a change in the endocrine system. Menopausal women have many symptoms; hot flashes, sweating, frigidity, lumbago, headaches, and so on. These symptoms can affect the Quality of Life (QOL) of perimenopausal women [1].

Therefore, it is necessary to develop health education programs and support systems so that women can independently assess and make proper decisions about their health. Such health education programs can also maintain and promote health through all stages of life.

It is important to ascertain the sexuality of menopausal women and its related factors in order to improve their QOL.

^{*} Kumamoto University Hospital Kumamoto 860-8556, Japan

E-Mail: kakakakakameko5042@yahoo.co.jp
** Division of Nursing, Faculty of Medicine, Saga University
Saga 849-8501, Japan

Materials and Methods

Subjects: Subjects were menopausal women aged from 44 to 56 years.

Methods: Subject selection: The present study was conducted at one consenting obstetrics and gynecology department in Kumamoto and involved ten staff members that agreed to distribute questionnaire forms. Survey methods: After obtaining the consent of the menopausal women who visited the obstetrics and gynecology department, the collaborators handed forms directly to the women. From 1 to 40 forms were sent to each of the ten. Each form was either handed directly to or mailed to a participating woman. All forms were returned by mail. The study was conducted in Kumamoto and Fukuoka prefectures.

Study period: From October 18 to December 1, 2004

Ethical considerations

The study objective, significance, methods, and privacy protection were explained to the women in writing, and each participant provided informed written consent.

Investigated items

- Basic attributes
 Age and occupation
- 2. Physical factors
 - Childbirth
 - Menopause
 - Height and body weight
 - Severity of menopausal symptoms

The severity of menopausal symptoms was assessed using the Simplified Menopausal Index (SMI). This simplified scale was designed by Koyama and Asama for assessing general menopausal symptoms [2,3]. Its Cronbach alpha coefficient is 0.77, and its reliability and validity have been confirmed. This scale was designed to reflect changes in estrogen levels. The maximum score is 100, and the greater the total score the greater the number or severity of menopausal symptoms.

In the present study, the Cronbach alpha coefficient of the SMI was 0.82, which is comparable to previous studies, thus indicating superior internal consistency.

- Hormone replacement therapy
- Past history of gynecological surgery
- 3. Psychological factors
 - Marital intimacy

The degree of marital intimacy was assessed using a scale developed by Taide [4] based on Hisada and colleagues' Marital Intimacy Scale (MIS) [5]. Taide's scale consisted of the following nine items for assessing marital harmony and compatibility: conversation, going out, relaxation, happiness, reconciliation, trust, openness, good relationship and satisfaction. Intimacy was graded on a 5-point Likert scale and was quantified by summing the score of all nine items. Scores range from 9 to 45 points with higher total scores

indicating greater intimacy. The validity of the scale has been investigated by Hisada and colleagues, and Taide has confirmed its constructive validity.

In the present study, the Cronbach alpha coefficient for the scale was 0.95, which is similar to Hisada's study (0.95) and Taide's study (0.92), thus indicating superior internal consistency.

4. Husband

Age

5. Sexuality of menopausal women

The sexuality of menopausal women was ascertained using a questionnaire designed by Komatsu and colleagues [6] for assessing the effects of urinary incontinence on sexuality. This scale was utilized because the genital and physical changes in menopausal women affect urinary incontinence and female sexuality in a comparable manner. The questionnaire used in the present study was designed to be appropriate for menopausal women and consisted of 19 items in four aspects of the perimenopausal period.

Total scores range from 19 to 76 points with higher total scores indicating a greater impact on perimenopausal sexuality.

In the present study, the Cronbach alpha coefficients of the four elements, "activeness of sexual behaviors", "expansion of interpersonal relationships", "self-reliance" and "intensity of sexual excitement" were 0.94, 0.88, 0.70 and 0.70, respectively.

Statistical analysis

Statistical analysis was conducted using the SPSS statistical software package for Windows (Version 11.0J). Subjects were divided into premenopausal and postmenopausal groups, and based on the number of the subjects a parametric test was used. Statistical significance was established at the p < 0.05 level.

Results

1. Subject profile

Among the 137 subjects, 86 were premenopausal women (62.8%) and 51 were postmenopausal women (37.2%). The mean age was 47.4 ± 2.40 years for the premenopausal women and 53.4 ± 2.29 years for the postmenopausal women. A significant intergroup difference was observed for age (p<0.05).

Of the 107 subjects who were employed (78.1% of the whole object), 65 were premenopausal women (75.6% of the premenopausal women) and 42 were postmenopausal women (82.4% of the postmenopausal women). No significant intergroup difference was observed for employment status.

The distribution of the number of childbirths was as follows: 0 births (n=16, 11.7%), 1 birth (n=11, 8.0%), 2 births (n=76, 55.5%), 3 births (n=28, 20.4%), 4 births (n=5, 3.6%) and no answer, (n=1,0.73%). The mean number of childbirths was 1.88 ± 0.94 for premenopausal women and 2.09 ± 0.93 for postmenopausal women. No significant intergroup difference was observed for number of childbirths.

BMI values were calculated for each subject from height and body weight data. The mean BMI was 21.9 ± 3.32 for all subjects, 21.5 ± 3.24 for premenopausal women, and 22.6 ± 3.36 for postmenopausal women. No significant intergroup difference was observed; however, BMI values for postmenopausal women tended to be higher in comparison to premenopausal women.

The mean SMI score was 28.8 ± 18.9 for all subjects, 29.0 ± 19.2 for premenopausal women, and 28.6 ± 18.65 for postmenopausal women. No significant intergroup difference was observed.

Among the 137 subjects, 12 women (8.8%) were on Hormone Replacement Therapy (HRT): 6 premenopausal women (7.0%) and 6 postmenopausal women (11.8%).

Furthermore, 43 women (31.4%) had undergone gynecological surgery: 25 premenopausal women (29.1%) and 18 postmenopausal women (35.3%).

The mean marital intimacy score was 34.8 ± 8.32 for all subjects, 34.7 ± 8.17 for premenopausal women, and 34.9 ± 8.66 for postmenopausal women. No significant intergroup difference was observed.

The mean age of the husband was 52.7 ± 5.04 for all subjects, and 50.5 ± 4.04 for premenopausal women. For postmenopausal women, however, the mean was significantly higher at 56.3 ± 4.39 years (p<0.05).

2. Sexuality of menopausal women

The mean sexuality-impact score was 41.6 ± 10.8 for all subjects, and 39.2 ± 9.97 for premenopausal women. For postmenopausal women, however, the mean was significantly higher at 45.8 ± 11.1 points (p<0.05).

For premenopausal women, the mean scores for "activeness of sexual behaviors", "expansion of interpersonal relationships", "self-reliance" and "intensity of sexual excitement" were 15.5 ± 6.03 , 11.1 ± 4.02 , 8.06 ± 2.39 , and 4.02 ± 1.71 points, respectively. For postmenopausal women, the mean scores were 19.9 ± 6.53 , 12.1 ± 4.91 , 8.34 ± 2.59 , and 5.09 ± 1.78 points, respectively. Among the premenopausal and postmenopausal women, a significant difference was observed between "activeness of sexual behaviors" and "intensity of sexual excitement" (p<0.05).

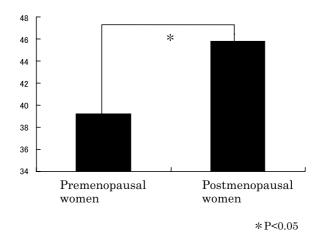


Fig. 1 The mean of the sexuality-impact score. The mean was significantly higher in postmenopausal women.

3. Factors related to the sexuality of menopausal women

For premenopausal women, a slightly strong positive correlation was observed between SMI and sexuality-impact scores (r=0.438, p<0.05). In addition, a weak negative correlation was observed between intimacy and sexuality-impact scores (r= -0.283, p<0.05).

For postmenopausal women, a positive correlation was observed between SMI and sexuality-impact scores (r=0.362, p<0.05), while a weak negative correlation was observed between intimacy and sexuality-impact scores (r= -0.388, p<0.05).

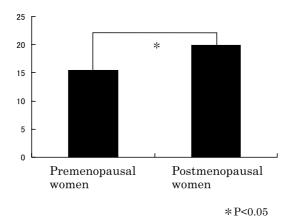


Fig. 2 The mean scores for "activeness of sexual behaviors"

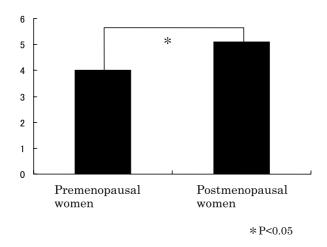


Fig. 3 The mean scores for "intensity of sexual excitement"

Discussion

1. Sexuality of menopausal women

Kaneko and colleagues [7] reported that the frequency of sexual intercourse generally begins to decrease in the latter half of the 40s and further decreases after menopause. In addition, Matsumoto and colleagues [9] found that the number of women who did not have sex at all rapidly increases after the age of 50. In the present study, when compared to premenopausal women, the impact of menopause on sexuality was greater for postmenopausal women. Furthermore, when compared to premenopausal women, the impact of menopause on "activeness of sexual behaviors" and "intensity of sexual excitement" was greater for postmenopausal women.

The changes seen during the menopausal period include painful intercourse caused by decreased vaginal secretion or thinning and atrophy of the vaginal wall, and reduced libido caused by low estrogen production. Painful intercourse decreases the frequency of intercourse and induces vaginal atrophy, thus further exacerbating painful intercourse [9]. Menopause rapidly decreases estrogen production. In addition, some postmenopausal women feel that the loss of fecundity causes them to be less than complete, thus impairing their sexual behaviors [10]. These factors appear to affect postmenopausal sexual behaviors and levels of excitement.

In Japanese culture and society, female sexuality tends to be suppressed and Japanese women are less

likely to actively seek sex or talk about sex with their partners [11]. Also, Japanese women do not talk about sexual problems. In particular, postmenopausal women are averse to talking about sex, thus making sexual problems less likely to surface [9]. Since sexual problems are hidden, it is necessary for nurses to question women. As drugs can improve certain physical symptoms of menopause, nurses with specific knowledge of female sexuality can play an important role in improving the QOL of postmenopausal women by providing support in a variety of areas.

2. Factors related to the sexuality of menopausal women

For both premenopausal and postmenopausal women, sexuality-impact scores were correlated with SMI and intimacy scores. Higher SMI scores were correlated with higher sexuality-impact scores and higher intimacy scores were correlated with lower sexuality-impact scores.

Menopausal women with high SMI scores tended to have many or severe physical and psychological symptoms that occur during the perimenopausal period. Some menopausal women suffer from not only hot flashes, sweating, palpitations, insomnia, headaches and rapid-onset symptoms caused by reduced estrogen production, but also symptoms that appear several years after menopause, such as, painful intercourse, urinary incontinence, obesity, and skin atrophy. Because these symptoms have both physical and psychological effects, they can affect sexuality. Therefore, nurses must provide accurate knowledge and information about the physical changes caused by aging so that women can independently assess their problems.

Furthermore, it is necessary to actively treat menopausal symptoms, as psychological and physical recovery should improve the QOL, including sexuality, of menopausal women.

In the present study, higher intimacy scores were correlated with lower sexuality-impact scores. Therefore, menopausal women with good spousal relationships experience less impact on sexuality. Araki and colleagues investigated the sexuality of middle-aged and elderly individuals and found that women seek a psychological connection and care [12]. In the present study, women in harmonious relationships with compatible partners experienced less impact on sexuality. Psychological factors are more important than physical factors as causes of female sexual dysfunctions (e.g., disorders of sexual libido, sexual excitement, orgasm, and painful intercourse) [13]. Both men and women must recognize each other's situations and nurses must act as intermediaries in order to facilitate understanding between sexual partners. Furthermore, educational activities are required in order to improve awareness of the sexuality of menopausal women and the surrounding social issues.

Conclusions

In the present investigation of the sexuality of menopausal women, the following results were obtained:

- 1. When compared to premenopausal women, the impact of menopause on sexuality was greater for postmenopausal women.
- 2. Among the various elements of sexuality, the impact of menopause on "activeness of sexual behaviors" and "intensity of sexual excitement" was greater for postmenopausal women when compared to premenopausal women.
- 3. For both premenopausal and postmenopausal women, higher SMI scores were correlated with a greater impact on sexuality.
- 4. For both premenopausal and postmenopausal women, higher intimacy scores were correlated with a lower impact on sexuality.

References

- 1. Honjyou H: Woman's middle and advanced age QOL and HRT, Science of body, 219, 2001 (in Japanese).
- 2. Hori H: Psychology measurement collections, 280–282, 2001 (in Japanese).
- 3. Koyama T: Background of SMI and the interpretation, *Japan menopause Society Journal* 93(6): 1998 (in Japanese).
- 4. Taide M: Consideration and action on contraception of the married man who exists in genital enhancement period, Saga Medical University Nursing study major Master's thesis, 2002 (in Japanese).
- 5. Hisata M: Childcare Stress and Postpartum Depression-An Examination of the Stress-buffering Effect of Marital Intimacy as Social Support, *Social psychology* 42–51, 1990.
- 6. Komatsu H: Making of Effect of Urinary Incontinence on Sexuality Questionnaire and examination of reliability and validity, *Nursing research* 29(5): 34-45, 1996 (in Japanese).
- 7. Kaneko N: Sex of middle and advanced age women, Obstetrics and gynecology treatment 79: 54–56, 1999 (in Japanese).
- 8. Matsumoto S: Sex: Nursing of sexuality 157, 2002 (in Japanese).
- 9. Takamatsu K: Sexuality and HRT, Science of body 219: 60-65, 2001 (in Japanese).
- 10. Ishikawa N: Mind and body of woman who thinks through life cycle Igakusyoin, 176-177, 1986 (in Japanese).
- 11. Matsumoto S: Sex: Nursing of sexuality 99, 2002 (in Japanese).
- 12. Araki T: Sexuality in middle and advanced age-About the current state of man and woman's partnership-, Japan sex reseach group report 12(1): 2-18, 2003 (in Japanese).
- 13. Okawa R: Woman's sexual function trouble, Trend of diagnosis and treatment, *Japanese sexology association magazine* 20(1): 3-10, 2002 (in Japanese).