Health Behavioral Patterns Associated with Psychologic Distress Among Middle-Aged Korean Women

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Purpose Middle aged women are exposed to high levels of psychologic distress due to various factors including health problems of family members, their own declining health, negative outlook towards menopause, loss of significant supportive relationships, and uncertainties regarding the future. The purpose of this study was to identify the factors associated with psychologic distress of middle-aged Korean women in the Seoul metropolitan area.

Methods The data were collected from 277 community-dwelling women between the ages of 40 and 60 years without any known severe illnesses from May 6, 2004 to May 31, 2004. The researcher or two research assistants visited the participants in person, handed out copies of the questionnaire after receiving study permission, and answered if they had any questions.

Results Hierarchical multiple regression analysis found that women with low scores of health promoting behaviors for self-actualization, nutrition, and interpersonal relation reported high levels of psychologic distress. In addition, women with low scores of marital satisfaction reported high psychologic distress.

Conclusion The study found cultural characteristics of middle-aged Korean women in psychologic distress. Health care providers should consider marital satisfaction, self-actualization, nutrition, and interpersonal relations, in particular, among Korean middle-aged women. [Asian Nursing Research 2007;1(1):61-67]

Key Words health promoting behavior, middle-aged women, psychologic distress

INTRODUCTION

Middle age is a period in which women are under more psychologic distress and should cope with changes inside as well as outside. Approximately 66% of middle aged women are exposed to high levels of stress from various factors including health problems of their own or family members, negative outlook towards menopause, loss of significant supportive relationships such as parents, and uncertainties...

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regarding the future (Thomas, 1990). Specifically middle-aged women in a patriarchal system in Korea suffer psychologic distress such as dissociation, depression, somatization and anxiety, because they are primarily responsible for education of the children, family management and taking care of their parents, and burdened with ever-increasing roles and responsibilities (Kim & Park, 1989). A study in Korea examining the correlations between anger, perceived stress and mental health status reported that in middle-aged Korean women, the responsibility for taking care of multiple generations as a mother, wife, and daughter-in-law may be their main source of stress (P. S. Lee, 2003). In the study carried out by Kim and Park (1992), it was shown that Korean women between the ages of 45 and 60 years experienced more stress than those between the ages of 20 and 44 years, and that stress factors include issues of child rearing, conflicts within the family, and health issues of themselves and their families.

Studies on psychologic distress in Korea began in the late 1990s. However, most studies have focused on depression only and there are few studies of psychologic distress in middle-aged women. Therefore, relationships between psychologic distress and potential associated or predicting factors remain unclear. Especially, people show various behavioral patterns associated with their health such as exercise and recreation. The purposes of this study were to describe the status of psychologic distress and to identify behavioral patterns associated with psychologic distress among middle-aged Korean women in the Seoul metropolitan area.

METHODS

Study design and sample
The present study employed a cross-sectional design. The study sample consisted of 277 women between the ages of 40 and 60 years who did not possess any known illnesses severe enough to interfere with daily activities, who could understand the contents of the present study, and consented to participation.

The data were collected from May 6, 2004 to May 31, 2004 in Seoul, Korea. The study proposal was reviewed and approved by the institutional review board of K Medical Center in Seoul. The researcher and two research assistants visited five community bazaar events held for community residents in Seoul, recruited potential participants who met the study criteria, handed out copies of the questionnaire after receiving study permission, and answered if they had any questions. Of the 310 subjects contacted, 292 responded (a response rate of 94%), and upon elimination of the responses that were considered inappropriate or that were from individuals who did not satisfy the inclusion criteria, a total of 277 responses were analyzed in the study.

Instruments

Psychologic distress
Psychologic distress was measured using the 20-short Korean version of the General Health Questionnaire-60 (GHQ-60) (Goldberg, 1972; Goldberg & Hillier, 1979; Kim, 1999). The questionnaire contains 4 sections: a) social performance and self-confidence; b) depression; c) anxiety and sleep disturbance; and d) general wellbeing and vitality. Higher scores indicate higher levels of psychologic distress; a score of 9 points or below indicates a state of wellbeing, while a score between 10 and 27 indicates a state of potential risk of distress, and a score of 28 or higher indicates high risk of distress. The reliability in this study sample was Cronbach’s alpha of .86.

Health promoting lifestyle behavior
Health promoting lifestyle behavior was evaluated using the modified 43-item Health-Promoting Lifestyle Profile (HPLP) (Park, 1995), which was originally developed by Walker, Sechrist and Pender (1987). Its reliability tested as .93 in a study involving 20 Korean women in their late middle years (Park, 1995). The questionnaire included 6 sections: self-actualization ($\alpha = .80$, 9 items), health responsibility ($\alpha = .83$, 13 items), physical activity ($\alpha = .67$, 5 items), nutrition ($\alpha = .70$, 6 items), interpersonal relations ($\alpha = .81$, 5 items), and stress management ($\alpha = .74$, 5 items). The response from each
participant was graded according to a 5-point summed rating scale, and higher scores indicate better implementation of health promoting behavior. The reliability in this study sample was Cronbach’s alpha of .92.

Family background such as age, education, income, and number of children were included as control variables. Education was classified into 4 groups (1—0–6 grade to 4—college or higher). Monthly income was classified into 3 groups (1=< $1,500 to 3=≥ $3,000). The number of children was classified into 5 groups (0—none to 4—more than four children). Because 94% of women were married, we included marital satisfaction as another factor for psychologic stress. The scale ranged from 1—very satisfied to 4—very unsatisfied. For the analysis, we combined unsatisfied and very unsatisfied based on low frequency of very unsatisfied and used listwise analysis.

**Data analysis**

Three major sets of analyses were conducted. First, means and standard deviations were computed for all continuous variables. Next, zero-order correlations were examined to identify individual variables having significant relationships with psychologic distress. The third set of analyses employed hierarchical multiple regression analysis. A set of family background variables entered followed by a set of health promoting behaviors.

**RESULTS**

**Demographic characteristics of subjects**

The demographic characteristics of the sample are presented in Table 1. The average age was 46.1 years (SD=5.4) and most participants (84.1%) were between the ages of 40 and 50 years. The majority of women (75.3%) possessed religious inclinations, and 25.8% of the sample had been educated to college level or higher. Most participants (94.2%) were married and lived with their spouses. Approximately 63.4% of the participants were full-time housewives. As for the income level, 52.2% belonged to the middle-income class, with a monthly family income between $1,500 and $3,000. Most (69.7%) had two or fewer children. Approximately 20% were post-menopausal, and most (95.6%) had no prior history of hormone replacement therapy. Marital satisfaction measured by a 4-point scale averaged 2.06.

Descriptive statistics for health promoting behaviors and psychologic distress are described in Table 2. The internal consistency of each dimension of health promoting behaviors showed good reliability, with
Cronbach’s alpha ranging from .67 to .83. The mean score of the 20-item psychologic distress was 42.12 (SD = 6.70, range = 20 to 73), indicating high risk of stress.

Table 3 provides the zero-order correlations among study variables. All of the variables of family background (age, education, income, number of children, and marital satisfaction) and 6 dimensions of health promoting behaviors were significantly correlated with psychologic distress. Six dimensions of health promoting behaviors were correlated with each other from .21 to .49. However, some family background factors such as income and number of children were not significantly associated with physical activity, nutrition, or interpersonal relations.

### Correlates of psychologic distress

With regard to psychologic distress, 8.6% of the variance was explained with family background variables at the first step, $F(5, 272) = 4.69$, $p < .01$, $R^2 = .086$ (Table 4). Only marital satisfaction was statistically significant ($\beta = 2.873$, $p < .05$). Women
with low scores of marital satisfaction reported a high level of psychologic distress. At the second step, the addition of health promoting behaviors increased 24.1% of the variance, $F(11, 266)=9.95$, $p<.01$, $R^2=.327$, $R^2$ change=.241. Of health promoting behaviors, self-actualization ($\beta=-.528$, $p<.05$), nutrition ($\beta=-.330$, $p<.05$) and interpersonal relations ($\beta=-.391$, $p<.05$) were significant correlates to psychologic distress. Women with low scores of marital satisfaction, nutrition, and interpersonal relations reported high scores for psychologic distress.

**DISCUSSION**

We investigated psychologic distress level and identified its correlates among middle-aged Korean women in the Seoul metropolitan area. The study sample reported higher scores of psychologic distress than those in studies of middle-aged men, indicating that the middle-aged woman has a very stressful status (Kim & Shin, 2004; Yeun, 1999). Kim and Park (1989) reported that while the types and frequency of daily life events were similar in both middle-aged husbands and wives, the level of perceived stress was higher in the wives and this difference in the level of perceived stress was due to the low social position of women in a patriarchal society.

The present study found that marital satisfaction from family background, and self-actualization, nutrition, and interpersonal relations from health promoting behaviors significantly predicted psychologic distress. The study sample reported a relatively lower level of marital satisfaction (2.06 on a 4-point scale) than other studies of 178 elderly women who reported a score of 3.54 on a 5-point scale (Shin & Cho, 1999) and 19,881 married women aged from 20 to 64 years old reporting 3.18 on a 5-point scale (Park, 2001). Jeong (1996) reported that, generally, marital satisfaction is high at the beginning of the marriage, decreases slowly after that, and increases from the elderly period. Women with low scores of marital satisfaction reported high psychologic distress. This negative relationship is consistent with the study by Oh, Koh and Park (2000). They found that middle-aged women who were not satisfied with their marital status felt psychologic distress such as depression, powerlessness, hopelessness and emotional crisis.

Previous studies of health promotion behaviors in middle-aged Korean women have focused on health status as a dependent variable or factors influencing health promotion behaviors (Hong, 1998; Lee, 1996; Park, 1995). In this study, women with low scores of self-actualization, nutrition, and interpersonal relations reported high scores of psychologic distress. The negative relationship between health promotion behaviors for self-actualization and psychologic distress is consistent with previous studies (Edelman & Mandle, 2005; Han, 2000). In a patriarchal society such as Korea, middle-aged women under stress may think about their ego and find a job that they used to do before marriage or find new hobbies. Those health promotion behaviors for self-actualization help them reduce the level of distress.

Middle-aged women who did not keep regular meal times or amounts, or carried out poor health promotion behaviors for good nutritional status reported high levels of psychologic distress. Stress and nutritional behaviors may be interrelated. There
have been few studies of the relationship between nutritional behaviors and psychologic distress in middle-aged Korean women. In a study of Korean elders, nutritional pattern and health promoting behaviors for nutrition correlated with mental health specifically in the elderly living alone (Kwoak, 1998).

Middle-aged women who had good interpersonal relations reported less psychologic distress. Interestingly in Korea, many studies of interpersonal relations in middle-aged women have focused on conflicts with a mother-in-law (Choi, 1998; Kim & Park, 1992; H. J. Lee, 2003; Sung & Lee, 2001). Because, in general, the majority of Korean elders (60%) live with their children (Korea National Statistical Office, 2003), middle-aged women as a daughter-in-law face role conflicts about taking care of their mother-in-law. Kim and Park reported that a negative relationship with a mother-in-law affected other relationships with family members and worsened mental health. Park (2003) also found that women with difficulties in interpersonal relationships were more depressed.

The study has several limitations. First, as the sample included middle-aged women in a metropolitan area in Korea, the geographical limitation reduces the generalizability of these results. Second, because the study employed a cross-sectional design, we could not explain how much the stress was changed by each predictor. A longitudinal study design to describe the pattern of the relationships between health promotion behaviors and psychologic distress is suggested.

CONCLUSION

The study found cultural characteristics of middle-aged Korean women in health behavioral patterns associated with psychologic distress. Middle-aged women in this study were at high risk for psychologic distress. Health care providers should consider marital satisfaction, self-actualization, nutrition, and interpersonal relations to develop prevention or intervention programs for psychologic distress, in particular, among middle-aged Korean women.

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REFERENCES


