Women’s Empowerment Status in Menopausal Transition: A Cross-sectional Study

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ABSTRACT

Background: Women’s empowerment status in menopausal transition is of great importance due to the increasing trend of life expectancy and population aging. This study was conducted to evaluate the empowerment status of women during the menopausal transition in Gonabad, Iran.

Methods: This cross-sectional study was conducted in Gonabad city in Northeast of Iran from April 2017 to March 2018. Cluster sampling was used for selecting 680 women who were in the menopausal transition. Demographic questionnaire and Women’s Empowerment Status Questionnaire - a researcher-made questionnaire- was used for data collection. Pearson’s correlation coefficient, one-way ANOVA, and linear regression were used to analyze the data using SPSS version 16; A p-value less than 0.05 was considered as significant.

Results: The majority of the participants 510 (76.10%) had a high empowerment level. A high empowerment status in the family, economic, social, and health domains was observed in 499 (74.50%), 534 (79.70%), 523 (78.05%), and 493 (73.60%) participants, respectively. The majority of the participants had moderate empowerment status in political 427 (70.40%) and religious domains 464 (69.30%). There was a negative correlation between the total empowerment score and the participants’ age (P<0.001), husband’s age (P<0.001), and the number of children (P<0.001). There was a positive correlation between the total empowerment score and education (P=0.003) as well as age of marriage (P=0.03).

Conclusion: Overall empowerment status of women in menopausal transition in Gonabad -Iran was high. However, in political and religious domains, the status was moderate. We suggest that empowered women should be invited to share their experiences with other females. Development of social networks could provide the basis for sharing the experiences of these women and helps policy makers to develop community empowerment programs.

Keywords: Empowerment, Menopause, Economic, Politics, Family

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**INTRODUCTION**

“Promoting gender equality and empowering women” is the third objective of the Millennium Summit which focuses on gender equality and women’s empowerment as the key factors to achieve sustainable development.1, 2 The International Conference on Population and Development, Cairo, Egypt (1994) and the United Nations (UN) 4th World Conference on Women, Beijing, China (1995) also insisted on the important role of women’s empowerment in health outcomes and social development.3, 4 The existing literature confirms that many international organizations including the UN, World Bank, World Health Organization, and United Nations International Children’s Emergency Fund consider women’s empowerment as one of the fundamental principles of their strategies.5-7 Some experts believe that none of the goals of the Millennium Summit can be achieved without considering “women’s empowerment”.

Based on the definition of women’s empowerment, women should overcome their unnecessary shame, become able to correctly evaluate and know themselves, know their own talents and limitations, have the power to confront hardships, have a precise knowledge about their goals, and be able to achieve their goals by increasing their capabilities.8, 9

Five issues relating to women’s empowerment are the sense of self-value and respect; the right to have choices and the decision-making power; access to various opportunities, prospects and means; and the right to have the power to control their own lives; as well as the ability to influence trends in social change to create more social and economic orders both nationally and internationally.10

A study indicated that in the process of empowerment not only women are notified about their rights, but also their self-confidence is increased, so that they can free themselves from absolute poverty.11 Women who have high empowerment have good interactions and communication with husband, experience less partner violence, have high ability to confront and adapt with stress due to family violence, and experience less depression and psychological disorders after violence from husbands.12-14

Empowered women can better use family planning methods15-17 and have less malnourished children.18, 19 Some researchers declare that promoting women’s empowerment and pregnancy health can reduce the risk of stillbirth and improve prenatal care.1, 20

Among various age groups, menopausal age is a special period due to the development of societies. The social and economic statistics predict an unfortunate future for women in developing countries.21 Respecting menopausal women is important due to the population ageing and the increased population of menopausal women. Today, the majority of countries are dealing with an increase in the population of menopausal women. Due to the higher life expectancy in women compared to men, the increase in the population of elderly women is higher than elderly men.22 Similar to many developing countries, Iran is experiencing significant population and epidemiologic changes. According to the forecast of the Statistical Center of Iran, the population of women aged 65 and over will reach 3.8 million people in 2026.23

Menopausal women encounter issues related to menopausal symptoms and age-related disabilities due to their age status other than the common problems of women in other age groups. To the best of our knowledge, few studies have been conducted in the field of women’s empowerment. A narrative review study was conducted about empowerment and coping strategies in menopausal women that focused on the health outcome and management symptoms of menopause. However, in this review other domains of women’s empowerment such as economic, political, family, and religious empowerment did not consider.24 To the best of our knowledge, no study has yet assessed menopausal women empowerment status in
Iran. Therefore, this study was conducted to assess women’s empowerment status in menopausal transition in Gonabad city, Iran.

**MATERIAL AND METHODS**

This is a cross-sectional study. This report is written based on STROB checklist for cross-sectional studies. The study was conducted from April 2017 to March 2018 in Gonabad, Northeast of Iran. Gonabad is a small and relatively traditional city in Khorasan-Razavi province. The participants were women aged 45-60 years who were in various stages of menopausal transition including perimenopause and post-menopause.

We determined the sample size based on a confidence interval of 95%, a power of 80%, a maximum acceptable absolute error of 0.6 (0.12*σ), and standard deviation of 5 according to a pilot study and using the following formula:

\[
 n = \frac{(x_1 - \bar{x} + x_1 - \bar{x})^2 \times \delta^2}{d^2} = \frac{(1.96 + 0.84)^2 \times 5^2}{(0.6)^2} = 544
\]

The estimated sample size for study was 544. At the beginning of the study, it was predicted that some women are not willing to participate in the study, and some may receive the questionnaire but do not send it back or return it incomplete, so 25% was considered for sample attrition, and 136 women were added to the calculated number for sample. Thus, the sample size increased to 680 subjects.

Cluster sampling method was used in this study. For this purpose, three community health centers of Gonabad city were selected as clusters; further, a sampling framework including women between 45-60 years old was obtained using the household registration offices of each center. The participants were selected from this list using systematic random sampling method.

Inclusion criteria were married women aged 45-60 years old, residents of Gonabad city, and willingness to participate in the study. Exclusion criteria were inability to undergo the written parts of the questionnaire or unwillingness to participate in the study.

Data collection was done using two questionnaires including demographic and women’s empowerment questionnaire. The demographic questionnaire included questions on personal and fertility profiles of participants such as women’s age and education; husband’s age and education; women and their spouses’ jobs, age at menarche; age at marriage; number of children; the last menstruation date; the status of menstruation; the number of husband’s marriage; marital life satisfaction, the home mate persons, and the status of underlying diseases (including depression, hypertension, diabetes, hyperlipidemia, back ache, leg pain, heart disorders, and kidney disorders).

Women’s Empowerment Status Questionnaire (WESQ), which was a self-structured questionnaire, was designed by the researchers. For developing this questionnaire, a wide search in the literature was done and similar questionnaires were read. Then, the first draft of the questionnaire was designed, and its validity and reliability were assessed.

The validity of the questionnaires was assessed using face and content validity. The face validity of the questionnaire was evaluated qualitatively, and the viewpoints of ten similar individuals of the target group were assessed in terms of readability, clarity of wording, and appropriateness of the items. A panel of experts assessed the validity of the content of the WESQ using both qualitative and quantitative methods. In the qualitative method, the prepared questionnaire was sent to 12 faculty members including reproductive health, sociologist, and psychologist, and their opinions about the questionnaires were gathered. Furthermore, content validity ratio (CVR) and content validity index (CVI) were utilized in the quantitative method. The CVR was assessed by 12 experts who reviewed each item based on a three-part spectrum (3=necessary, 2=useful but not necessary, and 1=not necessary). The items with a CVR value of higher than 0.56 (based on the evaluation
of 12 experts) were preserved based on the Lawshe table of identifying the minimum value. The CVI was also calculated for all items in the tool. For this purpose, the criteria of relevancy were examined by 12 experts for each item on a 4-point Likert scale. In all items, CVI was greater than 0.86. Two forms of CVI containing I-CVI and S-CVI (S-CVI/UA and S-CVI/Ave) were evaluated. In all items, I-CVI was greater than 0.8. S-CVI/UA and S-CVI/Ave for the Women's Empowerment status Questionnaire were 0.83 and 0.96. The questionnaires were completed by 20 participants, and the reliability of the WESQ was confirmed by the Cronbach's alpha coefficient of 0.87.

This final version of the questionnaire included six domains of family empowerment (10 items), economic empowerment (11 items), political empowerment (5 items), social empowerment (10 items), health empowerment (4 items), and religious and traditional beliefs empowerment (10 items). In this questionnaire, a five-point Likert scale ("strongly agree", "agree", "no opinion", "disagree", and "strongly disagree") was used. All questionnaire statements were given scores from 1 to 5. The total scores of the women's empowerment questionnaire was in the range of 50 to 250. The least total or domain score of women's empowerment questionnaire showed the lowest women's empowerment status. The scores were divided into three groups of low, middle, and high, representing 33 and 66 percentiles. Accordingly, the scores between 50-116 were labeled as low empowerment, those between 117-183 as middle empowerment, and the scores between 184-250 as high empowerment.

For data collection, the participants were provided a brief description of the study aims and then invited to participate in the study. The setting for filling out the questionnaires depended on the participants’ preferences, and might be in their home or the health center. Before completing the questionnaires, the participants signed the written informed consent and then answered the questions in the presence of the researcher; if necessary, the questionnaires were completed by closed interview. At the end, to acknowledge women’s participation in the study, we gave an educational booklet on management of menopause to the participants as gift.

The protocol of the present study was approved in the Research Ethics Committee of Mashhad University of Medical Sciences, Mashhad, Iran (code number: IR.MUMS.REC.1395.111). Confidentiality of data was observed in all stages including data collection, data analysis, and publication of the results. The participants were free to withdraw from the study at any time.

The results were presented as mean±SD (Standard Deviation) for quantitative variables and frequency (percentage) for categorical ones. One-sample Kolmogorov-Smirnov test was used to determine the normal distribution of the data. In this study, the scores of the women’s empowerment were the normal continuous variable and were compared using Pearson’s correlation and analysis of variance (ANOVA) test. The linear regression model was adopted to determine the factors related to the women’s empowerment. Therefore, the variables that had P<0.2 in simple linear regression were entered into the multiple linear regression model, and their relationship was assessed in the presence of other variables following women’s empowerment. All statistical analyses were carried out using SPSS Statistics for Windows, version 25, and P<0.05 was considered statistically significant.

**Results**

A total of 670 women filled out the questionnaires and were included in data analysis. The majority of them 515 (76.90%) were in post-menopausal status; among others who were in the perimenopausal status, 41 women (6.10%) had regular and 114 (17%) had irregular menstrual cycles. Also, 501 (74.80%) were housewife and the majority of their husbands 239 (35.70%)
were retired; 353 (52.70%) were living with their husbands; 388 (60.90%) women expressed a moderate level of marital satisfaction with their husbands and 600 (89.60%) of them reported having at least one underlying disease. Other demographic variables of the participants are presented in Table 1.

Table 1: Demographic characteristics of the participants

| Variables                          | Mean±SD  |
|------------------------------------|----------|
| Women’s age (years)                | 53.00±5.20 |
| Women’s education (years)          | 7.09±4.83   |
| Age of husband (years)             | 58.52±7.90   |
| Husband’s education (years)        | 8.80±5.05   |
| Age of menarche (years)            | 13.85±1.59  |
| Age of marriage (years)            | 18.06±3.34  |
| Number of children                 | 3.79±1.65   |
| The last menstruation date (Month ago) | 48.32±56.87 |

Assessing the empowerment domains showed that 499 individuals (74.50%) in family domain, 534 (79.70%) in economic domain, 523 (78.05%) in social domain, and 493 (73.60%) in health domain were in the high level of empowerment. In policy and religious domains, the majority of the participants were in the moderate level 472 (70.40%) and 464 (69.30%) respectively. Overall, the majority of participants 510 (76.10%) had a high total score of empowerment (Table 2).

The results showed that there was a reverse significant correlation between the total score of empowerment and women’s age (P<0.001), spouse’s age (P<0.001), and the number of children (P<0.001). Also, there was a direct significant correlation between the total score of empowerment and age at marriage (P=0.03), women’s education (P=0.003), and the time elapsed from the last menstruation date (P=0.01). There was no significant correlation between the total score of empowerment and age at menarche (P=0.14), as well as the spouse’s education (P=0.12). More details about the relationship between the above-mentioned variables and domains of empowerment are presented in Table 3.

The results of one-way ANOVA showed that the mean of total empowerment score was not significantly different in different levels of husband’s education (P=0.48), the husband’s first marriage (P=0.06), the husband’s second marriage (P=0.97), and the status of menstruation (P=0.12). However, there was a significant difference in the mean of total empowerment score in relation to husband’s job (P=0.01), the home mate persons (P<0.001), and the marital satisfaction (P=0.01). Women whose husband was employee, lived with their child, and had a good relationship; had higher empowerment scores. Also, from the list of underlying diseases, the mean of total empowerment was significantly different in depression (P<0.001). There was no significant deference in the other underlying diseases including hypertension (P=0.17), diabetes (P=0.05), hyperlipidemia (P=0.43), back ache (P=0.70), leg pain (P=0.65), heart disorders (P=0.67), and kidney disorders (P=0.94).

Based on the results of the simple linear regression model to examine the relationship between socio-demographic factors and women’s empowerment, women’s age,

Table 2: The level of women’s empowerment in menopausal period in different domains

| Empowerment Domains    | Low level of Empowerment N (%) | Moderate level of Empowerment N (%) | High level of Empowerment N (%) | Mean±SD  |
|------------------------|--------------------------------|------------------------------------|--------------------------------|----------|
| Family empowerment     | 7 (1.00)                       | 164 (24.50)                        | 499 (74.50)                    | 40.38±6.13 |
| Economic empowerment   | 16 (2.40)                      | 120 (17.90)                        | 534 (79.70)                    | 41.62±6.88 |
| Policy empowerment     | 3 (0.40)                       | 472 (70.40)                        | 195 (29.10)                    | 18.34±3.02 |
| Social empowerment     | 16 (2.39)                      | 131 (19.55)                        | 523 (78.05)                    | 41.68±7.18 |
| Health empowerment     | 4 (0.60)                       | 173 (25.80)                        | 493 (73.60)                    | 16.55±2.38 |
| Religious empowerment  | 21 (3.10)                      | 464 (69.30)                        | 185 (27.60)                    | 35.04±5.71 |
| Total empowerment score| 00 (00)                        | 160 (23.90)                        | 510 (76.10)                    | 193.14±19.46 |
husband’s age, women’s education, husband’s education, age at menarche, age at marriage, number of children, women’s Job, history of underlying diseases, home mate persons, marital satisfaction, and status of menstruation had a P value < 0.2 and were entered into a multiple linear regression model. The mean score of women’s empowerment in those who lived with their children was 11.28 units higher, compared to other individuals; the difference was statistically significant (B = 11.28, P = 0.005). In people with poor marital satisfaction, the mean score of women’s empowerment was 8.94 units lower than that in those who did have a good marital satisfaction (B = -8.94, P = 0.03) (Table 4).

**Discussion**

The findings of the current study regarding women’s empowerment status during the menopausal transition period in Gonabad city showed that the majority of the studied women had a high level of empowerment. The empowerment level of most women in the family, economic, social, and health domains was high, but the majority of the women showed a moderate level of empowerment in the political and religious domains.

Women’s empowerment, an important issue in development of human societies, is a process in which women not only acquire control over their lives, but also gain the ability to cooperate with the society and obtain critical understanding about their environment. The process of empowerment enables women to gain the ability to influence their own lives and decide for themselves. The important factors in empowerment are reported to be high educational level, access to economic sources, and improved health status. To the best of our knowledge, no study has yet assessed women’s empowerment using a standard questionnaire in menopausal transition; therefore, it was not possible to compare the results of this study with similar studies conducted in the past. However, some studies that have generally assessed women’s empowerment status and its related factors will be discussed here.

In the present study, the findings showed that women had a high empowerment level in the family domain, especially in the household

| Empowerment Domains | Family empowerment | Economic empowerment | Policy empowerment | Social Empowerment | Health empowerment | Religious empowerment | Total empowerment |
|---------------------|-------------------|---------------------|-------------------|-------------------|-------------------|---------------------|------------------|
| Age of women (year) | r=-0.06           | r=-0.12             | r=-0.15           | r=0.09            | r=-0.07           | r=-0.16             | r=-0.16          |
| P=0.08             | P=0.62            | P<0.001*            | P=0.02*           | P=0.07            | P=0.22            | P<0.001*            |                  |
| Age of husband (year) | r=-0.09           | r=-0.13             | r=-0.09           | r=-0.05           | r=-0.03           | r=-0.12             |                  |
| P=0.02*            | P<0.001*          | P=0.01*             | P=0.21            | P=0.45            | P<0.001*          |                    |                  |
| Education of women (year) | r=0.06           | r=0.12              | r=0.15            | r=0.09            | r=0.05            | r=0.30              | r=0.11           |
| P=0.08             | P<0.001*          | P=0.001*            | P=0.02*           | P=0.20            | P=0.45            | P<0.001*            |                  |
| Education of husband (year) | r=-0.001         | r=0.06              | r=0.01           | r=0.05            | r=-0.01           | r=0.06              |                  |
| P=0.97             | P=0.10            | P=0.72              | P=0.15            | P<0.001*          | P=0.71            | P=0.12              |                  |
| Age of marriage (year) | r=0.03            | r=0.05              | r=0.03           | r=0.07            | r=0.04            | r=0.08              |                  |
| P=0.43             | P=0.14            | P=0.37              | P=0.07            | P=0.16            | P=0.33            | P<0.001*            |                  |
| Age of menarche (Year) | r=-0.005          | r=0.05              | r=0.007          | r=-0.03           | r=0.04            | r=0.06              | r=0.05           |
| P=0.90             | P=0.14            | P=0.85              | P=0.36            | P=0.25            | P=0.12            | P=0.14              |                  |
| The last menstruation date (month) | r=-0.15           | r=-0.04             | r=0.03           | r=0.03            | r=-0.05           | r=-0.05             | r=0.09           |
| P=0.70             | P=0.28            | P=0.41              | P=0.40            | P=0.15            | P=0.22            | P<0.01*              |                  |
| Number of children | r=-0.02           | r=-0.10             | r=0.02           | r=-0.06           | r=-0.12           | r=-0.01             | r=-0.14          |
| P=0.49             | P=0.01*           | P=0.48              | P=0.08            | P=0.003*          | P=0.77            | P<0.001*            |                  |

Pearson’s correlation coefficient; *Correlation is significant at the 0.05 level (2- tail)
decision making sub-domain. These findings were not in the same line with those of a study that assessed the empowerment indices among women in Mozambique; it was shown that the majority of women could not do shopping for the household or visit family and friends alone.28 Household decision-making was considered as an important indicator of empowerment in the exiting literature. A study that evaluated the empowerment status of Egyptian women showed that household decision-making was one of the two important indices for women’s empowerment.29

Other results showed that women in menopausal transition had a high empowerment level in the economic domain. Recently, the economic empowerment of Bangladeshi women was reported as medium level. In this study, half of women had owned pieces of land; the majority owned some assets; more than half had the power of decision on sale and purchase of the house, land and assets; and nearly half of them were engaged in paid work. Evidence shows that economic empowerment of women has a very important role in their health and that women with high level of economic empowerment can have an active role in health-related decision-making both for themselves and their children.30-32

In the current study, the participants had a high level of empowerment in the health domain. The relationship between women’s

Table 4: The results of linear regression model on the factors associated with women’s empowerment

| Variables                  | The levels of variable | Simple regression | Multiple regression |
|----------------------------|------------------------|-------------------|---------------------|
|                            | B                      | Std error | β      | P value | B      | Std error | β      | P value |
| Age of woman (Year)        | -                      | -0.62     | 0.14   | -0.16   | <0.001 | -0.24     | 0.23   | 0.06   | 0.29   |
| Age of Husband (Year)      | -                      | -0.31     | 0.09   | -0.12   | <0.001 | -0.04     | 0.14   | 0.01   | 0.75   |
| Education of woman         | -                      | 0.46      | 0.15   | 0.11    | 0.003  | 0.16      | 0.28   | 0.04   | 0.55   |
| Husband’s education        | -                      | 0.22      | 0.14   | 0.06    | 0.12   | -0.27     | 0.21   | 0.07   | 0.20   |
| Age of marriage (year)     | -                      | 0.46      | 0.22   | 0.08    | 0.03   | 0.08      | 0.26   | 0.01   | 0.75   |
| Age of menarche (Year)     | -                      | 0.70      | 0.47   | 0.05    | 0.14   | 0.65      | 0.50   | 0.05   | 0.19   |
| Number of children         | -                      | -1.69     | 0.45   | -0.14   | <0.001 | -0.92     | 0.58   | 0.07   | 0.11   |
| Job of woman               | House wife             | -         | -      | -       | -      | -         | -      | -      | -      |
|                           | Practitioner           | 6.95      | 2.36   | 0.11    | 0.003  | 2.20      | 3.00   | 0.03   | 0.46   |
|                           | Home jobs              | 0.91      | 2.76   | 0.01    | 0.74   | -3.36     | 2.90   | 0.48   | 0.24   |
|                           | Retired                | 5.45      | 3.21   | 0.06    | 0.08   | 2.72      | 3.87   | 0.03   | 0.48   |
| Job of husband             | Self-employed          | -         | -      | -       | -      | -         | -      | -      | -      |
|                           | Employee               | 3.18      | 2.77   | 0.05    | 0.25   | -         | -      | -      | -      |
|                           | Worker                 | 3.34      | 2.56   | 0.05    | 0.21   | -         | -      | -      | -      |
|                           | Farmer                 | -1.27     | 2.49   | -0.02   | 0.60   | -         | -      | -      | -      |
|                           | Retired                | -0.41     | 1.91   | -0.10   | 0.83   | -         | -      | -      | -      |
| History of Underlying disease | No                  | -         | -      | -       | -      | -         | -      | -      | -      |
|                           | Yes                    | -6.71     | 2.46   | -0.10   | 0.007  | -4.01     | 2.62   | -0.6   | 0.12   |
| Home mate person           | Husband and children   | -         | -      | -       | -      | -         | -      | -      | -      |
|                           | Spouse                 | -4.69     | 1.63   | -0.11   | 0.004  | -2.98     | 1.82   | 0.07   | 0.10   |
|                           | Children               | 9.24      | 3.27   | 0.11    | 0.005  | 11.28     | 3.96   | 0.12   | 0.005  |
|                           | Alone                  | -4.98     | 2.87   | -0.06   | 0.08   | -1.00     | 3.65   | 0.12   | 0.78   |
|                           | Relatives              | -4.59     | 19.21  | -0.09   | 0.81   | -6.74     | 19.66  | 0.01   | 0.73   |
| Marital satisfaction       | Well                   | -         | -      | -       | -      | -         | -      | -      | -      |
|                           | Moderate               | 2.35      | 1.58   | 0.05    | 0.13   | 1.38      | 1.68   | 0.03   | 0.41   |
|                           | Weak                   | -7.17     | 3.36   | -0.76   | 0.05   | -8.94     | 4.11   | 0.94   | 0.03   |
| The status of menstruation | Irregular              | -         | -      | -       | -      | -         | -      | -      | -      |
|                           | Regular                | 3.42      | 3.53   | 0.04    | 0.33   | -         | -      | -      | -      |
|                           | Menopause              | -1.66     | 2.01   | -0.03   | 0.40   | -         | -      | -      | -      |
empowerment and health is a highly proposed subject in the current literature. The findings of a study on Indian women showed that women’s empowerment through household market integration and agriculture could improve the quality and diversity of diet. Empowering women not only affects their own health, but also is directly related to the health of their children. A study reported a relationship between women’s empowerment and reduced dental caries in children. In another study on Bangladeshi women, empowerment was found to be directly related to health seeking behaviors in women both for themselves and their children.

Furthermore, evidence shows that women’s empowerment leads to improved health during pregnancy and reduces negative pregnancy outcomes. Evaluation of the relationship between women’s empowerment and reduced preterm labor showed appropriate timing of pregnancy, improved prenatal care, and nutritional status as the influencing factors on women’s empowerment. Women’s empowerment can improve their health and reduce unintended pregnancy.

A negative relationship was found between the age and empowerment level. These findings are worrisome due to the age of the women in this study. These findings indicate that empowerment decreases with an increase in age. Similar findings are reported in another study which indicated that social and economic statistics showed a devastating future for old women, especially in developing countries. Therefore, researchers suggest that elderly women should be included in development programs in order to reduce their dependency. Identifying various economic resources, education and internships for the elderly women, as well as building relationships between generations, as resources for empowerment, can have a helpful role for elderly women.

Furthermore, the findings of the current study showed a significant positive relationship between the educational level and empowerment. Similar findings were reported in Pakistani women. It was also reported that one of the important causes of low empowerment among women in Kashmir Valley was low educational level.

The findings of the current study showed a significant relationship between the empowerment level and type of relationship with husband; women with higher marital satisfaction had more empowerment scores. An Indonesian study also reported that women’s empowerment resulted in a better relationship with the spouse and improved their negotiating power in asking for condom wearing for prevention of sexually transmitted diseases by improving educational level and socio-economic empowerment.

Other findings showed that women with fewer children had higher empowerment level compared to those with more children. This finding was also supported by the findings of other studies including the one that assessed the freedom of movement as an indicator of women’s empowerment and reported women with fewer children in the first 20 years of marriage had a higher empowerment level compared to those with more children in the same period of life. Also, it was reported that women with higher empowerment level had longer birth spacing compared to women with lower empowerment level.

The results also showed that women with older age at marriage had a higher empowerment level compared to those who married at younger age. One of the factors that affect women’s empowerment is youth and child marriage. The results of a study conducted on Nepalese women showed that the decision-making power in the families of women who got married at the age of 18 years old or older was higher compared to those who married before they were 17.

In the current study, the results showed that women who lived with their child were significantly more empowered. It seems that living with child could be an important source of social support. In a systematic review that assessed the key variables influencing women’s empowerment in the United Arab
Emirates, 21 out of 23 studies reported social support as one of the main variables which affected women’s empowerment.10

The current study had some limitations. Due to some restrictions, researchers had to assess empowerment status through self-administered questionnaire and, thus, had to rely on the accuracy and correctness of the responses of participants. One of the most important strengths of this study was that, to the best of our knowledge, it is the first study that has assessed the empowerment of women during menopausal transition in Iran.

**Conclusion**

The findings of the current study showed that the overall women’s empowerment during menopausal transition was high in Gonabad city. However, in the political and religious domains, the majority of the participants were in the moderate level. Also, empowered women can be invited to health-oriented or education-oriented social organizations to share their experiences with other women. Development of social networks could provide the basis for sharing the experiences of these women and helps policy makers to develop community empowerment programs.

It is suggested that further studies should assess women’s empowerment with more objective methods and consider other factors including ownership of land, house, or car or precisely measure the women’s income. As women’s empowerment is a context-based subject, it is recommended that similar studies should be conducted in other communities.

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