A Study to Assess the Effectiveness of Structured Teaching Program on Symptoms of Menopause and It’s Management in Terms of Knowledge and Quality of Life among Menopausal Women in a Selected Community of Delhi

Mili Bhattacharya¹, Ravi Kulal²

Abstract

The life cycle of a newborn undergoes many changes physically, emotionally as she enters womanhood starting from menarche, then marriage, motherhood and finally enters into menopause, which marks the end of reproductive capacity. Menopause is derived from the Latin words meno (month) and pausia (halt), and essentially marks the end of a woman’s period of natural fertility. Meno (menstruation) pause (stops) is, technically, the last menstrual flow of a woman’s life. The public healthcare system does not acknowledge the special health needs of older women. Keeping this in mind, a study was undertaken to assess and evaluate the effectiveness of Structured Teaching Program (STP) on symptoms of menopause and its management in terms of knowledge and quality of life among menopausal women. 50 menopausal women from a selected community of Delhi were selected using purposive sampling technique for the study in order to assess the effectiveness of structured teaching program. The tools developed and used for data collection were structured knowledge questionnaire and quality of life (MENQOL). The data obtained were analyzed using both descriptive and inferential statistics in terms of frequency, percentage, mean, SD, ‘t’ value and coefficient correlation. The major findings of the study were: the mean posttest knowledge score of menopausal women was significantly higher than the pretest knowledge score with a mean difference of 11.2. The obtained mean difference was found to be statistically significant as evident from the ‘t’ value of (23.99) for df (49) at 0.05 level of significance. Thus the structured teaching program was found to be effective in enhancing the knowledge and quality of life among menopausal women regarding menopausal symptoms and its management.

Keywords: Structured Teaching Program (STP), Menopause, Council of Affiliated Menopause Society (CAMS), Menopause – Specific Quality of Life (MENQOL)

Introduction

One of the major physiological events in a woman’s life is menopause. Cessation of menses, which usually occurs between the ages of 45 and 55 years, is universal, unavoidable and unpreventable. Menopause marks not only the end

¹Program Associate Nursing, Health and Beyond Foundation, Gurugram.
²Associate Professor, Maharaja Agrasen Nursing College, Bahadurgarh, Haryana.

Correspondence: Ms. Mili Bhattacharya, Health and Beyond Foundation, Gurugram.

E-mail Id: mili.bhattacharya10@gmail.com

Orcid Id: https://orcid.org/0000-0001-6200-5358

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of the fertile period, but also the beginning of a new era in which changes in metabolism and psyche may become prominent.6

Women have a more complex phase of old age than men because of the dominant effects in them of hormonal changes caused by menopause. However, the public healthcare system does not acknowledge the special health needs of older women. There has been extensive research on menopause in the West but in India only a few institutes have recognized the potential of research on the subject.8

The years just before and just after the menopause itself are referred to as the climacteric. For most women, the climacteric spans from early mid-40s to late-50s/early-60s, including the pre-menopausal years, the menopausal climax years, and the postmenopausal years, popularly known as the Change of Life.2

During the experience of the investigator in her clinical practice, it was observed that many women complain about various signs of arriving menopause. They felt embarrassed about the various symptoms like irregular periods, hot flashes, urinary incontinence, and mood changes. They wanted to have information regarding the menopause and its management. So, there is a need to provide knowledge to women regarding the menopausal symptoms and their management, helping them live a happy and fruitful life.

Menopausal health has been one of the neglected areas in our country and needs timely vital attention. Moreover, the investigator has also found that most of the research done on menopause is confined to describe the various menopausal changes and their frequency/incidence in the women with different sociodemographic variables. This motivated and encouraged the investigator to undertake the present study.

A cross-sectional study was conducted on menopausal symptoms of postmenopausal women in a rural community of Delhi, India. The study states that there is very little data on the consequence of menopause on women in South East Asia region, especially from rural India. Importance is always given to reproductive health from menarche to menopause. Menopausal health demands priority in Indian scenario due to rising population of postmenopausal women. The prevalence of various self-reported menopausal symptoms complained by postmenopausal women (40–54 years) reveals that the mean age at attaining menopause was 46.24 years (standard deviation=3.38). Only 4 (1.6%) postmenopausal women had premature menopause. A total of 225 (89.3%) postmenopausal women experienced at least one or more menopausal symptom(s). The most common complaints of postmenopausal women were sleep disturbances (62.7%), muscle or joint pain (59.1%), hot flushes (46.4%) and night sweats (45.6%). A total of 32.1% (n=81) postmenopausal women suffered from depression and 21.0% (n=53) postmenopausal women suffered from anxiety. The study further stated that it is necessary to critically introspect health needs of postmenopausal women and specific components can be incorporated in the national health programs.1

The Council of Affiliated Menopause Societies (CAMS) and International Menopause Society (IMS),7 states that perimenopause is the period of five years before and one year after menopause. This is an important transition phase as all endocrinological and biological changes which occur during menopause are initiated during this period. Surgical menopause occurs after surgical removal of ovaries. Climacteric is the period between two years before and five years after menopause.

Eleanor Roosevelt has rightly said that “It’s better to light a candle than curse the darkness”. This statement verifies the need of the study as by providing knowledge on the management of menopausal symptoms among perimenopausal women will make their future fruitful and help them to lead a happy life ahead.

Hence, the researcher felt the need to assess the effectiveness of structured teaching program on symptom of menopause and its management in terms of knowledge and quality of life among menopausal women in a selected community of Delhi.

Objectives

- To assess the level of knowledge, before and after the administration of structured teaching program on symptoms of menopause and its management among menopausal women.
- To assess the quality of life among menopausal women before and after administration of structured teaching program on symptoms of menopause and its management.
- To find the relationship between posttest knowledge score and quality of life among menopausal women.
- To determine the association between the posttest knowledge score and selected demographic variables among menopausal women.
- To determine the association between the posttest MENQOL score and selected demographic variables among menopausal women.

Materials and Methods

One group pretest-posttest design was adopted for the present study, and the study was conducted in Guild Association (NGO) Chhawla, Najafgarh. The sample for the present study comprised of 50 menopausal women, visiting Guild Association (NGO) Chhawla. The sample was selected using non-probability purposive sampling technique. The data collection tool used was structured
knowledge questionnaire-MENQOL scale. The dependent variable of the study was knowledge of menopausal women and the independent variable was structured teaching program on symptoms of menopause and its management among menopausal women. Administrative approval was obtained from the coordinator, Ms. Mannu Chowdhury, Guild of Service Chhawla, Delhi, for the final study. The data for final study was collected from 12th February to 29th February 2016. Women were explained about the nature of the study and their expected participation in the study before data collection. Then the individual women were assessed using structured knowledge questionnaire and MENQOL™ scale. The confidentiality of the responses was assured to the subjects and maintained.
Results

Description of Sample Characteristics

Table 1. Frequency and Percentage Distribution of Menopausal Women by Demographic Characteristics

| Sr. No. | Characteristic                  | Frequency (F) | Percentage (%) |
|---------|--------------------------------|---------------|----------------|
| 1       | Age                            |               |                |
|         | 40−45 years                    | 12            | 24             |
|         | 46−50 years                    | 14            | 28             |
|         | 51−55 years                    | 13            | 26             |
|         | 56−60 years                    | 11            | 22             |
| 2       | Education                      |               |                |
|         | Illiterate                     | 13            | 26             |
|         | Primary                        | 16            | 32             |
|         | Secondary                      | 13            | 26             |
|         | Higher secondary and above     | 8             | 16             |
| 3       | Occupation                     |               |                |
|         | Unemployed                     | 17            | 34             |
|         | Govt. Employee                 | 7             | 14             |
|         | Self-Employed                  | 14            | 28             |
|         | Others                         | 12            | 24             |
| 4       | Family income per month        |               |                |
|         | Less than Rs. 10,000           | 14            | 28%            |
|         | Rs. 10,001−15,000              | 20            | 40             |
|         | Rs. 15,001−20,000              | 8             | 16             |
|         | Rs. 20,001 and above           | 8             | 16             |
| 5       | Religion                       |               |                |
|         | Hindu                          | 44            | 88             |
|         | Sikh                           | 2             | 4              |
|         | Christian                      | 1             | 2              |
|         | Muslim                         | 1             | 2              |
|         | Others                         | 2             | 4              |
| 6       | Food habits                    |               |                |
|         | Veg                            | 13            | 26             |
|         | Non-veg                        | 37            | 74             |
| 7       | Marital status                 |               |                |
|         | Unmarried                      | 1             | 2              |
|         | Married                        | 43            | 86             |
|         | Divorced                       | 4             | 8              |
|         | Widowed                        | 2             | 4              |
| 8       | Types of family                |               |                |
|         | Nuclear                        | 17            | 34             |
|         | Joint                          | 26            | 52             |
|         | Extended                       | 7             | 14             |
| 9       | Age at menarche                |               |                |
|         | <15 years                      | 49            | 98             |
|         | 15−20 years                    | 1             | 2              |
| 10      | No. of Children                |               |                |
|         | Nil                            | 38            | 76             |
|         | One                            | 8             | 16             |
|         | Two                            | 3             | 6              |
|         | >Two                           | 1             | 2              |
Findings Related to the Knowledge of Menopausal Women before and after Administration of Structured Teaching Program

H$_{01}$ – There will be no significant difference between the mean pretest and posttest knowledge scores of menopausal women who were regular visitors at the Guild Association Chhawla, New Delhi, as evident from the structured knowledge questionnaire at 0.05 level of significance.

Table 2. Frequency and Percentage Distribution of Pretest and Posttest Knowledge Score of Menopausal Women

| Knowledge Level | Pretest Frequency (f) | Pretest Percentage (%) | Posttest Frequency (f) | Posttest Percentage (%) |
|-----------------|-----------------------|------------------------|------------------------|------------------------|
| Very good (20–25) | 0                     | 0                      | 0                      | 0                      |
| Good (15–19)    | 0                     | 0                      | 4                      | 8                      |
| Average (10–14) | 20                    | 40%                    | 32                     | 64%                    |
| Poor (less than 10) | 30                    | 60%                    | 14                     | 28%                    |

Table 3. Mean, Median, Standard Deviation, ‘t’ value of Pretest and Posttest Knowledge Scores

| S. No. | Pretest | Posttest |
|--------|---------|----------|
| Mean   | 9.1     | 20.3     |
| Median | 9       | 20.5     |
| Standard Deviation | 2.3 | 1.79 |
| df     | 49      | 49       |
| t-Value | 23.9905 | <0.00001 |
| p-Value |        | <0.00001 |

The data presented in Table 3 shows that the mean posttest knowledge score (20.3) of menopausal women was significantly higher than the pretest knowledge score (9.1), with a mean difference of 11.2. The calculated value was 23.9905 at 0.05 level of significance at df (49), which was greater than the table value 1.676. Hence null hypothesis H$_{01}$ is rejected.

Table 4. Mean, Median, Standard Deviation, ‘t’ Value of Pretest and Posttest Quality of Life Scores of Post-Menopausal Women

| S. No. | Pretest | Posttest |
|--------|---------|----------|
| Mean   | 83.8    | 182.4    |
| Median | 84      | 181      |
| Standard Deviation     | 5.99    | 7.2      |
| df     | 49      | 49       |
| t-Value | 73.659 | <0.00001 |
| p-Value |        | *S       |

The data presented in Table 4 shows that mean posttest MENQOL score of menopausal women is significantly higher than the mean pretest MENQOL score. The calculated ‘t’ value was 73.659 at 0.05 level of significance at df 49, which was greater than the table value 1.676. Hence H$_{02}$ is rejected.

Findings Related to the Quality of Life of Menopausal Women before and after Administration of Structured Teaching Program

H$_{02}$ – There will be no significant difference between mean pretest and posttest MENQOL score of menopausal women evidenced by MENQOL scale at 0.05 level of significance.
The data presented in Table 4 shows that the mean posttest MENQOL score (182.4) of menopausal women was significantly higher than the pretest MENQOL score (83.8) with the mean difference of (98.6). The obtained mean difference was found to be statistically significant as evident from the ‘t’ value of (73.65) at 0.05 level of significance.

**Findings Related to Correlation between Knowledge Score and Quality of Life**

H$_{03}$ – There will be no significant relationship between posttest knowledge score and posttest quality of life score as evident by structured knowledge questionnaire and MENQOL scale at 0.05 level of significance.

There is negative relationship between the posttest knowledge and posttest MENQOL scores of menopausal women as evident from ‘r’ value – 0.2707 at 0.05 level of significance (Table 5).

Thus the null hypothesis H$_{03}$ was accepted and research hypothesis H$_{3}$ was rejected.

### Table 5. Correlation between Knowledge Score and Quality of Life

| Variables                  | Mean  | SDMD | SDD  | df  | r-Value | p-Value |
|----------------------------|-------|------|------|-----|---------|---------|
| Posttest knowledge score   | 20.3  | 1.324| 9.362| 49  | -0.2707 | 0.0579  |
| Posttest quality of life score | 182.4 |      |      |     |         |         |
Findings Related to Association between Posttest Knowledge Score and Selected Demographic Variables of Menopausal Women

**Table 6. Association between Posttest Knowledge Score and Demographic Variables of Menopausal Women (Fisher Exact Test)**

| S. No. | Characteristic               | Below Mean | Above Mean | Degree of Freedom | Fisher exact p-Value | Significant /Non-significant |
|--------|------------------------------|------------|------------|-------------------|----------------------|----------------------------|
| 1      | Age                          | 40–45 years | 6          | 6                 | 3                    | 1.000 NS                    |
|        |                              | 46–50 years | 7          | 7                 |                       |                            |
|        |                              | 51–55 years | 7          | 6                 |                       |                            |
|        |                              | 56–60 years | 5          | 6                 |                       |                            |
| 2      | Education Level              | Illiterate | 6          | 7                 | 4                    | 0.2128 NS                    |
|        |                              | Primary     | 6          | 10                |                       |                            |
|        |                              | Secondary   | 9          | 4                 |                       |                            |
|        |                              | Higher      | 2          | 6                 |                       |                            |
| 3      | Occupation                   | Unemployed  | 11         | 6                 | 3                    | 0.0431 S                     |
|        |                              | Govt. employee | 5      | 2                 |                       |                            |
|        |                              | Self-employed | 7      | 7                 |                       |                            |
|        |                              | Others      | 2          | 10                |                       |                            |
| 4      | Family income per month      | Less than Rs. 10,000 | 8 | 6 | 3 | 0.6478 NS | NS |
|        |                              | Rs. 10,001–15,000 | 8 | 12 | 12 | 0.6478 NS | NS |
|        |                              | Rs.15,001–20,000 | 5 | 3 | 3 |                       |                            |
|        |                              | Rs. 20,001 and above | 5 | 3 | 3 |                       |                            |
| 5      | Religion                     | Hindu       | 23         | 21                | 4                    | 0.3543 NS                    |
|        |                              | Muslim      | 1          | 0                 |                       |                            |
|        |                              | Sikh        | 1          | 0                 |                       |                            |
|        |                              | Christian   | 0          | 2                 |                       |                            |
|        |                              | Others      | 0          | 2                 |                       |                            |
| 6      | Food Habits                  | Veg         | 8          | 5                 | 1                    | 0.5202 NS                    |
|        |                              | Non-veg.    | 17         | 20                |                       |                            |
| 7      | Marital status               | Unmarried   | 1          | 0                 | 3                    | 0.5961 NS                    |
|        |                              | married     | 22         | 21                |                       |                            |
|        |                              | divorced    | 2          | 2                 |                       |                            |
|        |                              | Widow       | 0          | 0                 |                       |                            |
| 8      | Family Type                  | Nuclear     | 7          | 10                | 2                    | 0.7920 NS                    |
|        |                              | Joint       | 13         | 13                |                       |                            |
|        |                              | Extended    | 4          | 3                 |                       |                            |
| 9      | Age of menarche              | < 15 years  | 25         | 24                | 1                    | 1.000 NS                     |
|        |                              | 15 - 20 years | 0 | 1 | 1 |                       |                            |
| 10     | No. of Children              | Nil         | 0          | 1                 | 3                    | 0.7170 NS                    |
|        |                              | One         | 1          | 2                 | 3                    |                            |
|        |                              | Two         | 19         | 19                |                       |                            |
|        |                              | <Two        | 5          | 3                 |                       |                            |

N=50

There is an association of occupation of menopausal women with knowledge related to menopausal symptoms. There is no relationship between posttest knowledge score and age, educational qualification, family income, religion, marital status, food habits types of family, age at menarche, and number of children of menopausal women.
Finding Related to Association between Posttest MENQOL Score and Selected Demographic Variables of Menopausal Women

Table 7. Association between Posttest MENQOL Score and Demographic Variables of Menopausal Women

| S. No. | Characteristic                | Below Mean | Above Mean | Degree of Freedom | Chi Square Value of Knowledge Tool | Fisher Exact p-Value | Significant / Non-Significant |
|--------|------------------------------|------------|------------|-------------------|-----------------------------------|----------------------|-----------------------------|
| 1      | Age                          | 40–45 years | 5          | 7                 |                                   |                      |                             |
|        |                               | 46–50 years | 6          | 8                 | 3                                 | 28.64                | 0.4634 NS                   |
|        |                               | 51–55 years | 6          | 7                 |                                   |                      |                             |
|        |                               | 56–60 years | 8          | 3                 |                                   |                      |                             |
| 2      | Education Level              | Illiterate | 3          | 10                | 3                                 | 7.13                 | 0.0696 NS                   |
|        |                               | Primary    | 10         | 6                 |                                   |                      |                             |
|        |                               | Secondary  | 6          | 7                 |                                   |                      |                             |
|        |                               | Higher     | 6          | 2                 |                                   |                      |                             |
| 3      | Occupation                   | Unemployed | 10         | 7                 | 3                                 | 0.94                 | 0.8193 NS                   |
|        |                               | Govt. Employee | 3       | 4                 |                                   |                      |                             |
|        |                               | Self-employed | 6    | 8                 |                                   |                      |                             |
|        |                               | Others     | 6          | 6                 |                                   |                      |                             |
| 4      | Family income per month      | Less than Rs.10,000 | 8 | 6                 |                                   |                      |                             |
|        |                               | Rs.10,001–15,000 | 11   | 9                 | 3                                 | 2.48                 | 0.5415 NS                   |
|        |                               | Rs.15,001–20,000 | 4   | 4                 |                                   |                      |                             |
|        |                               | Rs.20,001 and above | 2 | 6                 |                                   |                      |                             |
| 5      | Religion                     | Hindu      | 20         | 24                |                                   |                      |                             |
|        |                               | Muslim     | 1          | 0                 |                                   |                      |                             |
|        |                               | Sikh       | 0          | 1                 | 4                                 | 6.36                 | 0.0780 NS                   |
|        |                               | Christian  | 2          | 0                 |                                   |                      |                             |
|        |                               | Others     | 2          | 0                 |                                   |                      |                             |
| 6      | Food habits                  | Veg        | 8          | 5                 | 1                                 | 0.08                 | 0.5202 NS                   |
|        |                               | Non-veg.   | 17         | 20                |                                   |                      |                             |
| 7      | Marital status               | Unmarried  | 0          | 1                 |                                   |                      |                             |
|        |                               | Married    | 21         | 22                |                                   |                      |                             |
|        |                               | Divorcee   | 2          | 2                 | 3                                 | 3.02                 | 0.5455 NS                   |
|        |                               | Widow      | 2          | 0                 |                                   |                      |                             |
| 8      | Family Type                  | Nuclear    | 10         | 7                 | 2                                 | 1.26                 | 0.6260 NS                   |
|        |                               | Joint      | 11         | 15                |                                   |                      |                             |
|        |                               | Extended   | 4          | 3                 |                                   |                      |                             |
| 9      | Age of menarche              | <15 years  | 23         | 26                | 1                                 | 49.96                | 1.0000 NS                   |
|        |                               | 15–20 years | 0     | 1                 |                                   |                      |                             |
| 10     | No. of children              | Nil        | 0          | 1                 | 3                                 | 5.42                 | 0.7710 NS                   |
|        |                               | One        | 1          | 2                 |                                   |                      |                             |
|        |                               | Two        | 19         | 19                |                                   |                      |                             |
|        |                               | <Two       | 5          | 3                 |                                   |                      |                             |

S= Significant at 0.05 level

There is no relationship between quality of life of menopausal women and demographic variables.

Discussion

In this section the major findings of the study have been discussed in the terms of objectives, theoretical-based and hypothesis formulated. Many researches have been conducted in the past to evaluate the effectiveness of STP on symptoms of menopause and its management in terms of knowledge and quality of life among menopausal women. Results of the present study indicate that structured teaching program is effective in enhancing the knowledge of menopausal women regarding menopausal symptoms. In the present study, the results revealed that the 40% of the
The subjects had average knowledge and 60% of the subjects had poor knowledge related to symptoms and quality of life of menopause. In all 50% of menopausal women maintain the quality of life. Majority (85%) of the menopausal women faced the problem of hot flushes. A similar study was conducted by Nagar and Dave to find out the perception of middle-aged women regarding physiological problems faced during this period. Samples of 30 married women in the age range of 39 to 52 years were selected through snowball technique from middle socio-economic group of people in Baroda city. Results indicated that the mean age at menopause was 44.59 years. It was found that women reported problems like backache, uneasiness, fatigue, increased headache, hot flushes and sleep disturbances during the menopausal period. It was found that 89 percent of women complained of hot flushes.

The present study findings are consistent with a study conducted by Pathak et al. to assess knowledge, attitude and practice regarding menopause among menopausal women attending outdoor in a tertiary care center. This analytical study was conducted for a period of 1 year in postmenopausal women attending outdoor in Department of Obstetrics and Gynecology, Sultania Zanana Hospital, Gandhi Medical College, Bhopal, Madhya Pradesh, India. The instrument used in this study was structured questionnaire consisting of 19 items in Hindi language, developed on the basis of the objective of the study. The study findings revealed that 32.72% of menopausal women had knowledge of menopausal symptoms. 39.09%, 52.72% and 22.72% knew that menopause increases risk of cardiovascular, osteoporosis and breast cancer respectively. 28.18% think menopausal women should consult a physician, only 4.54% of menopausal women were aware of HT. 64.55% of menopausal women perceive menopause as loss of youth. 67.28% think menopause psychological symptoms affect quality of life. 57.28% think that menopause means end of sexual life. 30% think that menopause is associated with maturity and experience. 46.27% think that absence of menstruation in the postmenopausal period is a relief. 39.10% think physical changes of menopause are inevitable and hence acceptable. 29.09% had consulted a physician at the onset of menopause.

**Conflict of Interest:** None

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