Effect of Educational Package based on Individual Empowerment Model on Self-Efficacy, Self-Esteem and Quality of Life of Menopausal Women

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Abstract:

Background: Menopause is a physiologically normal phase of a woman's life; however, a variety of symptoms may be experienced by many women during this time, which can have a negative impact on their self-efficacy, self-worth, and quality of life. **Aim:** The research aimed to examine the effect of educational package based on individual empowerment model on self-efficacy, self-esteem and quality of life of menopausal women. **Design:** The quasi-experimental research design was implemented. **Study Setting:** The investigation was conducted at the Faculty of Education at Benha University in Qaliobya governorate, Egypt. **Sample:** A purposive sample, 57 menopausal women were recruited **Tools:** Five primary instruments were implemented: a structured self-administered questionnaire, general self-efficacy scale, Rosenberg self-esteem scale and the Utian quality of life scale **Results:** At the pre-intervention, 1-month, and 2-month post-intervention phases, menopausal women exhibited a significant improvement in menopausal rating symptoms, self-efficacy, self-esteem, quality of life, and satisfaction with life. **Conclusion:** Menopausal women exhibited an increase in self-efficacy, self-esteem, quality of life, and satisfaction with life which reflected approval of the research hypothesis. **Recommendations:** Continuing educational package based on individual empowerment model in other different health care settings in order to enhances' knowledge, self-efficacy and self-esteem, life satisfaction and quality of life of menopausal women with different health problems.

Keywords: Educational Package, Empowerment Model, Menopausal Women, Quality of Life, Self-efficacy, Self-esteem.

Introduction:

The point at which a woman's menstrual periods end is referred to as the menopause. When a woman has not had period for a full year, woman is diagnosed with menopause. Menopause is one stage of midlife that a woman may find either straightforward or challenging to navigate. Menopause is a critical transition from a generative to an infertile state during a woman's reproductive life cycle **(Simbar, et al., 2023).** In the life of a woman, the levels of progesterone and estrogen are essential. The onset of menopause, which is the complete shut-down of the ovaries, is the consequence of a progressive decrease in of progesterone and estrogen levels **(El Hajj, et al., 2020).** The climacteric period, which signifies the transition from a woman's reproductive age to the post-reproductive age, encompasses the premenopausal, perimenopausal, and

postmenopausal periods **(Zaman, et al., 2022).**

Epidemiological studies suggest that the symptoms of menopause are experienced by as many as 65 to 85 percent of menopausal women. Sweating, palpitations, sleep disorders, irritability, lethargy, depression, insomnia, pain in the muscles and joints, shortness of breath, weight gain, growing facial hair, anxiety, problems with sexual function, and problems with the urinary tract are among the symptoms that may accompany this condition. These symptoms detrimentally affect the biological, psychological, and social well-being of women and impair their overall health **(Theis, et al., 2023).** Menopause occurs between the ages of 40 and 60, with a median age of approximately 49 to 51 years. Menstrual cycles that are irregular or expanded are an indicator of the transition from the reproductive period to menopause, which can last for four to eight years **(Peycheva, et al., 2022).**

"A woman's perception of their position in life in relation to their goals, expectations, standards, and concerns, as well as the culture and value systems in which women live" is included in the concept of quality of life (QOL). The six domains of QOL are: psychological condition, spiritual concerns, social interactions, physical health, environmental characteristics, and level of independence. Menopause symptoms may have a detrimental effect on the QOL, which are experienced by three out of every four women to varying degrees **(Gürler, et al., 2020).** During the perimenopausal and early postmenopausal years, women's quality of life declines significantly **(Kahlout, et al., 2023).**

Enhancing and maintaining a high quality of life is a critical health objective for governments and health care authorities, as well as for menopause-related medicine. QOL is regarded as a critical health factor, particularly for women who have experienced menopause **(Rathnayake, et al., 2019).** Given that the postmenopausal years account for one-third of the average woman's lifespan. As a result, it is essential to establish programs that will enhance the self-esteem and QOL of women who are experiencing menopause **(Taşkıran, and Özgül, 2021)**. Satisfaction with Life (SWL) is a unique aspect of subjective wellbeing that serves as a menopausal woman's comprehensive cognitive assessment of the content of life. Specifically, the assessments of menopausal women are determined by comparing the woman's self-selected criteria to her perceived living circumstances **(Sosa-Ortega, et al., 2022)**.

The woman's conviction that woman is a valuable and "good enough" individual is referred to as self-esteem. Menopausal women frequently experience diminished self-esteem as a result of their poor body image **(Gümüşsoy, et al.,2023).** The accumulation of weight and the increase in central adiposity are also associated with the menopausal transition. As a result, the probability of women experiencing negative self-esteem may be elevated by the physical alterations that occur following menopause. The QOL of menopausal women is significantly diminished by the preponderance of menopause symptoms, which have a detrimental effect on their self-esteem and body image. Women's increased self-esteem and self-worth facilitate the adjustment to the menopause and its accompanying symptoms **(Dąbrowska-Galas, and Dąbrowska, 2021)**.

In the presence of obstacles, self-efficacy is defined as the belief and capacity of individuals to attain specific levels of performance that exert influence over events

that impact individuals' lives. Self-efficacy is the extent to which an individual is confident in their capacity to perform a particular action in another context. Whereas self-esteem expectations are sense-specific, self-efficacy expectations are behavior-specific. **(Ebrahimi, and Rahimi, 2019**). Research has shown that perimenopausal women experience an improvement in their QOL and a reduction in anxiety when they possess high levels of self-efficacy. A woman who has a high level of self-efficacy will find it easier to adjust to the changes in her life, such as menopause **(Teja, et al., 2019).**

How empowered a woman feels can have an effect on her menopausal quality of life. In a societal context, empowerment is defined as the acknowledgement, advancement, and improvement of menopausal women's abilities to care for themselves, address their own issues, and gain control of their own lives. It is important to personalize empowering techniques for menopausal women based on their specific needs, characteristics, and sociocultural background so that they can better comprehend and cope with the menopause transition (**Soniya, 2020)**.

The five-stage empowerment model consists of being aware, being equitable, having access, participating, and having control. Respecting menopausal women's autonomy in making health care decisions is of the utmost importance. The QOL for menopausal women can be improved through a health education package that emphasizes empowerment (**Kafaei-Atrian, et al., 2023)**. An informational package is necessary for menopausal women whose symptoms are reducing their standard of living. One way to help women understand and cope with menopause is to provide them with an education package **(Karimi, et al., 2022)**. Physical exercise, stress reduction methods, a nutritious, well-balanced diet, and emotional support are all components of an ideal menopausal health education package (**Ramadan, et al., 2020)**.

Keep improving the nursing model of women's empowerment is critical since empowering women is a strategic step towards enhancing health status. Nurses play an important role in empowering women so that they can live safely, adequately, and productively through menopause and still contribute fully to their families and communities. In menopausal women's empowerment programs, nurses educate and care for women in an effort to improve their health. When women receive the education and social support they need, they are better able to take charge of their health and wellness. Good knowledge and healthy lifestyle behaviors have a positive impact on self-efficacy and life satisfaction in the long term and improve QOL (**Pradanie et al., 2022)**.

Significance of the study:

More and more women are going through menopause symptoms due to people living longer. After menopause, now women often continue to live for more than 30 more years on average. The average age of menopause is influenced by a variety of factors, including race, heredity, diet, physical activity level, and sexual behaviour. Menopause is a time of change for over 500 million women, typically between the ages of 45 and 55 **(Swain et al., 2021).** In the next ten years, 1.94 billion women around the world will experience menopause, according to the World Health Organization. The current global population of menopausal women is 894 million, but experts predict that number will rise to 1.2 billion by 2030. Put another way, 1.2 billion women will reach menopause by the year 2020, which is three times as many as were postmenopausal in the 2000 census. Developing countries are home to 80% of

postmenopausal women, and the menopause rate is increasing at a rate of about 3% per year (**Vidia, et al.,2021)**.

Natural menopause occurs in around 10% of American women before the age of 45 **(Ebong, et al., 2022)**. Studies show that at least 30% of women going through menopause have symptoms that are bothersome, frequent, and have a negative effect on their QOL **(Larroy, et al., 2020) & (Baral, and Kaphle, 2023)**. When compared to women around the world, Egyptians have a younger average menopause age of 46.7. For many reasons, including cultural and educational ones, Egyptian women's views on menopause differ greatly from Western women. (**Ibrahim, et al., 2022).** Researchers utilized the individual empowerment model to study menopausal women and their struggles with self-efficacy, self-esteem, and QOL.

Aim:

The present research aimed to examine the effective of health educational package based on individual empowerment model on self-efficacy, self-esteem and quality of life of menopausal women.

Hypothesis:

Menopausal women who will receive health educational package based on individual empowerment model will experience better knowledge, self-efficacy, self-esteem, quality of Life and satisfaction with life.

Conceptual definition

- **Quality of life (QOL):** Is an all-encompassing term that encompasses not only a person's mental and physical well-being but also their degree of autonomy, social connections, and personal beliefs, all of which are intricately related to critical environmental elements.
- **Self-efficacy:** places an emphasis on how well a person thinks they can carry out an action under given conditions.
- **Self-esteem**: as a person's subjective assessment of their feelings and convictions. One way to look at self-esteem is as a schema that acts as a filter, allowing one's mood and behaviour to be positively or negatively impacted by any external information.

Operational definition:

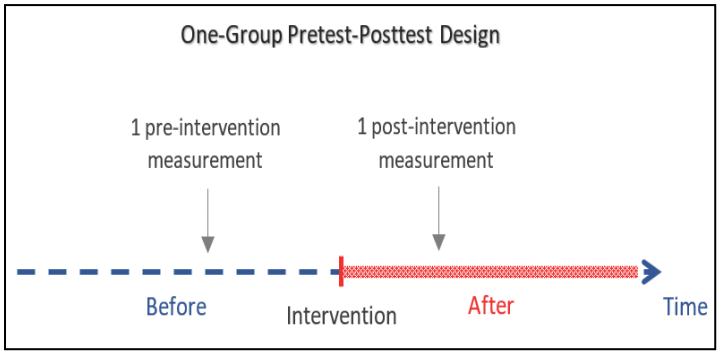
- **Individual Empowerment Model**: determines how much of an impact an individual can have on a decision-making process. This impact is measured by how well they can present relevant knowledge, the resources they have at their disposal, their ability to argue and convince, and the credibility of their participation. There are five steps to the individual empowerment model: being aware, being equitable, having access, participating, and having control.

Subjects and method:

Research Design:

This study achieved its goals by employing a quasi-experimental research design with a single group and a pre- and post-test. As a form of quasi-experiment, the one-group pretest-posttest design involves measuring the outcome of interest twice: once before and once after a non-random group of participants undergoes a specific intervention or treatment **(Choueiry, 2021).** One directionality benefit of a pre- and post-test study design is that it allows researchers to compare the levels of a dependent variable (in this case, self-efficacy, self-esteem, and QOL) before and after an intervention using an independent variable (in this case, an educational package based on the individual

empowerment model) **(Cambridge University Press, 2019)**.



Study Setting:

The research was carried out in Faculty of Education at Benha University in Qaliobya governorate, Egypt. This Faculty was established in 1976 AD as one of the faculties of Zagazig University, Banha branch. The actual study began in the academic year (1977/1978). The study began with the first year in the university administration building, then the study moved to the old building of the Faculty of Education (currently Physical Education).) in the year (1979), then the study moved to the college complex building in the academic year (2000) and the study continued there until a special building for the college was constructed in the college complex in Kafr Saad and it was moved to in the year (2013); The new location of the college consists of (2) buildings, the first is the administrative building, which includes (4) floors in addition to the ground floor and the basement, and the second building is the terrace building, which consists of two floors in addition to the ground floor. This college was specifically chosen due to its proximity to the College of Nursing, which makes it easier for researchers to conduct research easily and conveniently, due to the close distance and availability of the study sample in sufficient numbers.

Sampling:

Sample type, size and criteria: A purposive sample of 57 menopausal women was selected from the 69 menopausal women in the aforementioned research contexts. To minimize the transmission of information between groups during the research phases, each department or a maximum of two departments was dedicated to forming a single group. The menopausal women in each department were selected based on the following **inclusion criteria:** aged between 40 to 60 years, postmenopausal women (≥ 12 months of amenorrhea), married for sexual domain assessment, not using any form of hormonal replacement therapy for six months prior to the study (herbal/chemical), and no history of drug addiction or alcohol misuse. **The exclusion criteria:** women who have undergone hysterectomies, those who have undergone induced menopause, or those who have uncontrolled medical conditions such as hypertension, diabetes mellitus, cardiac disease, or cancer therapy.

Number of menopausal women in different departments as follow:

Department	No.	Department	No.
Dean's Secretarial Office	3	Information Technology Unit	2
Departments secretariat	12	Legal affairs office	2
Faculty Member Affairs Office	2	Financial entitlements Office	3
Postgraduate Studies Office	6	Accounting Unit Office	5
Graduates Affairs Office	2	Library staff	2
Student Affairs Office	4	Stores office	3
Employers Affairs Office	5	Female workers or cleaners	3
Youth Welfare Office	3	----------	-

Tools of data collection:

Data was acquired through the utilization of five instruments. The research participants' native language is Arabic, and all instruments were translated into this language.

Tool I: A structured self-administered questionnaire: After examining relevant literature, researchers crafted it. **(Song, et al., 2022)** & **(Hashem, et al., 2020)**. It involved two parts:

Part (1): **Personal characteristics of women:** included seven variables which were (age, age at menopause, residence, level of education, occupation, monthly income and duration since menopause).

Part (2): **Menopause Rating Scale (MRS) (pre/posttest):** It was developed by **(Heinemann et al., 2002)** in order to evaluate the menopausal symptoms' frequency and intensity in relation to the women's subjective ratings of their own complaints (a proper box needs to be clicked). Eleven items, classified as symptoms or complaints, make up the MRS. Following its validation in an Egyptian study by **(Sweed, et al., 2012)**, the current investigation used an Arabic version of the MRS. The MRS is categorized under three domains or subscales: Hot flushes, cardiac discomfort/palpitation, sleeping difficulties, and muscle and joint issues are all considered somatic. Psychological—irritability, anxiety, depression, and symptoms of physical and mental fatigue. Urogenital—dryness of the vagina, bladder problems, and sexual difficulty.

Scoring algorithm:

On the five-point likert scale, which is utilized to rate each item in the scale, 0 signifies no symptoms and 4 indicates extremely severe symptoms. The sum of the points from each item is used to calculate the total score, which can range from 0 (asymptomatic) to 44. There is an obvious point system for scoring; as the perceived severity of symptoms rises across all eleven items, the score rises accordingly. Here are the different ways the severity summation scores were classified:

-None/little symptoms = 0–4

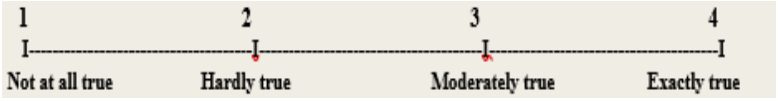
-Mild symptoms = 5–8

-Moderate symptoms = 9–16

- Severe/very severe symptoms = 17+

Tool II: General Self Efficacy Scale (GSE) (pre/posttest): (Schwarzer and Jerusalem, (1995) created the scale, which has been used in a plethora of studies with thousands upon thousands of subjects. The scale is currently compatible with 32 languages. The purpose of this 10-item, one-dimensional psychometric scale is to evaluate the extent to which an individual believes in their own capacity to overcome adversity.

Scoring algorithm:

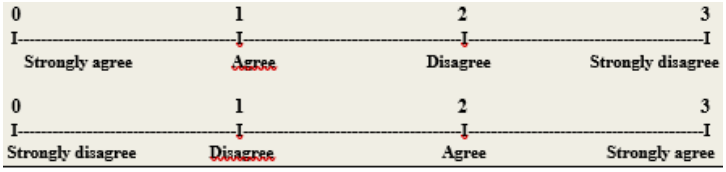


A four-point likert scale was used to answer each question; 1 meant not at all true and 4 meant exactly true. Total scores, which can be anything from 10 to 40, improve the SE. Using the cumulative mean score, we were able to differentiate between the intervention phases in terms of menopausal women's self-efficacy.

Tool III: **Rosenberg Self-Esteem Scale (RSES) (pre/posttest):** the scale was developed by **(Rosenberg, 1965),** adapted and translated into a variety of languages It is

a 10-item scale that is one-dimensional and is employed to assess global self-worth by evaluating both positive and negative emotions about oneself.

Scoring algorithm:



A 4-point Likert scale format is employed to respond to all items, with responses ranging from strongly concur to strongly disagree. The following is the method by which scores are determined: Five of the items contain statements that are positively phrased, while five are negatively phrased. **For items 1, 2, 4, 6, and 7:** Strongly agree = 3, Agree = 2, Disagree = 1 and Strongly disagree = 0. **For items 3, 5, 8, 9, and 10** (which are reversed in valence): Strongly disagree = 3, disagreement = 2, and agreement = 0. A higher score on the scale indicates a higher level of self-esteem, with a range of 0 to 30. At times, the total score is divided into three levels:

- Low (0–10): Feelings of incompetence, inadequacy, and difficulty facing life's challenges.
- Medium (11–20): Fluctuating between feelings of approval and rejection.
- High (21–30): Self-judgment of value, confidence, and competence.

Tool IV: The Utian Quality of Life (UQOL) Scale: It was adopted from **(Utian et al., 2018).** Four factors and twenty-three items make up the model. It was used to measure women's subjective well-being and quality of life during menopause. How much does woman agree with the scale statements that apply to woman in the last month? We asked the women to do just that. Here are the four groups into which these claims were placed:

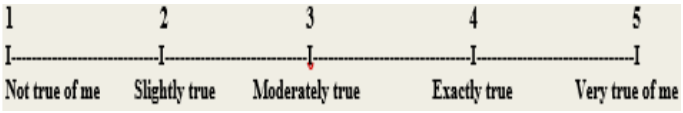
Factor 1: Occupational QOL (seven items): I take pride in my professional achievements, my work challenges me, I think my work helps society, I always aim high in my career and personal life, and I've gotten a lot of praise from people in my community and at work.

Factor 2: Health QOL (seven items): in spite of my belief that I have no control over my physical health, I exercise consistently three times a week and do not experience any negative effects from my workouts. I am self-conscious about my weight and eat poorly, but I am able to regulate my portion sizes.

Factor 3: Emotional QOL (six items): I am somewhat in charge of some parts of my life, but I'm generally depressed and anxious; I can't do much about most things that happen; I'm experiencing pain or discomfort whenever I get sexually active right now; and I believe that positive things will happen in my life.

Factor 4: Sexual QOL (three items): I am not content with my sexual life; I am content with my romantic life and I am content with the frequency of my sexual interactions with a partner.

Scoring algorithm:



A 5-point Likert-type scale was used to answer each question on the UQOL, with 1 indicating that the statement was not true and 5 indicating that it was very true. Just adding up all of the question scores for that factor yielded the factor scores. Here are the inversed negative item scores: 4, 7, 8, 11, 12, 13, 15, and 16. It was necessary to add the component scores in order to get the total score. A higher total score on the Utain QOL scale indicates a higher quality of life. The scale runs from 23 to 115.

Total QOL **score was classified into three levels:**

- High QOL: if the total scores (≥ 75 %)
- Moderate QOL: if the total scores (60 % - < 75%)
- Low QOL: if the total score (<60 %)

Tool V: Satisfaction with Life Scale (SWLS): It was adapted from **(Diener et al., 1985 & Pavot et al., 1991).** So far, I have accomplished most of my life goals, my living circumstances are perfect, I am happy with my life, and I would change very little if I could go back in time and do it all over. These are the five points that comprise the brief 5-item SWLS, a tool for gauging overall subjective evaluations of life satisfaction. The scale uses a Likert scale for scoring, so respondents usually only need about a minute to finish it. Since the questions on this scale are not directive, it is suitable for use by adults of various backgrounds. It should be used by those who aren't receiving medical treatment. Minimal changes were made to the total score classification to make statistical analysis easier.

Scoring algorithm:

A 7-point Likert scale was used to assess each item. For each item, we asked the women to put a number on the line that corresponded to their level of agreement. The following is an evaluation of how seriously each question was taken: A total of seven people is in complete agreement, six are in agreement, five are somewhat in agreement, four are unsure, and three are indifferent. Is slightly disagree, two equals disagree, and one equals strongly disagree. Scores can be anywhere from five to thirty-five. A total score is calculated by adding up the scores for each item. Scores can be anywhere from five to thirty-five. The overall SWL score was categorized as:

- A score of 20 representing a neutral point on the scale.
- Scores between 5-19 indicate the respondent is unsatisfied with life
- Scores between 21-35 indicate the respondent is satisfied.

Administrative approval:

The study's purpose was explained to the dean of the faculty of education at Benha University, and after receiving written formal approval from the dean of the faculty of nursing, permission to conduct the study was obtained.

Tools validity and reliability:

In order to guarantee that the questionnaires were clear, relevant, comprehensive, and applicable, a panel of five jury experts from Benha University's department of obstetrics and gynecological nursing and community health nursing assessed their validity. Some sentences needed to be slightly revised. The instruments were deemed legitimate in the opinion of the specialists.

Tools reliability:

The reliability of tools was done by Cronbach's Alpha coefficient test, which illustrated that, the internal consistency of each tool as following:

Tool	Cronbach's alpha value
Tool I: Menopause Rating Scale (MRS)	Internal consistency range between 0.60 and 0.90 for the total score as well the scores in the three domains.
Tool II: General Self Efficacy Scale (GSE)	Internal consistency ranged from .76 to .90, with the majority in the high .80s. .
Tool III: Rosenberg Self-Esteem Scale (RSES)	High internal consistency in the range of .77 to .88
Tool IV: The Utian Quality of Life (UQOL)	Overall internal consistency (α = 0.88). Internal consistency four domains: 0.79 health, 0.78 emotional, 0.76 sexual, and 0.75 occupational.
Tool V: Satisfaction with Life Scale (SWLS)	Good internal consistency (α = 0.74).

Ethical consideration:

The following ethical considerations were made prior to the commencement of the study: The scientific research ethics committee of Benha University's nursing faculty gave their approval for the study to go ahead. In order to conduct the study, formal approval was sought from the designated study locations. In order to win over the women's trust and confidence, the researchers explained the study's purpose and significance before administering the instruments. Before recruiting women to take part in the study, researchers made sure their information would remain private by obtaining their verbal consent. The women involved in the study were not exposed to any risks, either physically or mentally. In order to protect the privacy of the women who took part, we destroyed all records of the data after we ran the numbers. Respected human rights and refrained from making any unethical remarks. At any moment, the women could choose to stop participating in the study.

Pilot study:

To ensure that the tools were clear, objective, feasible, and applicable, as well as to identify any potential issues that could arise during data collection, the pilot study used 10% of the total sample size (6 women). It also sought to identify any issues specific to the statements, such as the order of questions and clarity. It was also useful for estimating how long data collection would take. In order to prevent sample contamination, the pilot sample was removed from the study and adjustments were made based on the results.

Field work:

The research, which lasted for six months, began in early February 2024 and ended in late July 2024. Researchers met at the aforementioned location twice weekly (on Sundays and Wednesdays) from 10:00 am to 2:00 pm to collect data until the specified number of participants was reached. Group interviews were conducted with the menopausal women. In order to impart knowledge and offer counselling for lifestyle modifications, the researchers in the study created an educational package based on the individual empowerment model. All of the menopausal women in the study were given a booklet at the end of the study to help them cope with the changes that come with menopause and how to make lifestyle changes to ease it.

There were five stages to the implementation of the educational package depending on the individual empowerment model: preparation, interviewing and assessment, planning, implementation, and evaluation.

Preparatory phase:

The researchers surveyed relevant literature on the topic, both domestically and abroad, before getting into the study. This acquainted the researchers with the problem's size and gravity, which in turn helped them prepare the necessary data collection instruments. To ensure the tools were suitable, thorough, easy to understand, important, and applicable, they were given to three obstetrics and gynaecological nursing faculty members at Benha University to evaluate. The jury's verdict was reached.

Interviewing and assessment phase:

The researchers initiated the interview by greeting the woman, introducing themselves to each woman involved in the study, elucidating the research's purpose, providing the woman with all relevant information, and obtaining her oral consent to participate in the study. **Tool (I) "Part:1":** In order to evaluate the personal characteristics of each menopausal woman, a structured self-administered questionnaire was distributed. **"Part:2":** To assess the prevalence and severity of menopausal symptoms, the

Menopause Rating Scale is employed. Next, the researchers distributed **Tool (II)**: An optimistic self-belief assessment tool for dealing with life's many challenges, the General Self-Efficacy Scale, **Tool (III)**: Rosenberg Self-Esteem Scale (RSES) to assess global self-worth of women, **Tool (IV):** The Utian QOL is a tool used to evaluate the QOL and perception of well-being of menopausal women. **Tool (V):** Satisfaction with Life Scale to measure global cognitive judgments of satisfaction with women's life. All these variables were assessed within the past month.

Planning phase:

The researchers devised an educational package regarding menopause that was based on the individual empowerment model. The package was presented in the form of a printed booklet that was accompanied by coloured and illustrated images, as a result of the results obtained during the assessment phase. The booklet was specifically created for menopausal women in a straightforward Arabic language to accommodate their level of comprehension and to address the women's lack of knowledge regarding menopause and lifestyle modifications. The objective was to improve the self-efficacy, self-esteem, and QOL of the women who were studied. The contents of the training sessions were determined in accordance with the five phases of the individual empowerment model for each group. In addition, a variety of instructional media and teaching methods were implemented, including ideation, critical thinking, group discussions, and lecturing. The booklet was distributed to all recruited women in the study during the first session as instructional media in order to accomplish its objectives.

Objectives were constructed to be attained after completion of educational package based on individual empowerment model taking into consideration that the components of the empowerment model included self-esteem and self-efficacy. So, the aim and importance of empowerment model is to construct (self-efficacy, self-esteem) among menopausal women. The general objective was: by the end of individual empowerment model based educational interventions, each menopausal woman will be able to acquire essential knowledge, improve women's self-efficacy and self-esteem and so attain better satisfaction and quality of life.

Implementation phase:

In order achieve the purpose of this study, the following **five stages** based on **individual empowerment model** were adopted; **awareness, equity, access, participation and control**. Over the course of three weeks, 57 menopausal women were randomly assigned to one of six groups and given individual instructions on each of the five stages. Each group consisted of nine women, and each session lasted 40 to 50 minutes. Keep in mind that these five steps must be interwoven rather than presented independently; however, for the sake of clarity, we will do so in the following sections. **(Longwe S., 1991 & Yazdkhasti et al., 2015):**

- **Awareness stage,** in the initial session, participants were educated about the symptoms of menopause and how to cope with them. Topics covered included healthy eating, regular exercise, getting enough sleep, hot flashes, osteoporosis, erectile dysfunction, vaginal dryness, changes in appearance, hair thinning, weight gain, and fat accumulation in the abdominal and chest areas. Advising the women on the following could help them reach this level:

- **Nutritional pattern** as (Balanced meals "very low carbohydrate, high protein low-fat diets and high fibers", Small, frequent meals every day 4 – 5 times, Decreased calorie intake, Fish diet rich in omega-3 such as salmon or tuna, olive oil instead of butter or ghee, beans and other legumes rich in protein instead of meat, Non-starchy vegetables such as leafy greens, whole grains, such as brown rice or barley, drink plenty of water, reduce refined white sugar and replace it with honey, limit salt intake ,reduce dairy and gluten products…..etc)
- **Physical activity** as (exercising regularly to strengthen muscles at least walk quietly for 20 minutes daily and walking instead of taking the car when going to work or the markets)
- **Psychological status** as (avoid psychological stress, anxiety through practicing relaxation techniques as breathing exercises and yoga. Also, women should be advised to avoid smoking and minimize alcohol intake).

- **Equity stage,** in the second session, menopausal women were introduced to the various scenarios in which they can engage in social or professional communication, including sports, religious or educational events, social gatherings, and planned excursions.
- **Access stage,** in the third session, menopausal women were instructed on how to obtain insurance and were introduced to free health counselling centers, screening, nutrition, and psychology, as well as free medical and dental centers. The participant was assisted in the discussion of barriers and strategies for their eradication. In addition, researchers assisted each woman in identifying the sources of social support for nutrition, physical activity, or psychological support, based on the aforementioned barriers. These barriers such as (poor dissemination of awareness, lack of credible information, perceived lack of motivation for weight management, time constraints, lack of financial support, limited access to resources, inadequate social support, family motivation, lack of positive health expectancies and inappropriate communication). The researchers assisted the menopausal women to overcome these barriers through different barrier removal strategies that is suitable for each woman.
- **Participation stage,** in the fourth session, menopausal women acquired the ability to leverage the influence of all family members and distribute responsibilities among them. Furthermore, it was recommended that menopausal women convene to address shared issues, which frequently resulted in the establishment of women's networks to facilitate the exchange of experiences and solutions.
- **Control stage,** in the fifth session, menopausal women is taught that men and women have equal power and that neither is supreme. What this means is that women, like men, have the ability to shape their own and society's future. Consequently, women need to have the agency to have a say in the decisions that affect them and their communities. On top of that, menopausal women figured out how to make affordable, age-appropriate meals that were low in sugar, fat, salt, and calories.

Evaluation phase:

By making available the identical format of the assessment tools (Tools I–V), the researchers were able to gauge the efficacy of this curriculum bundle. Individual empowerment model–based instructional packages required participants to fill out questionnaires three times: once before the intervention, once every month, and again

every two months as a follow-up to the last session. It was acceptable for women to fill out the survey independently.

Statistical analysis:

All data was double-checked before it was entered into the computer system. We used suitable statistical methods and tests to organize, code, and computerize the data we acquire. As a statistical tool, SPSS version 22.0 was utilized. Among the descriptive statistics that were included were means, standard deviations, percentages, and frequencies. To assess the research hypotheses, inferential statistics such as the paired t test and chi-square test were utilized. To examine the connection between the aggregate scores of the research variables, the correlation coefficient was employed. A p-value greater than 0.05 signified no statistically significant difference, a p-value less than or equal to 0.05 meant a statistically significant difference, and a p-value less than or equal to 0.001 meant a highly statistically significant difference across all statistical tests.

Results:

Table (1): Reveals that more than half (56.1%) of studied women were in age group 40 – <50 years old with a mean age of 48.65±5.46 years. The age at menopause of more than three-quarters (75.4%) of them was < 50 years old; therefore, less than three-quarters (70.2%) of them become menopause since less than 5 years ago. Concerning the residence, less than two-thirds (64.9%) of them lived in rural areas. Furthermore, less than half of them (49.1%) and (43.9%) had university and secondary or technical education respectively. Pertaining to the monthly income, more than two-thirds (68.4%) of them didn't have enough income.

Table (2): Reveals that there was a highly statistically significant difference between mean scores of all studied women's menopausal rating symptoms domains at pre-intervention, 1 month and 2 months post-intervention phases with (p- value<0.001).

Figure (1): Displays that, (17.5%), (49.1%) and (52.6%) of studied women had mild menopausal symptoms at pre-intervention, 1 month and 2 months post-intervention phases respectively.

Table (3): Reveals that there was highly statistically significant difference between mean scores of all items of the self-efficacy of studied women at pre-intervention, 1 month and 2 months post-intervention phases with (p- value<0.001).

Figure (2): Illustrates that the total mean score of self-efficacy of studied women was raised from 19.70±3.38 at pre-intervention phase to 26.26±2.84 and 26.82±2.76 at 1 month and 2 months post-intervention phases respectively; in the favor of 2 months post-intervention phase.

Table (4): Reveals that there was highly statistically significant difference between mean scores of all items of the self-esteem of studied women at pre-intervention, 1 month and 2 months post-intervention phases with (p- value<0.001).

Figure (3): Clears that the total mean score of self-esteem of studied women was improved from 18.61±2.66 at pre-intervention phase to 24.43±2.26 and 25.38±1.92 at 1 month and 2 months post-intervention phases respectively; in the favor of 2 months post-intervention phase.

Table (5): Indicates that, there was a high statistically significant difference among mean scores regarding menopausal women's QOL domains at pre-intervention, 1 month and 2 months post-intervention phases with (p- value<0.001). The total mean score of QOL of studied menopausal women was elevated from 77.87±7.46 to 95.33±7.64 and

96.43±6.46 throughout intervention phases; in the favor of 2 months post-implementation phase.

Figure (4): Displays that, (22.8%), (56.1%) and (61.4%) of studied menopausal women had high quality of life at pre-intervention, 1 month and 2 months post-intervention phases respectively.

Table (6): Indicates that, there was a high statistically significant difference among mean scores regarding all items of menopausal women's satisfaction with life at pre-intervention, 1 month and 2 months post-intervention phases with (p- value<0.001). The total mean score of satisfaction with life of studied menopausal women was raised from 12.96±3.59 to 20.05±3.61 and 20.19±3.30 throughout intervention phases; in the favor of 2 months post-implementation phase.

Figure (5): Displays that, (21.1%), (57.9%) and (61.4%) of studied menopausal women were satisfied with their life at pre-intervention, 1 month and 2 months post-intervention phases respectively.

Table (7): Explains that; there was increased significant statistical positive correlation between total quality of life score and total scores of (menopausal rating symptoms, self-efficacy, self-esteem and satisfaction with life) of the studied menopausal women regarding at pre-intervention, 1 month and 2 months post-intervention phases (P≤ 0.001).

Table (1) Distribution of the studied women according to their personal characteristics (n=57).

Personal characteristics	No	%
Age (in years):		
40 – <50	32	56.1
50 – 60	25	43.9
Mean ± SD = 48.65±5.46		
Age at menopause:		
< 50 years	43	75.4
≥ 50 years	14	24.6
Residence:		
Rural	37	64.9
Urban	20	35.1
Level of education:		
Read/write	2	3.5
Primary education	2	3.5
Secondary or technical education	25	43.9
University education	28	49.1
Monthly income		
Enough	18	31.6
Not enough	39	68.4
Duration since menopause		
Less than 5 years ago	40	70.2
5 or more years	17	29.8

Table (2): Mean scores of studied women's menopausal rating symptoms of throughout intervention phases (n=57).

Menopause Rating domains	Min./Max. score	Pre-intervention	1 month post-intervention	2 months post-intervention	ANOVA	
		Mean ± SD	Mean ± SD	Mean ± SD	F	p-value
Somatic symptoms:						
Hot flushes	0/4	2.25±0.91	1.53±1.05	1.35±1.06	12.53	0.000**
Heart/ discomfort/ palpitation	0/4	1.19±.78	0.60±0.72	0.58±0.65	13.22	0.000**
Sleeping problems	0/4	2.37±1.12	1.46±0.86	1.35±0.87	19.17	0.001**
Muscle and joint problems	0/4	1.22±.16	0.98±0.13	1.02±0.13	12.00	0.000**
Psychological symptoms:						
Depressive mood	0/4	2.51±0.88	1.79±0.86	1.60±0.90	16.84	0.000**
Irritability	0/4	2.02±1.21	1.21±0.78	1.12±0.80	15.09	0.000**
Anxiety	0/4	1.79±1.23	1.16±0.80	1.04±0.94	9.08	0.000**
Physical and mental exhaustion	0/4	1.93±1.23	1.32±0.80	1.09±0.85	11.17	0.000**
Urogenital symptoms:						
Sexual problems	0/4	1.30±.82	0.58±0.62	0.49±0.60	23.44	0.000**
Bladder problems	0/4	1.16±0.99	0.67±0.74	0.61±0.75	7.31	0.001**
Dryness of the vagina	0/4	1.42±1.06	0.60±0.67	0.53±0.73	19.78	0.000**
Total score	**0/44**	**20.22±4.69**	**12.42±2.53**	**11.12±3.48**	**102.05**	**0.000****

*A Statistical significant p ≤ 0.0 **A Highly Statistical significant p ≤ 0.001

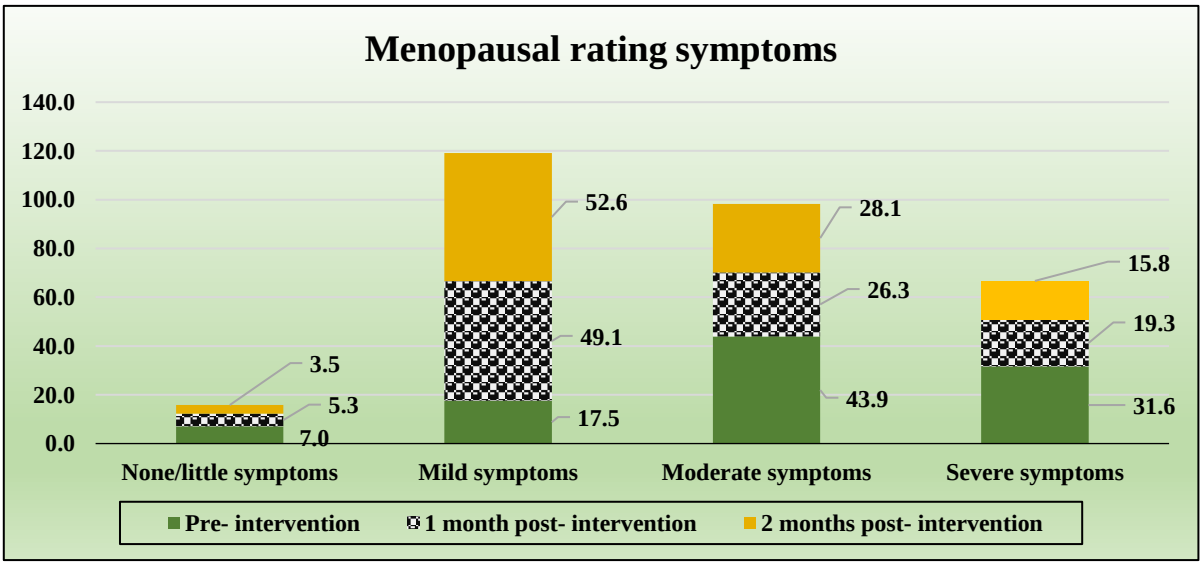


Figure (1): Percentage distribution of studied women regarding their total menopausal rating symptoms throughout intervention phases (n=57).

Table (3): Mean scores of studied women's self-efficacy throughout intervention phases (n=57).

Self-efficacy items	Min./Max. score	Pre-intervention	1 month post-intervention	2 months post-intervention	ANOVA
		Mean ± SD	Mean ± SD	Mean ± SD	F p-value
I can always manage to solve difficult problems if I try hard enough.	1/4	2.02±0.71	2.75±0.91	2.81±0.89	15.49 0.000**
If someone opposes me, I can find the means and ways to get what I want.	1/4	1.93±0.88	2.53±0.63	2.58±0.75	12.72 0.000**
It is easy for me to stick to my aims and accomplish my goals.	1/4	1.89±0.92	2.81±0.91	2.84±.090	19.75 0.001**
I am confident that I could deal efficiently with unexpected events.	1/4	2.56±0.90	3.26±0.89	3.42±0.82	15.54 0.000**
Thanks to my resourcefulness, I know how to handle unforeseen situations.	1/4	2.21±0.64	3.25±0.87	3.28±0.90	31.73 0.000**
I can solve most problems if I invest the necessary effort.	1/4	1.93±0.70	2.68±0.94	2.72±0.88	15.67 0.000**
I can remain calm when facing difficulties because I can rely on my coping abilities.	1/4	2.28±0.88	2.93±0.82	3.05±0.85	13.49 0.000**
When I am confronted with a problem, I can usually find several solutions.	1/4	1.91±.76	2.61±1.03	2.68±1.02	10.38 0.000**
If I am in trouble, I can usually think of a solution.	1/4	2.47±.94	3.04±.92	3.09±.91	7.66 0.000**
I can usually handle whatever comes my way	1/4	2.40±0.88	3.02±0.85	3.04±0.82	10.10 0.000**
Total score	**10/40**	**19.70±3.38**	**26.26±2.84**	**26.82±2.76**	**98.72 0.000****

*A Statistical significant p ≤ 0.0 **A Highly Statistical significant p ≤ 0.001

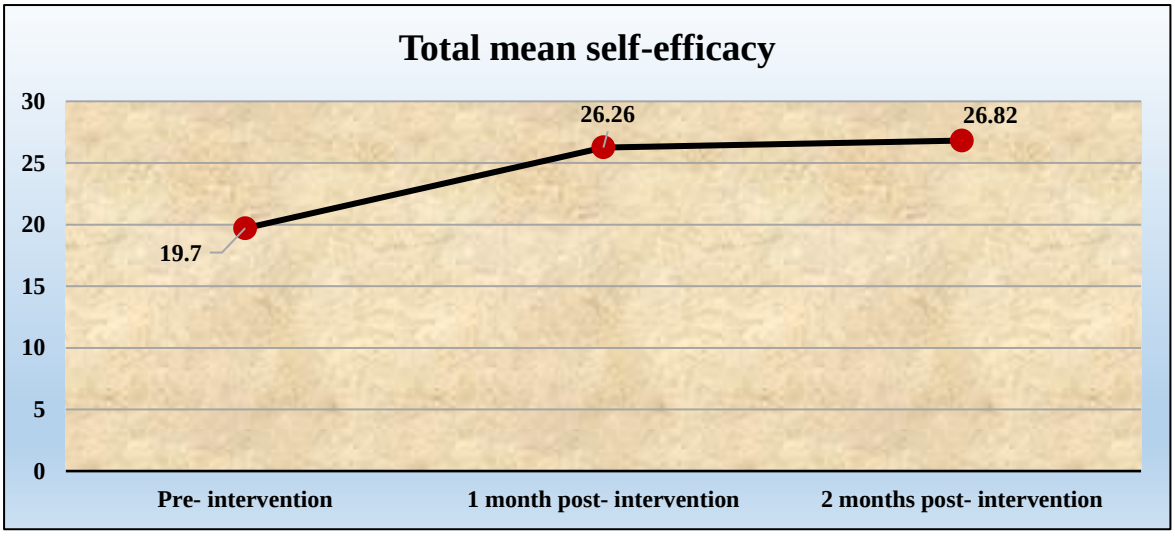


Figure (2): Total mean score of self-efficacy of studied women at pre-intervention, 1 month and 2 months post-intervention phases (n=57).

Table (4): Mean scores of studied women's self-esteem throughout intervention phases (n=57).

Self-esteem items	Min./Max. score	Pre-intervention	1 month post-intervention	2 months post-intervention	ANOVA
		Mean ± SD	Mean ± SD	Mean ± SD	F p-value
I feel that I am a person of worth, at least on an equal plane with others.	0/3	1.63±5.95	2.39±5.86	2.44±5.88	14.26 0.000**
I feel that I have a number of good qualities.	0/3	2.14±5.63	2.54±5.68	2.63±5.58	9.62 0.000**
All in all, I am inclined to feel that I am a failure.	0/3	1.91±5.83	2.39±5.67	2.47±5.63	10.12 0.001**
I am able to do things as well as most other people.	0/3	2.25±0.73	2.61±0.55	2.67±0.54	7.78 0.000**
I feel I do not have much to be proud of.	0/3	1.74±0.66	2.39±0.67	2.54±0.60	24.77 0.000**
I take a positive attitude toward myself.	0/3	1.70±0.86	2.28±0.62	2.40±0.62	15.79 0.000**
On the whole, I am satisfied with myself.	0/3	1.89±0.74	2.39±0.70	2.51±0.65	12.16 0.000**
I wish I could have more respect for myself.	0/3	2.14±0.61	2.68±0.46	2.74±0.44	23.60 0.000**
I certainly feel useless at times.	0/3	1.82±0.80	2.51±0.60	2.56±0.59	21.14 0.000**
At times I think I am no good at all.	0/3	1.39±0.90	2.26±0.69	2.42±0.62	31.52 0.000**
Total score	**0/30**	**18.61±2.66**	**24.43±2.26**	**25.38±1.92**	**144.51 0.000****

*A Statistical significant p ≤ 0.0 **A Highly Statistical significant p ≤ 0.001

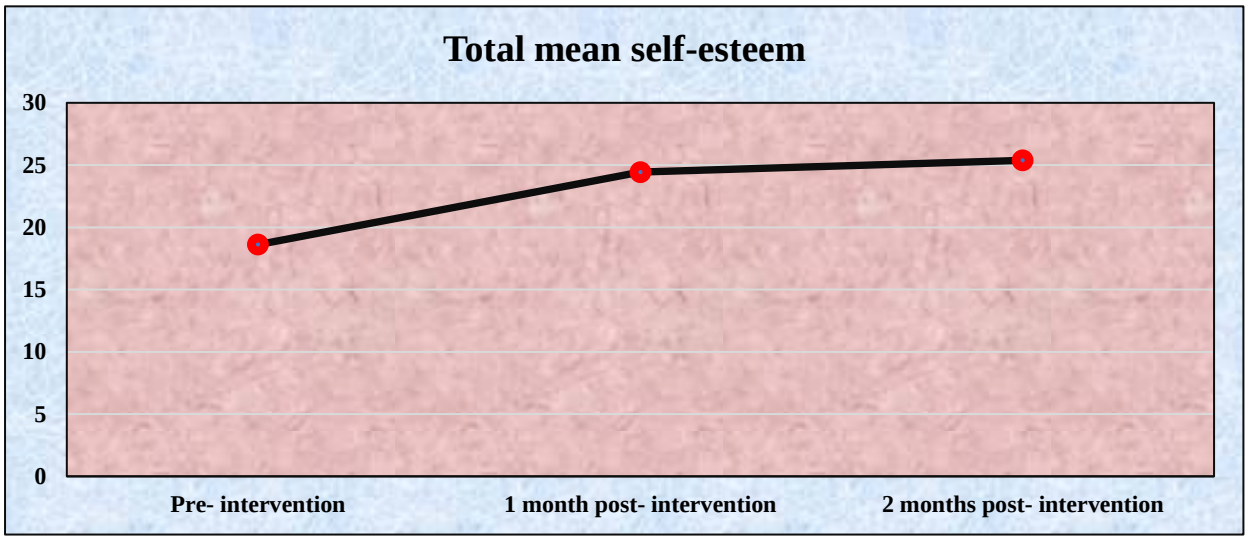


Figure (3): Total mean score of self-esteem of studied women at pre-intervention, 1 month and 2 months post-intervention phases (n=57).

Table (5): Mean cores of studied women's quality of life domains throughout intervention phases (n=57).

(UQOL) factors	Min./Max. score	Pre-intervention	1 month post-intervention	2 months post-intervention	ANOVA	
		Mean ± SD	Mean ± SD	Mean ± SD	F	p-value
Occupational QOL (7 items)	7/35	23.95±5.09	28.88±4.41	29.00±4.44	21.81	0.000**
Health QOL (7 items)	7/35	20.96±4.58	26.53±4.27	26.95±4.45	32.22	0.000**
Emotional QOL (6 items)	6/30	21.49±3.39	27.35±2.85	27.54±3.00	70.59	0.000**
Sexual QOL (3 items)	3/15	11.47±1.62	12.58±1.47	12.95±1.45	14.48	0.000**
Total score	**23/115**	**77.87±7.46**	**95.33±7.64**	**96.43±6.46**	**118.74**	**0.000****

*A Statistical significant $p \leq 0.0$ **A Highly Statistical significant $p \leq 0.001$

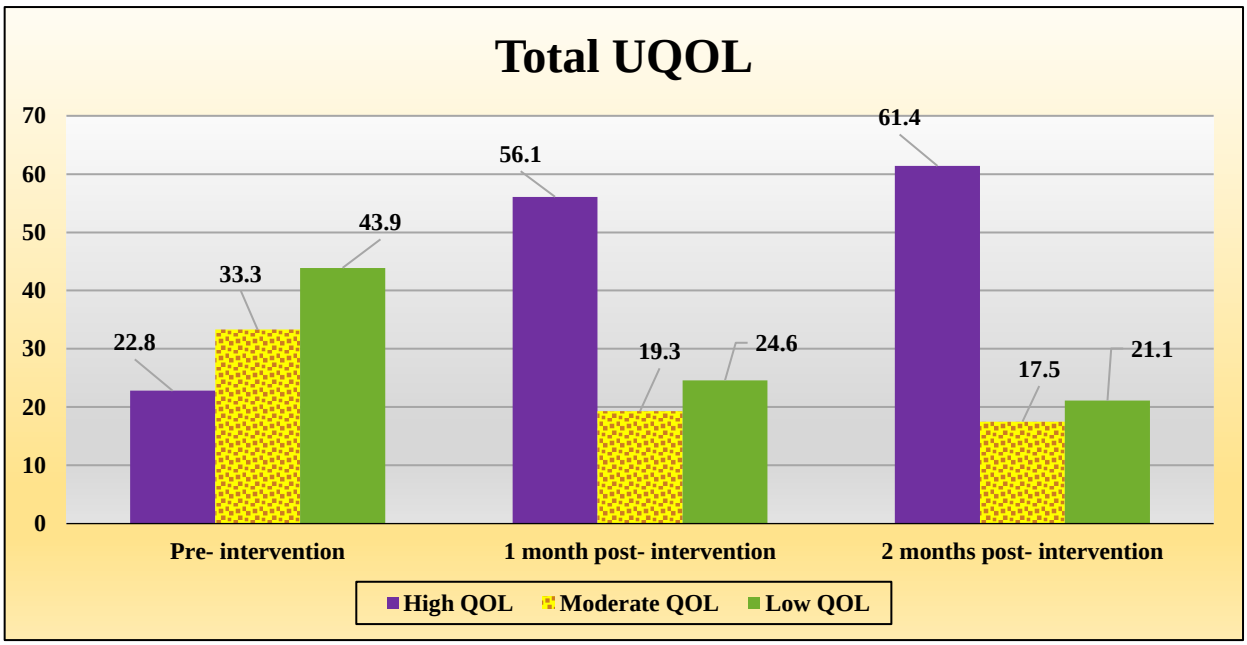


Figure (4): Percentage distribution of studied menopausal women regarding their total quality of life throughout intervention phases (n=57).

Table (6): Mean cores of studied women's Satisfaction with Life Scale (SWLS) of throughout program phases (n=57).

(SWLS) items	Min./Max. score	Pre-intervention	1 month post-intervention	2 months post-intervention	ANOVA
		Mean ± SD	Mean ± SD	Mean ± SD	F p-value
In most ways my life is close to my ideal.	1/7	2.42±0.96	3.56±1.11	3.60±1.11	22.34 0.000**
The conditions of my life are excellent.	1/7	1.96±.99	3.67±1.13	3.74±1.12	48.28 0.000**
I am satisfied with my life.	1/7	2.33±1.12	3.67±.93	3.68±1.07	31.31 0.000**
So far, I have gotten the important things I want in life.	1/7	3.67±1.77	5.00±1.30	5.05±1.17	16.90 0.000**
If I could live my life over, I would change almost nothing.	1/7	2.58±1.29	4.12±1.47	4.16±1.41	23.76 0.000**
Total score	**7/35**	**12.96±3.59**	**20.05±3.61**	**20.19±3.30**	**79.11 0.000****

*A Statistical significant $p \leq 0.0$ **A Highly Statistical significant $p \leq 0.001$

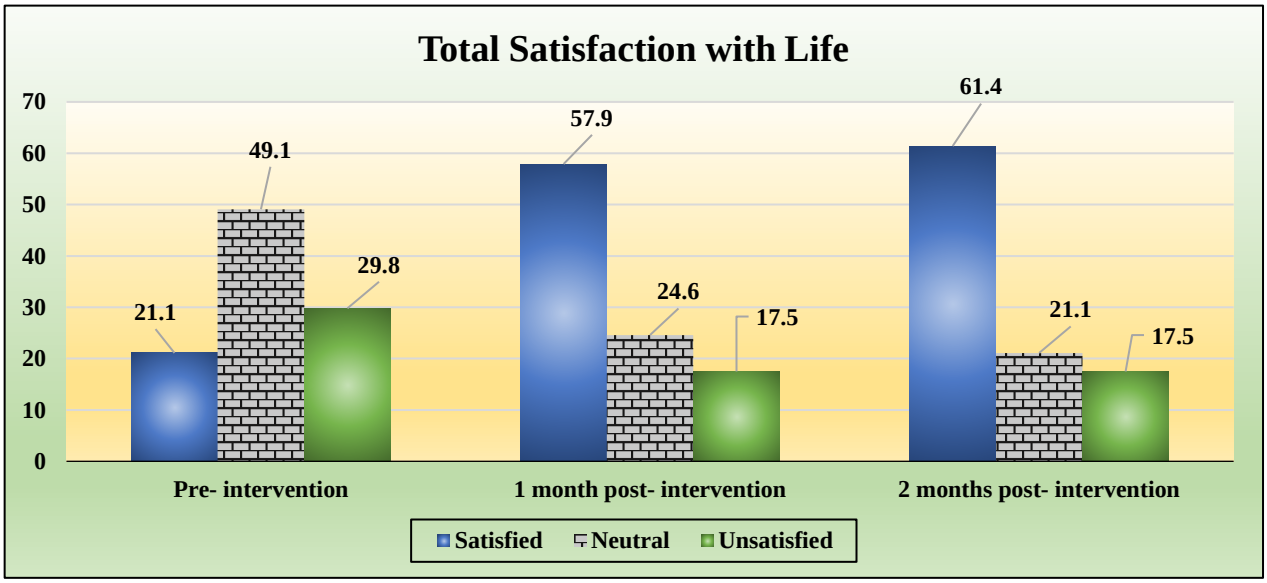


Figure (5): Percentage distribution of studied menopausal women regarding their total satisfaction with life throughout intervention phases (n=57).

Table (7): Correlation between total quality of life score and total scores of (menopausal rating symptoms, self-efficacy, self-esteem and satisfaction with life) of the studied women throughout intervention phases (n=57).

Variables	Total quality of life					
	Pre- intervention		1 month post-intervention		2 months post-intervention	
	r	P-value	R	P-value	r	P-value
Total menopausal rating symptoms	0.821	0.000**	0.647	0.000**	0.663	0.000**
Total self-efficacy	0.528	0.000**	0.664	.000**	0.557	0.000**
Total self-esteem	0.548	0.000**	0.628	0.000**	0.742	0.000**
Total satisfaction with life	0.459	0.000**	0.513	0.000**	0. 547	0.000**

**A Highly Statistical significant $p \leq 0.001$

Discussion:

The backbone of fostering healthy family behaviour is women, who are considered the most essential members of society. The menopause is the time when a woman's reproductive years officially begin. Menopause is a natural occurrence, but women might start to feel its effects a long time before the actual start of the process. Physiological changes can make it hard for some women to adapt to their new social and psychological status, which in turn can lower their self-esteem, life satisfaction, and quality of life. **(Hassan Saleh, et al., 2023).**

The aim of this research was to examine the effect of health educational package based on individual empowerment model on self-efficacy, self-esteem and quality of life of menopausal women. This study examined menopausal women's personal characteristics, the menopausal rating scale, women's self-efficacy, self-esteem, and life satisfaction. It also confirmed the research hypothesis, as there was a high statistically significant difference among mean scores regarding all research variables at pre-intervention, 1 month and 2 months post-intervention phases with (p-value<0.001).

In terms of personal characteristics, the most recent research has demonstrated that the majority of the women under investigation were between the ages of 40 and 50 years, with a mean age of 48.65±5.46 years. Consequently, less than three-quarters of them experienced menopause within the past five years, as over three-quarters of them were under the age of 50 when they reached menopause. Of those, less than two-thirds resided in rural areas. In addition, over two-thirds of them had concluded secondary or technical education, while less than half had obtained a university degree. In terms of monthly income, more than two-thirds of them did not have an adequate quantity.

These findings were in agreement with **Nazarpour, et al., (2021)** The average age of the women who participated in the investigation "The relationship between postmenopausal women's body image and the severity of menopausal symptoms" was 55.11 ± 3.99 (Mean ± SD) years old, with a range of 45 to 65 years old. The duration of menopause was 5.80 ± 4.42 months. Less than three-quarters of the women studied had a moderate to high level of education, while approximately two-fifths of them had insufficient income. Also, **Hassan, et al., (2022)** who studied "QOL among Post-Menopausal Women in Beni Suef University Hospital" showed that the socio-demographic profile of the participants indicated that their ages ranged from 47 to 57 years, with an average of 52.31 ± 2.78 years. Nearly half of them were rural residents, 34.4% were university-educated, and over half of them were employed. This indicated that the demographic characteristics of our study participants were comparable, which could be attributed to the similar culture, attitude of participants, and virtually identical study setting as two studies conducted in Egypt.

The current research findings regarding the menopausal rating scale indicate that the mean scores of all evaluated women's menopausal rating symptoms domains were significantly different at the pre-intervention, one-month, and two-month post-intervention phases (p-value<0.001). These findings were consistent with **Gebretatyos, et al., (2020**) who conducted a study on the "Effect of Health Education on Knowledge and Attitude of Menopause among Middle-Aged Teachers" and identified that the menopause rating scale scores at pre-intervention, immediate post-intervention, and three months follow-up were

significantly improved (p-value<0.001). From the perspective of researchers, this could be attributed to the positive impact of the educational bundle on the severity of menopausal symptoms. Additionally, women who adopted a healthier lifestyle as a result of the educational intervention experienced a reduction in the severity of menopausal symptoms. **(Yoshany, et al., 2020).**

Further, the findings of this research proved that the educational bundle, which was built on the individual empowerment model, was effective. The study found that mild menopausal symptoms were experienced by less than 20% of the women before the intervention, less than 50% one month later, and over 50% two months later. The findings were backed by **Zhao,et al.,(2019)** who studied "Menopausal symptoms in different substages perimenopause and their relationships with social support and resilience," and revealed that 25% of participants reported mild symptoms before the intervention, 33% at 2 months, and 46% at 6 months after the intervention. Improving postmenopausal women's health status and alleviating menopausal symptoms can be achieved through a multi-pronged approach, one of the most important of which is health-promoting lifestyle education. By providing accurate information, health educators can help women better understand and cope with menopausal symptoms.

Current study revealed that the mean scores of all self-efficacy items of the women who were studied differed significantly at the pre-intervention, 1-month, and 2-month post-intervention stages (p-value<0.001). This held true for the women's self-efficacy in particular. In the study, the women's total self-efficacy score raised from 19.70±3.38 before the intervention to 26.26±2.84 one month and 26.82±2.76 two months after the intervention, respectively. The greatest advantage came during the two-month period following the intervention. These results proved by **Lopez-Olivo, et al., (2020**) who conduct a study "Comparison of multimedia and printed patient education tools for patients with osteoporosis: a 6-month randomized controlled trial" demonstrated that self-efficacy scores in the intervention groups experienced a highly significant change from their baseline values at 3 and 6 months when compared to the control group (p 0.001).

Moreover, **Hashem, et al., (2020)** illustrated that; there was no statistically significant difference between the study and control groups before the application of the program with P value = 0.165. While a statistically significant difference was found between both groups before discharge as well as 3 months post-program with the mean of study and control group respectively were (12.37±2.98 & 35.13±2.32 & 37.27±3.23) and (13.47±3.08 0& 22.03±4.24& 21.23±8.54) with highly statistically significant difference before discharge as well as 3 months post-intervention. According to researchers, this could be because postmenopausal women's education boosts their confidence in their ability to care for themselves. Postmenopausal women spend a large chunk of their lives caring for themselves, so studying how self-efficacy and empowerment work together could lead to a solution that improves their quality of life during this time. (**Kafaei-Atrian, et al.,2022)**.

Concerning self-esteem of studied women current studies have shown that there is a remarkable disparity in the average scores of all self-esteem items at the pre-intervention, one-month, and two-month post-intervention stages (p-value<0.001). After the intervention, the women's total self-esteem scores improved from 18.61±2.66 before the intervention to 24.43±2.26 after one month and 25.38±1.92 after two months. There was an improvement

in the two months following the intervention. Current results proved by **EidFarrag et al., (2018)** The research conducted by the individual who investigated the "Effect of an educational supportive program on self-esteem and marital relation among women menopausal women" demonstrated that the self-esteem score was high after three and six months, with statistically significant differences. Additionally, the mean self-esteem scores of the women under investigation were 14.09 (1.3), 23.82 (2.1), and 24.9 (1.5) at the pre-intervention, one-month, and three-month post-intervention, respectively, with a highly statistically significant difference (p-value<0.001).

A high statistically significant difference was observed among the mean scores of menopausal women's QOL domains at the pre-intervention, 1-month, and 2-month post-intervention phases, as indicated by current research (p-value<0.001). Through the intervention phases, the overall mean QOL score of the menopausal women under study increased from 77.87±7.46 to 95.33±7.64 and 96.43±6.46. At the pre-intervention, one-month, and two-month post-intervention phases, less than one-quarter, less than three-fifths, and less than two-thirds of the menopausal women under investigation reported a high QOL. Current study results were supported by **Kafaei-Atrian, et al., (2022)** The results of the study "The effect of self-care education depending on self-efficacy theory, individual empowerment model, and their integration on QOL among menopausal women" indicated that the QOL of the women in the empowerment group was (32.96±10.62 & 28.55±11.03 & 26.50±11.07), in the self-efficacy group was (31.93±12.54 & 29.06±11.72 & 28.03±12.27), and in the integrated group, the QOL was (34.07±11.70 & 28.71±12.79 & 27.94±11.51) in the pre-intervention, one month after the intervention, and three months after the intervention. The statistical significance of the difference was highly significant (p-value<0.001). Also, **Bais, & Phansopkar, (2021)** who studied "The Impact of Pilates Training versus Progressive Muscle Relaxation Technique on QOL in Menopausal Women: A Comparative Study" demonstrated that group A (Pilates Group) and group B (PMRTgroup) exhibited significant differences in all vasomotor, psychosocial, physical, and sexual domains from baseline to six weeks. The P-value (P>0.0001) was found to be significant in all domains and is represented graphically. This can be elucidated by researchers as a significant priority to enhance the QOL of women during menopause by enhancing the health intervention of these women with respect to their health literacy skills.

Current research has shown that there was a high statistically significant difference among mean scores regarding all items of menopausal women's satisfaction with life at the pre-intervention, 1-month, and 2-month post-intervention phases in relation to satisfaction with life (p-value<0.001). The overall mean score of satisfaction with life among the menopausal women under study increased from 12.96±3.59 to 20.05±3.61 and 20.19±3.30 during the intervention periods, with the greatest improvement occurring two months after the implementation. It was demonstrated that over one-fifth, over half, and over two-thirds of the menopausal women who were studied were content with their lives at the pre-intervention, one-month, and two-month post-intervention phases, respectively.Current research supported by **Mitra, et al., (2022)** which demonstrated that postmenopausal women's contentment with their lives increased from 13.68±3.59 to 20.58±5.36 during the pre-intervention and

post-intervention phases. **Górczewska, and Jakubowska-Pietkiewicz, (2022)** It was discovered that the mean score of the Satisfaction with Life Scale (SWLS) in the examined group was 19.37 ± 7.31 points (median 19.00; min. 5.0; max. 35.0), indicating moderate life satisfaction in the female population (p = 0.3956).

Moreover, the findings of the current study demonstrated a highly significant statistical positive correlation between the total QOL score and the total scores of (menopausal rating symptoms, self-efficacy, self-esteem, and satisfaction with life) in the menopausal women who were the subject of the study at the pre-intervention, one-month, and two-month post-intervention phases (P≤ 0.001). The results of this study corroborate the current research hypothesis that a health educational program that is based on the individual empowerment model has a positive impact on self-esteem, self-efficacy, quality of life, and satisfaction. These results have been strengthened and enhanced by **Gebretatyos, et al., (2020**) who demonstrated a positive correlation between self-efficacy and the total score of the menopausal rating scale and total quality of life. The continuous guidance and reinforcement that were provided during the intervention period may have contributed to this favourable outcome.

Limitations:

Occasionally, the meeting chamber at the Faculty of Education at Benha University might be unavailable. Therefore, the researchers may need to wait for an extended period of time until the room is silent and empty in order to commence the educational sessions and to ensure that the women feel comfortable during the sessions. Occasionally, they may need to postpone the cessation. Additionally, a number of women failed to attend the educational sessions on a consistent basis, which required the use of telephone calls to remind them of their appointments.

Conclusions:

The current research results indicate that menopausal women demonstrated enhanced menopausal rating symptoms, self-efficacy, self-esteem, satisfaction with life, and QOL. The mean scores for all research variables at the pre-intervention, 1-month, and 2-month post-intervention phases were statistically significantly different (p<0.001). As a result, the research hypothesis was adopted and the research objective was successfully achieved.

Recommendations:

Depending on research findings, it was recommended following:

- Continuing educational package based on individual empowerment model in other different health care settings in order to enhance women's' knowledge, self-efficacy and self-esteem, life satisfaction and QOL of menopausal women with different health problems.
- It is recommended by researchers that a unit or section of hospitals, health centers, and treatment centers be established to provide menopausal women with instruction on the management of changing symptoms and the maintenance of a healthy lifestyle.
- The results of this research can be utilized by health policy makers to plan health services and by health center personnel to plan educational interventions. The findings can also be employed to develop training programs that will enhance the self-efficacy and empowerment of postmenopausal women.

Further researches

- Menopausal women with chronic conditions, including diabetes and

hypertension, are advised to participate in similar studies.

- Replication of the same study on larger probability samples at various geographical locations to facilitate data generalization. The educational booklet is provided to improve the QOL of menopausal women.

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Conflict of Interests:

Authors announced that there is no any conflict of interest.

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تأثير الحزمة التعليمية المبنية على نموذج التمكين الفردي على الكفاءة الذاتية واحترام الذات وجودة الحياة لدى السيدات في سن الإياس

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انقطاع الطمث هو مرحلة فسيولوجية طبيعية في حياة السيدة ومع ذلك، قد تعاني العديد من السيدات من مجموعة متنوعة من الأعراض خلال هذا الوقت، مما قد يكون له تأثير سلبي على كفاءتهن الذاتية، واحترامهن لذاتهن، ونوعية حياتهن. لذا هدف البحث إلى دراسة تأثير الحزمة التعليمية المبنية على نموذج التمكين الفردي على الكفاءة الذاتية واحترام الذات وجودة الحياة لدى السيدات في سن الإياس. و تم تنفيذ تصميم البحث شبه التجريبي. وقد أجريت الدراسة في كلية التربية بجامعة بنها بمحافظة القليوبية، مصر على عينة غرضية، تم تضمين ٥٧ سيدة في سن اليأس . تم استخدام خمس أدوات أساسية: استبيان ذاتي منظم، ومقياس عام للكفاءة الذاتية، ومقياس روزنبرج لتقدير الذات ومقياس يوتيان لجودة الحياة. واظهرت النتائج انه في مرحلة ما قبل التدخل، وشهر واحد، وشهرين بعد التدخل، أظهرت السيدات في سن اليأس تحسنًا كبيرًا في أعراض انقطاع الطمث، والكفاءة الذاتية، وتقدير الذات، ونوعية الحياة، والرضا عن الحياة. كما أظهرت السيدات في سن اليأس زيادة في الكفاءة الذاتية، وتقدير الذات، ونوعية الحياة، والرضا عن الحياة مما يعكس موافقة على فرضية البحث. واوصت الدراسة بتنفيذ حزمة تعليمية مستمرة تعتمد على نموذج التمكين الفردي في أماكن رعاية صحية مختلفة أخرى من أجل تعزيز المعرفة والكفاءة الذاتية وتقدير الذات والرضا عن الحياة ونوعية حياة السيدات في سن اليأس اللاتي يعانين من مشاكل صحية مختلفة.