The Relation between Menopausal Symptoms among Rural Women and Their Quality of Life

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Abstract

Background: Menopause is a normal physiological process of cessation of menses in women. During menopausal period women can experience many symptoms. These symptoms can be severe enough to affect their quality of life (QOL). The characteristics of rural women can affect the manifestations and treatment of their health problems. **Aim of the study:** to assess the relation between menopausal symptoms among rural women and their quality of life. **Subjects and Method: Design:** A descriptive cross- sectional study design**. Setting:** The Rural Health Unit of Ceber bay rural village in Tanta city. **Subjects:** A convenient sample of 400 menopausal women who experienced stop of menstrual cycle for at least 12 months and free from chronic diseases. **Tools of the study:** Three tools were used by to obtain the necessary data for this study. **Tool I:** A structured interview schedule: which included two parts: Part (1): Socio demographic characteristics of menopausal women, Part (2): Obstetrical history of menopausal women. **Tool II:** Menopause Rating Scale (MRS) questionnaire. **Tool III:** World Health Organization Quality of Life Questionnaire (WHOQOL BREF). **Results**: Less than half (48%) of rural menopausal women had a moderate menopausal symptom and more than one-quarter (27.3%) of them had a mild symptom. About one-quarter (24.7%) of them had a severe symptom. More than half (52.0%) of the studied menopausal rural women had a good quality of life and less than one-half (47.4%) of them had fair level of quality of life. **Conclusion**: The QOL of menopausal rural women is affected by their menopausal symptoms where a negative high significant correlation was found between the total score of menopausal rating scale of the studied menopausal rural women and the total score of their QOL. **Recommendations**: Develop specific health educational programs aimed to improving the quality of life of menopausal rural women and management of their problems and complains.

***Key words*:** Menopausal Symptoms, Rural Women, Quality of Life

Introduction

Menopause is a normal physiological process which is characterized by the permanent cessation of menses in women as a result of reduced ovarian hormone secretion usually between the ages of 45 and 55 years. This process is accompanied by many biological and psychosocial changes [(1)]. As a widest range, women usually reach menopause between the ages of 40–58 years. In Egypt the mean age at menopause was 46. 7 years [(2, 3)].

During menopausal period women can experience many symptoms including hot flashes, night sweats, sleep and mood disorders, impaired memory, lack of concentration, nervousness, depression, insomnia, bone and joint complaints, and reduction of muscle mass [(1, 4)]. The prevalence of these symptoms varies widely not only between women in the same population but also between different populations. As well, there is great diversity in nature of symptoms and frequencies across countries, even in the same cultures. Also, some women may become symptomatic in months, others may take years to develop symptoms and some may never develop any symptoms [(4, 5)].

The health of rural women is important in all stages of their life. They reside in rural areas that are diverse in their geography, economic base, demographics, and development. There are common elements throughout rural life: low population density; geographical distance from large metropolitan areas; isolation; dense social networks; a culture of self-sufficiency; and fewer economic and manpower resources. These characteristics affect the manifestations and treatment of the health problems of rural women [(6, 7).]

The post-menopausal symptoms not only affect the women's health and well-being but also can affect the other aspects of their life as woman's behavior, social consequences and psychological and emotional well-being. These symptoms can be severe enough to affect the normal daily life activities of menopausal women which ultimately affect their quality of life (QOL) [(8, 9)].

Studying the QOL in the post-menopausal women has become an essential component in clinical practices. Quality of life is a critically important part of the care of symptomatic post-menopausal women. According to the World Health Organization (WHO), quality of life is "individual's perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards, and concerns". The menopausal women tend to have high levels of physical and

psychological health problems, which need more attention and effective health care for these health problems [8, 10, 11].

Community health nurse (CHN) is a key player in assessing menopausal changes in the women. She can help in creating awareness about the possible changes and problems which are caused by menopause. This could be achieved through providing a good listening to menopausal women because many of them derive comfort from simply talking about their physical and psychological issues with health care provider [3, 9].

The community health nurse should also serve as an important role in motivating and promoting healthy behaviors for those women to adopt healthier lifestyles by participating suitable exercise as walking, introducing weight loss initiatives, periodical physical and laboratory examination and stopping smoking [12].

The community health nurse is in an ideal position to provide the necessary support for exploring solutions to embarrassing problems of menopausal women such as pain when having sex or urinary incontinence. She also assesses whether menopausal symptoms are being effectively controlled by the prescribed therapy and if there are any nuisance side effects for this therapy [13, 14]. Therefore, the significance of the present study was to assess the relation between menopausal changes among rural women and their quality of life.

Aim of the study:

The aim of the study was to assess the relation between menopausal symptoms among rural women and their quality of life.

Subjects and Method

Study design:

A descriptive cross – sectional study design was used in this study

Study setting:

The study was conducted in the Rural Health Unit of Ceberbay rural village in Tanta city. This unit was selected because it had the highest rate of attendance of rural women.

Study subjects:

A convenient sample of 400 menopausal women was selected from the previous setting. Study subjects included any women attended the mentioned setting for any of the following reasons: giving immunization for the children of their dependents, seeking medical care and dental care through the study period (six months). The women had the following criteria:

The inclusion criteria included women who experienced stop of menstrual cycle for at least 12 months and free from chronic diseases.

The exclusion criteria included women who had either ovariectomy or hysterectomy for duration of five years.

Tools of the study

Three tools were used by the researchers based on relevant literatures in order to obtain the necessary data for this study.

Tool I:A structured interview schedule:

A structured interview schedule was developed by the researcher according to the literature review. It consisted of the following parts:

Part (1): Socio-demographic characteristics of menopausal women such as: age, marital status, level of education, occupation, family income, number of children and type of family.

Part (2):Obstetrical history of menopausal women which included data about: age of menarche, history of regulatory of menses,symptoms of menstruation, type of previous delivery, frequency of abortion, age of menopause, history of taking hormonal therapy and physician checkup for menopause.

Tool II: Menopause Rating Scale (MRS) questionnaire:

It was developed by Heinemenn et al. (2004) [(15)]. It was used for the purpose of assessing menopausal symptoms. The MRS is composed of 11 items which divided into three subscales:

(a) Somatic symptoms: It included four items (hot flushes, heart problems, sleeping problems and muscles and joints' problems).

(b) Psychological symptoms: It included four items (depressive mood, nervous and feeling aggressive, inner restlessness and feeling panicky and physical and mental exhaustion) and

(c) Urogenital symptoms: It included three items (sexual problems, bladder problems and dryness of the vagina.

Scoring system:

The score of Menopause Rating Scale was calculated according to the answer of menopausal women and her complaints which was ranged from 0 **(**not present) to 4 (very severe) as following: Women who selected (not present) had a score (0), (mild) had a score (1), (moderate) was scored (2), (severe) was scored (3) and (very severe) was scored (4).

The total score was calculated and the degrees of severity of menopausal symptoms were classified as following:

Degree of severity of menopausal symptoms

Severity of menopausal symptoms	Description of menopausal symptoms	WHO standards for menopause	Actual Scores (0-44)
No problems	None, absent	0 – 4%	0-<2
Mild problems	Slight, low	5 – 24%	2-<11
Moderate problems	Medium, fair	25 – 49%	11-<22
Severe problems	High, extreme	50 -<95%	22-<42
Very severe problems	Total	95 – 100%	42-44

Tool III: World Health Organization Quality of Life Questionnaire (WHOQOL BREF) [16].

This tool was used to assess the quality of life of menopausal women. The WHOQOL-BREF was consisted of 26 standard items. The 26 – item standard contained two generic items (1&2) which included overall QOL and general health, and the remaining 24 items were classified into 4 domains: **physical domain:** It had 7 items about woman's perception regarding her physical condition, **psychological domain:** It had 6 items about woman's perception regarding her affective and cognitive condition, **social relationships:** It had 3 items about woman's perception regarding social relations and social roles adopted in her life and **environmental domain:** It had8 items about woman's perception regarding diverse aspects related to the environment in which she lives.

These facets were scored using 5-point Likert Scale which ranged from 1 to 5. It was scored and classified according the meaning of each question either: (1= very poor, 2= poor, 3= neither poor or good, 4= good, and 5= very good); **or** (1=very satisfied, 2= dissatisfied, 3= neither dissatisfied or satisfied, 4= satisfied and 5= very satisfied); **or** (1= not at all, 2= a little, 3= a moderate amount, 4= very much and 5= extremely); **or** (1= never, 2= seldom, 3= quite often, 4= very often and 5= always). The negative items had reversed score. Thus, the total score ranged from 26 (The worst possible QOL) to 130 (The best possible QOL). It classified according to the following degrees:

The Scoring system was modified by the researchers to be: -

Poor quality of life: (20% - < 40%)

Fair quality of life: (40% - < 60%)

Good quality of life: (60% - < 80%)

Excellent quality of life: (80% - 100%)

Method

The steps which had been followed in this study were as following:

1- Obtaining approvals:

- An official permission to conduct the study was obtained from the Dean of Faculty of Nursing to the director of Health Affairs of Gharbia governorate and then to the director of the Rural Health Unit in Ceberbay village.
- The director of Rural Health Unit was informed about the study objectives to facilitate the process of data collection.
- Meeting had been done with nursing manager of Ceberbay Rural Health unit to obtain her cooperation to conduct the study. The purpose and importance of the study was explained to her.

2- Ethical and legal considerations:

Ethical and legal considerations were considered all over the study as the following: -

- Every menopausal woman was informed about the purpose and benefit of the study at the beginning of the interview.
- An informed consent was obtained from the women to participate in the study.
- The menopausal women were informed about their right to terminate participation at any time.
- Women were assured that the nature of study does not cause any harm or pain for them.
- Privacy and confidentiality of collected data were assured for the studied women. The researchers explained that the collected data was used only for the study purpose only.

3- Developing the tools:

- The tool I was developed by the researchers based on literature review.
- The tool II and III were translated into Arabic.
- The study tools were tested for face and content validity by a jury of five professors in the field of Community Health Nursing and Obstetrical and Gynecological nursing before conducting the study. The necessary modifications were done according to the jury opinions.
- The reliability was done for the Arabic copy of the study tools by using Cronbach's alpha test. Reliability for tool II (MRS) was **0.881**, the reliability for tool III (WHO QOL Bref.) was **0.841**, and the reliability for the total sheet was **0.889.**

4-The pilot study:

A pilot study was carried out on (10%) of the total number of menopausal women to test the tools for its clarity, applicability and identifying obstacles that may be encountered during the data collection. As well as to determine the length of time needed to collect the data from each menopausal woman. Accordingly, the necessary modifications were done. These menopausal women were excluded from the study sample.

5- Actual study:

- Collection of the data continued during a period of six months started from July to December 2019.
- The researchers attended the rural health unit two days weekly (Saturday and Wednesday) to collect the data needed for this study.
- The researchers interviewed the women individually in the waiting area which was the suitable place in the selected rural health unit.
- The average time needed to complete the questionnaire from each menopausal woman was approximately 15 to 20 minutes.
- The numbers of menopausal women the researchers can interview each day were ranged from 7-10 women.

Statistical analysis:

The collected data were organized, tabulated and statistically analyzed using SPSS software statistical computer package version 23. For quantitative data, the range, mean and standard deviation were calculated. For qualitative data, comparison was done using Chi-square test($\chi 2$).

Correlation between variables was evaluated using Pearson and Spearman's correlation coefficient r. A significance was adopted at $P<0.05$ for interpretation the results of tests of significance (*). Also, a highly significance was adopted at $P<0.01$ for interpretation the results of tests of significance (**).

Results

Table (I): presents the distribution of the studied rural women according to their socio- demographic characteristic. The table shows that more than half (54.3%) of the studied women their age was ranged from 50-< 60 years old and the age of nearly about one-quarter (24.3%) of them was ranged from 60-< 70 years with the mean age 59.88 ± 7.408 years. Regarding marital status of the studied women, more than one-third (43.3% and 36.2% respectively) of them were married and widow. Concerning to educational level, more than one-third (38.0%) of the studied women were illiterate and more than one-quarter (27.5%) of them were read and write. Nearly about three-quarters of them (73.8%) were house wives and more than one- half (54.2%) of them had enough family income. The table

also reveals that the number of the women's children was ranged from 0-9 child. More than one-third of studied women (35.6% and 34.2%) their family type was nucleus and extended family respectively and it was step parent for 30.2% of them.

Table (II): presents the distribution of the studied rural women according to their obstetrical history. It shows that the age at menarche of the studied women was ranged from 11-16 years with the mean age 12.93±1.161years. Slightly less than two-thirds (65.3%) of them had regular menstruation while more than one-third (34.7%) of them had irregular menstruation. Regarding symptoms of menstruation, more than one-half (60.3% and 56.8%) of the studied women had lower back pain and lower abdominal pain respectively and only 14.5% of them had nausea and vomiting.

As regard the type of delivery, more than one half (57.7%) of the studied women had normal delivery and only 11.0% of them had caesarian delivery and one-quarter (25%) of them had both types of delivery (normal and caesarian). The number of normal deliveries was ranged from 0-8, the number of caesarian deliveries was ranged from 0-5 and the number of frequencies of abortion was ranged from 0-4. The age of women's menopause was ranged from 40-59 years with mean age 50.19±3.027years. The majority of the studied women (96.0 % and 88.0%) didn't take hormonal replacement therapy and didn't follow-up with a doctor during their menopause respectively.

Table (III): presents the distribution of the studied rural women according to the items of menopausal rating scale (MRS)**.** The table shows that the hot flushness and seating as somatic symptoms were mild for 38.5% of the studied menopausal women and it was severe for nearly one quarter (24.5%) of them. The unusual awareness of heart beat and tightness were mild for more than one-third (42.8%) of the studied menopausal women and it was moderate for less than one-quarter (23.0%) of them.Difficulty in sleep and weak up early were mild for more than one-third (36.3%) of the studied menopausal women and it was moderate for nearly one-third (33.0%) of them.Joint and muscles pain were moderate for more than one-third (37.3%) of the studied menopausal women and it was mild and severe for more than one-quarter (28.8% and 28.5%) of them respectively.

Concerning psychological symptoms, the table shows that the sense of sad and depression was mild for 30.0% of the studied menopausal women and severe for 17.3% of them. Feeling nervous and feeling aggressive were not present for more than one-half (50.5%) of the studied menopausal women and it was mild for more than one-

quarter (28.3%) of them. Inner restlessness and feeling panicky not present for 41.2% of the studied menopausal women but it was mild for more than one third (36.5%) of them. Physical and mental exhaustion were moderate for more than one-third (38.0%) of the studied menopausal women and it was mild and severe for more than one-quarter(28.0% and 28.8%) of them respectively.

Regarding urogenital symptoms, the table shows that the change in sexual desire, activity and satisfaction were moderate for more than one -third (38.0%) of the studied menopausal women, it was mild for 31.5% and it was not present for 18.0% of them. Difficulty in urination, incontinence and increase need to urination were mild for more than one-third (35.3%) of the studied women, it was moderate for more than one-quarter(25.3%) of them and it was severe for about fifth (20.5%) of them. Sense of dryness, burning in vagina and difficulty with intercourse were mild for more than one-third (40.8%) of the studied menopausal women, it was moderate for less than one-quarter (23.8%) of them and it was severe for the rest (19.8%) of them.

Figure (1): presents the distribution of the studied menopausal rural women according to their severity level of menopausal symptoms. The table shows that less than one-half (48%) of rural menopausal women had moderate menopausal symptoms and more than one-quarter (27.3%) of them had mild symptoms. About one-quarter (24.7%) of them had severe symptoms.

Table (IV): presents the total mean scores of the domain of quality of life (QOL) among the studied menopausal rural women. This table illustrates that the highest mean score was related to environmental domain (23. 94 ± 3.982), followed by physical domain (21. 46 ± 4.945) and psychological domain (18.27 ± 2.485) then social relationship (9.00 ±1. 986) and finally, over all QOL and general health (5.35 ± 1.663). The total score of QOL was ranged from (51-104) with the total mean score (78.02 ±10. 551).

Figure (2): presents the distribution of the studied menopausal rural women according to their level of quality of life (QOL). This figure shows that more than half (52.0%) of the studied menopausal rural women had a good quality of life and less than one-half (47.4%) of them had fair level of quality of life.

Table (V): presents the relation and correlation between levels and total score of menopausal rating scale (MRS) of the studied menopausal rural women and their quality of life. This table shows that there was negative high significant correlation between total score of menopausal rating scale of the studied menopausal rural women and the total score of their quality of life ($r = -0.427$ and $p = 0.00$). It was found that the majority (82.6%) the studied menopausal rural women who had mild menopausal problems had a good quality of life. And more than half (53.1% and 69.7% respectively) of them had either moderate or severe menopausal problems respectively had a fair quality of life.

Table (I): Distribution of the studied rural women according to their socio-demographic characteristics

Socio-demographic characteristics	The studied rural women (n =400)	
	No	**%**
Age (in years)		
▪ <50 years	23	5.7
▪ 50-<60 years	217	**54.3**
▪ 60-<70 years	97	**24.3**
▪ ≥70 years	63	15.7
Range	**(47-77)**	
Mean ± SD	**59.88±7.408**	
Marital status		
▪ Single	23	5.8
▪ Married	174	**43.5**
▪ Divorced	58	14.5
▪ Widow	145	**36.2**
Educational level		
▪ Illiterate	152	**38.0**
▪ Read and write	110	27.5
▪ Elementary school	31	7.8
▪ Secondary school	75	18.7
▪ University/post graduate	32	8.0
Work		
▪ Working	105	26.2
▪ Housewife	295	**73.8**
Family income		
▪ Not enough	105	26.3
▪ Enough	217	**54.2**
▪ Enough and save	78	19.5
Children number		
Range	**(0-9)**	
Type of family		
▪ Nucleus	142	**35.6**
▪ Step parent	121	**30.2**
▪ Extended	137	**34.2**

Table (II): Distribution of the studied rural women according to their obstetrical history

History of pregnancy and childbirth	The studied rural women (n =400)	
	N	%
Age at menarche (in years) **Range** **Mean ± SD**	**(11-16)** **12.93±1.161**	
Regularity of menstruation		
▪ Yes	261	**65.3**
▪ No	139	**34.7**
# Symptoms of menstruation		
▪ Lower back pain	241	**60.3**
▪ Lower abdominal pain	227	**56.8**
▪ Nausea and vomiting	58	**14.5**
▪ Edema in the body	24	6.0
▪ Change in bowel habit	21	5.3
▪ Chest pain	15	3.8
▪ Abdominal distention	8	2.0
Type of delivery		
▪ No delivery	25	6.3
▪ Normal **Range (0-8)**	231	**57.7**
▪ Caesarian **Range (0-5)**	44	**11.0**
▪ Both	100	**25.0**
Frequency of abortion **Range**	**(0-4)**	
Age of menopause **Range** **Mean ± SD**	**(40-59)** **50.19 ± 3.027**	
Taking hormonal replacement therapy		
▪ Yes	16	4.0
▪ No	384	**96.0**
Medical follow up with doctor during menopause		
▪ Yes	48	12.0
▪ No	352	**88.0**

 # More than one answer was allowed

Table (III): Distribution of the studied rural women according to theitems of Menopausal Rating Scale (MRS)

Items of Menopausal Rating Scale (MRS)	The studied rural women (n=400)									
	Menopausal Rating Scale (MRS)									
	Not Present		Mild		Moderate		Severe		Very Severe	
	No	%	No	%	No	%	No	%	No	%
a. Somatic symptoms										
• Hot flushness and sweating	75	18.8	154	38.5	71	17.8	98	24.5	2	0.5
• Unusual awareness of heart beat and tightness	86	21.5	171	42.8	92	23.0	51	12.8	0	0.0
• Difficulty in sleep and weak up early	45	11.3	145	36.3	132	33.0	77	19.3	1	0.3
• Joint and muscles pain	9	2.3	115	28.8	149	37.3	114	28.5	13	3.3
b. Psychological symptoms										
• Sense of sad and depression	142	35.5	120	30.0	60	15.0	69	17.3	9	2.3
• Feeling nervous and feeling aggressive	202	50.5	113	28.3	39	9.8	43	10.8	3	0.8
• Inner restlessness and feeling panicky	165	41.2	146	36.5	66	16.5	23	5.8	0	0.0
• Physical and mental exhaustion	19	4.8	112	28.0	152	38.0	115	28.8	2	0.5
c. Urogenital symptoms										
• Change in sexual desire, activity and satisfaction	72	18.0	126	31.5	152	38.0	46	11.5	4	1.0
• Difficulty in urination, incontinence and increase need to urination	64	16.0	141	35.3	101	25.3	82	20.5	12	3.0
• Sense of dryness, burning in vagina and difficulty with intercourse	61	15.3	163	40.8	95	23.8	79	19.8	2	0.5

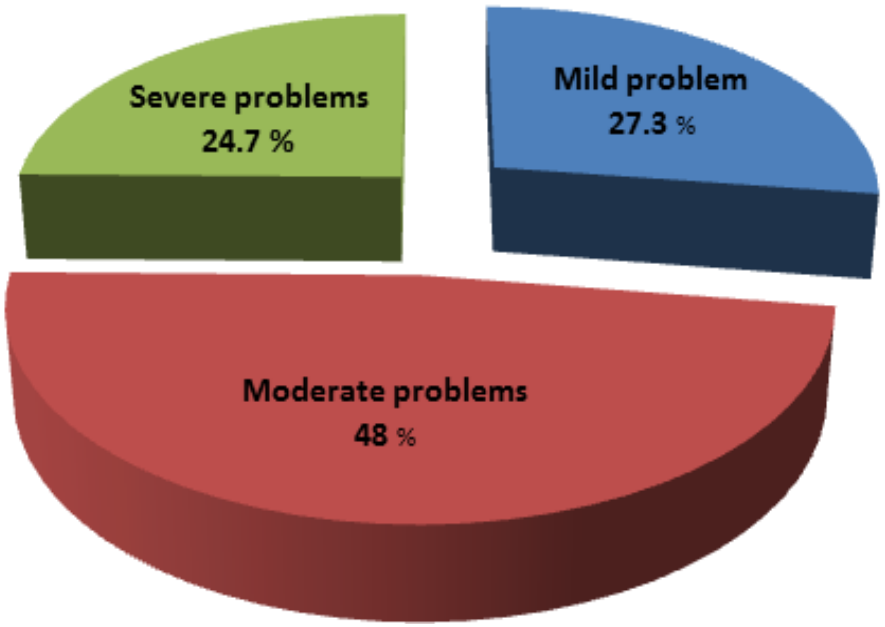

Figure (1): Distribution of the studied menopausal rural women according to their severity level of menopausal symptoms

Table (IV): Total mean scores of domains of quality of life (QOL) among the studied rural women

QOL domains	The studied menopausal rural women (n=400)	
	Range	**Mean ± SD**
a. Overall QOL and general health	(2-9)	5.35±1.663
b. Physical domain	(10-32)	21.46±4.945
c. Psychological domain	(10-24)	18.27±2.485
d. Social relationships	(5-15)	9.00±1.986
e. Environmental domain	(15-32)	23.94±3.982
Total score of QOL	**(51-104)**	**78.02±10.551**

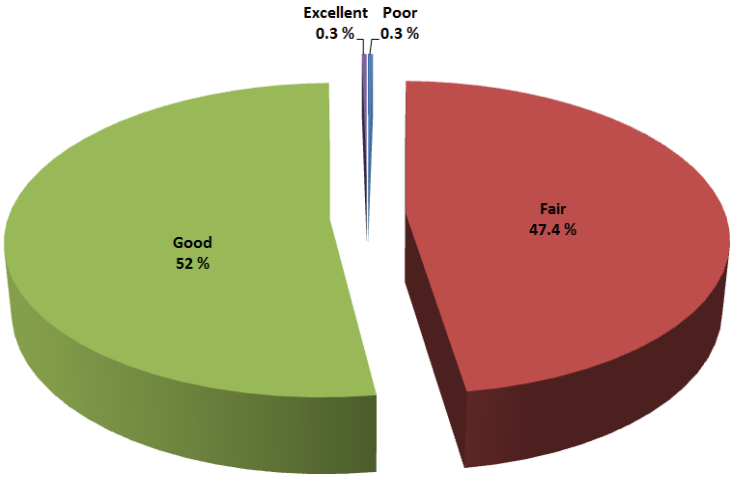

Figure (2): Distribution of the studied menopausal rural women according to their level of quality of Life (QOL)

Table (V): Relation and correlation between levels and total score of menopausal rating scale (MRS) of the studied menopausal rural women and their quality of life

Levels of QOL	The studied menopausal rural women (n=400)						
	Levels of MRS						χ^2 P
	Mild Problem (n=109)		Moderate Problems (n=192)		Severe Problems (n=99)		
	No	%	No	%	No	%	
▪ **Poor**	-	-	-	-	1	1.0	
▪ **Fair**	19	17.4	102	**53.1**	69	**69.7**	**67.00**
▪ **Good**	90	**82.6**	89	**46.4**	29	29.3	**0.00***
▪ **Excellent**	-	-	1	0.5	-	-	
r , P	**-0.427 , 0.00****						

* Significant at P < 0.05 ** High significant at P < 0.01

Discussion

Many women experience menopausal symptoms during their post-reproductive years. This natural phenomenon often results in various psychological, somatic, vasomotor, and urinary symptoms, which impair the overall quality of life of women [17]. So, this study aimed to assess the relation between menopausal changes among rural women and their quality of life.

In the current study, the age of the studied menopausal women was ranged from (47-77) years with the mean age 59.88±7.408 years. This high mean age could be related to the presence of high percent (40%) of the studied women whose age was equal or more than 60 years old. This result is nearly in the same line with**Nirmala Rathnayake et al., (2019)** who revealed that the mean age of postmenopausal women, was 55.8 years [8].While **El Hajj et al., (2020)** reported that the mean age of their participants was 49.53 ± 5.74 years old [3]. As well, **Jang et al., (2021)** resulted in the average age at menopause in India, is 46.6 years which significantly lower than the age in some developed countries [18].

In the present study, more than one- third of the studied menopausal women were found to be married and widow. While, **Masjoudi et al., (2017)**reported that the mean age ± SD of menopausal women was 50.7± 4.6 years. And 89% of them were married [9].This difference in marriage percent may be attributed to the difference in the mean age in the two studies.

Several studies have been conducted to determine the symptoms and signs associated with menopause. Frequency and intensity of symptoms vary in different cultures and also according to stage of menopause situation [8, 19]. Regarding the severity level of menopausal symptoms of the studied women, the results of the present study reported that less than half of rural menopausal women had a moderate menopausal symptom, more than one-quarter of them had a mild symptom and about one-quarter of them had a severe symptom. These results could be explained that the nature of the studied rural women as they are mostly work hard either in their houses or farm works which can decrease their experience of feeling of menopausal symptoms.

On the other hand, **Gupta and Kumari (2021**) revealed that the majority of women in their study suffer from severe menopausal symptoms [17]. As well, **Mohammed and Mohammed (2018)** indicated that nearly half of the studied sample (49%) had severe menopausal symptom [20]. While, **Masjoudi et al. (2017)** reported that the severity of

menopausal symptoms according to Menopause Rating Scale (MRS), 55.2% of women had mild to moderate symptoms, 43.8% had no symptoms and only 1% had severe to very severe symptoms [9].

In the current study, menopausal symptoms were presented according to the Menopausal Rating Scale (MRS) which consisted of somatic symptoms, psychological symptoms and urogenital symptoms. It was observed that the highest percents of the mentioned menopausal symptoms' categories were found to be as mild degree. This is nearly in the same line with **Mohammed and Mohammed (2018)** who indicated that 68% of the studied sample had mild to moderate somatic symptoms, 54% had mild to moderate psychological symptoms, and more than half (58%) of the studied sample had severe urogenital symptoms [20].

Concerning somatic symptoms, joint and muscles pain were moderate for more than one-third of the studied menopausal women and it was mild and severe for more than one- quarter of them respectively. This could be explained that more than one-third of studied women their family type was nucleus and it was step parent for 30.2% of them. Nearly about three-quarters of them were house wives. And the number of the women's children was ranged from 0-9 child. All these factors can increase the burden on the women to care for their home and children for several years which have an effect on their joints and muscles in addition to the menopausal effect.

In the same context, **Masjoudi et al., (2017)** reported that 82.7% of the women had muscle and joint problem as one of the physical symptoms of menopausal problems [9]. **Nie et al., (2017)** presented that from the most common symptoms in Chinese menopausal symptomatic women were "aching in muscle and joints" (89.4%), "low backache" (86.9%), "decrease in physical strength" (86.6%), "aches in back of neck or head" (86.2%) [21].

In the present study, hot flushness and seating as somatic symptoms were mild for more than one- third of the studied menopausal women and it was severe for nearly one quarter of them. According to **Rathnayake et al. (2019)** hot flushes represented one of the most frequently reported menopausal symptoms in postmenopausal women which was (42.2%) [8]. **Nie et al., (2017),** reported that the majority 80.7% of menopausal symptomatic women had hot flash [21]. And **Masjoudi et al., (2017)** revealed that 76.1% of women had hot flushes and sweating [9].

The unusual awareness of heart beat and tightness in the current study were mild for more than one-third of the studied

menopausal women and it was moderate for less than one-quarter of them. This may be revealed to sympathetic reactivityas mentioned by **Manda et al., (2020**), who revealed that females with menopause symptoms did not have an exaggerated BP and sympathetic reactivity to a stressor. They had elevated resting sympathetic activity which was associated with severity of physical menopausal symptoms. [(4)]. **Masjoudi et al., (2017)** reported that50.9 % of the women had heart discomfort [(9)].

The results of the present study reveal that difficulty in sleep and weak up early were mild for more than one-third of the studied menopausal women in this study and it was moderate for nearly one-third of them. While**, Nie et al., (2017)** found that 83.6% of the menopausal symptomatic women had difficulty sleeping [(21)].

Concerning psychological symptoms of menopausal women in the present study, it was observed as a general that the higher percent of women either had mild psychological symptoms or had no symptoms. This could be attributed to religious factors and faith of the studied rural Egyptian women which help them in accepting and adjusting the experienced problems especially psychological types.

In more details, it was found in the current study, that the sense of sad and depression was mild for about one – third of the studied menopausal women and severe for about one-fifth of them. This is supported by **Ensiyeh et al., (2021**) who resulted in that there is an association between depression and menopausal symptoms [(22)]. This result was nearly in the same line with **Rathnayake et al., (2019)** who reported that 43.4% of thepostmenopausal women had depressive mood [(8)]. Also, **Masjoudi et al., (2017)** revealed that 53.8% of menopausal women had depressive mood [(9)].

Furthermore**, Kling et al., (2019)** found that depressed mood, anxiety, and a decreased sense of well-being are common during the menopausal transition. Additionally, women who have a history of mood disorders or stressful early childhood life events experience a greater incidence of more severe psychological symptoms during menopause [(23)].

Regarding inner restlessness and feeling panicky, it was mild for more than one-third (36.5%) of the studied menopausal women in this study and it was moderate for 16.5% of them**.** In this context, **Rathnayake et al., (2019)** found that 48.2% of postmenopausal women had irritability [(8).] As well, **Masjoudi et al., (2017)** revealed that54.9% of menopausal women had irritability and 69.5% of them had anxiety [(9).]

The physical and mental exhaustion of the studied women were moderate for more than one-third of the studied menopausal women and it was mild and severe for more than one-quarter of them respectively. While, **Rathnayake et al., (2019)** reported that physical and mental exhaustion were experienced by 53% of the studied menopausal women [(8)]. Also, **Nie et al., (2017)** revealed that the most common symptoms in Chinese menopausal symptomatic women were "experiencing poor memory" (94.4%), "feeling tired or worn out" (93.8%), "accomplishing less than I used to" (83.4%), and "feeling a lack of energy" (83.3%) [(21)].

Genitourinary syndrome of menopause (GSM) is a highly prevalent and progressive condition of postmenopausal women that has significant negative effects on vulvovaginal health, sexual health, and overall quality of life [(14)]. Concerning urogenital symptoms, this study resulted in that the change in sexual desire, activity and satisfaction were moderate for more than one-third of the studied menopausal women, it was mild for 31.5% and it was not present for 18.0% of them. This mostly could be attributed to the changes in hormones and genital system of the menopausal women especially dryness in the vaginal secretions.

This result is nearly in accordance with **Nie et al., (2017)** who reported that 81% of menopausal symptomatic women complained of change in sexual desire [(21)]. This also supported by **Masjoudi et al., (2017)** who revealed that menopausal women who had uro-genital symptoms as following: 41.1% had sexual problem, 40.3% had bladder problem and 44.1% had dryness of vagina [(9)]. As well, in the current study, difficulty in urination, incontinence and increase need to urination were mild for more than one-third of the studied women, it was moderate for more than one-quarter of them and it was severe for about fifth of them. Regarding sense of dryness, burning in vagina and difficulty with intercourse, it was mild for more than one-third of the studied menopausal women, it was moderate for less than one-quarter of them and it was severe for the rest of them.

Menopausal symptoms mostly contributed to the poorer Quality of life (QOL). Quality of life was significantly impaired among postmenopausal women [(8)]. In the present study, it was found that less than one-half of the studied menopausal rural women had fair level of quality of life. Furthermore, it was found that there was negative high significant correlation between total score of menopausal rating scale of the studied menopausal rural women and the total score of their quality of life. This result is in

accordance with **Gupta and Kumari (2021**) who concluded that menopausal women have poor health related quality of life [17].While, **Calvo-Pérez and Campillo-Artero (2013)** revealed that a weak association was detected between being menopausal and QoL [24].

The difference in the mentioned results which found either strong or weak association between menopausal symptoms and quality of life may be attributed to the level of spiritual wellbeing of menopausal women which have direct reflex on their all-life dimensions. This is supported by **Tarrahi et al.,** (**2021**) who evidenced by the obtained results, that spiritual wellbeing and its components are important variables affecting the quality of life of postmenopausal women [25].

In addition, the difference in the previous results could be related to the degree of marital satisfaction of menopausal women. This is supported by **Caico (2013)** who reported that women who experienced greater marital satisfaction have been shown to have less severe menopausal symptoms and negative moods [26]. While **Roesch et al., (2021**) found that no significant difference was found between the mean ENRICH Marital Satisfaction score for women who report that they are in menopause and not in menopause [27].

Regarding the total mean scores of the domains of quality of life (QOL) among the studied menopausal rural women, it was found that the highest mean score was related to environmental domain, followed by physical domain and psychological domain then social relationship. This may be explained that environmental factors can be managed easily by menopausal women more than other personal factors as physical or psychological one. On the other hand, **El Hajj et al., (2020)** found that the highest mean scores of Menopause-Specific Quality of Life (MEN QoL) were found in the physical and psychosocial domains [3].

Conclusion

The QOL of menopausal rural women is affected by their menopausal symptoms where a negative high significant correlation was found between the total score of menopausal rating scale of the studied menopausal rural women and the total score of their QOL.

Recommendations

1- Enhance the awareness of rural women about the early identification of the common menopausal symptoms.
2- There is a need to establish a special clinic in each rural health unit to concern the management of problems and complains of menopausal rural women.

3- Develop specific health educational programs aimed to improving the quality of life of postmenopausal women and promoting their life styles.
4- Stress on providing the needed medical and social services to the menopausal rural women to help them in overcoming their health problems.

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