Stressors and Coping Strategies among Menopausal Women during COVID-19 Pandemic Lockdown

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Abstract

BACKGROUND: Menopause is one of the women's lifespan conditions that increase the potentiality of developing multiple physical and psychological diseases. Thus, it exposes the women to many fears and pressures, mainly during the COVID-19 pandemic.

AIM: This study aims to assess stressors and coping strategies among Egyptian menopausal women during the COVID-19 pandemic.

METHODS: A descriptive cross-sectional design was used to identify the associated menopause complaints stressors and the types of coping strategies among 126 university working women ages 40–60. Three tools were used: The demographic-characteristic, menopause rating scale, and coping with menopause symptoms questionnaires.

RESULTS: The most prevalent complaints were psychological stressors with a mean of 88.8 (70.5%), where fear of infection and death by COVID-19 was the most common problem (87.3%). Further, the most coping technique was used by participants was protective measures with a mean of 82.2 (65.2%). There is a highly significant difference (p = 0.001) with all coping strategies based on the women's menopausal status.

CONCLUSION AND RECOMMENDATIONS: The COVID-19 pandemic with menopause represents a significant burden on women at a critical time of their lives. Based on the results, it is essential to address the effectiveness of highly competent nursing care and support that includes effective coping strategies. Establishing and adopting nursing care guidelines that deal with stress and caring during this pandemic are highly recommended.

Introduction

Menopause is a period of the female life cycle characterized by several modifications; among the most notable changes are certain biological and psychological events that are influenced by hormonal, social, family, and personal alterations. All of these can lead to stress and coping difficulties for some women [1], [2]. According to the World Health Organization (WHO), menopausal women are expressed in three phases from a disturbance in the menstruation irregularity until completely stopping as pre-, peri, and post-menopause. Menopause or climacteric is a permanent stop of regular menstruation; it is an inevitable developmental cycle that women experience at 42–54 years. Depleting female reproductive hormones during menstruation is associated with multiple vasomotor, physical, psychological, and social threads [3], [4]. Every woman's experience with menopause is different, and many are unaware of menopausal symptoms, health-related symptoms, and complications. Most women attain menopause without having adequate knowledge and how to cope with menopausal changes, which make them face a lot of stressors [5]. While the menopausal women tried to cope with the burden of the aging cycle, they faced various risks of being exposed to the coronavirus disease 2019 (COVID-19) crisis [6].

COVID-19 is pandemic pretenses a severe challenge to the global health system and economy. It is caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) and has led to severe illness and death all over the world [7], [8]. As the WHO reported on September 13, 2020, over 28 million confirmed cases and over 917,000 related deaths were reported worldwide, especially for the elderly [9]. Research continues to focus on examining the effect of COVID-19 on menopause to make it go away simply [10]. With the increasing studies on COVID-19, the association of the intrinsic and adaptive immune systems led to differences in the susceptibility and response to COVID-19 and incidence and disease severity [11]. However, the differences in COVID-19 outcomes for women are inconsistent [12]. In addition, several studies explored common susceptibility factors (older age, sex, comorbidities, and hormones)

to virus infection [10], [13], little is known about the association of menopause status (i.e., pre-, peri, and post-menopause) with clinical outcomes of hospitalized patients with COVID-19.

The daily research and publications on the development of the COVID-19 pandemic have aroused panic on the extent to which the elderly is exposed to infection since they have many causes for exposure as; weak immunity, blood flow diseases, and accompanying physiological changes. Thus, menopausal women find themselves among the vulnerable group, which leads them to panic about exposure to infection [14]. The previous literature regarding menopausal women's stressors stated that they experienced many physiological and psychological problems such as depressive disorders, anxiety, fatigue, and hot flashes. Therefore, many women have taken many coping techniques to overcome their stress, which may or may not be effective. Moreover, many studies have also confirmed women's ability to cope with the symptoms of menopause, especially vasomotor, which consider the most common cause of referral to health centers. As well as the indirect relation between the drop in ovarian hormones and menopause symptoms, the effects of menopausal problems, including psychosocial aspects, can affect their coping [15]. Due to the COVID-19 pandemic lockdown and for safety measures, women were advised not to visit the doctors at their clinics or hospitals physically [13]. On the other hand, it is essential to highlight that those menopausal symptomatic women may delay seeking health services, resulting in fear about their lives and worsening their adaptation to menopause [16], [17]. The present study assessed stressors and coping strategies among menopausal women during the coronavirus pandemic to develop appropriate care guidelines.

Significant of the study

Despite the increasing number of studies on COVID-19, little is known about the extent to which menopausal women are vulnerable to the infection and its effective outcomes. There is no conclusive evidence of why women of menopause are at risk of disease or death associated with infection. Otherwise, obstetricians emphasized that the hormonal changes associated with menopause and lack of estrogen hormone increase women's exposure to COVID-19 and worsen the health condition outcomes after infection. In addition, getting difficult to get medical care advice and appointment for investigation of warning signs when potentially serious illnesses may develop, making menopausal women face a lot of physical, psychological, and sexual menopause symptoms and stressors added to anxiety around the COVID-19 crisis. Therefore, women try to adapt to their ways, whether useful or not [15]. Because of the similarity of symptoms of corona with hot flashes and the difficulty of medical examination, women are susceptible to maladjustment and increased stress rates. Therefore, studying menopausal stress during the COVID pandemic is crucial for appropriate screening and providing optimal health-care services.

Aims of the study

The present study aims to assess the correlated stressors and coping strategies among menopausal women during the COVID-19 pandemic.

Research questions

1. What are the stressors facing menopausal women during the COVID-19 pandemic?
2. What are used coping strategies among menopausal women during the COVID-19 pandemic?

Materials and Methods

Research design

A descriptive cross-sectional design was used to identify the associated menopause complaints stressors and the types of coping strategies among 126 university working women ages 40–60.

Subjects and setting

The study was conducted from May to September 2020. The Ethical Committee approved this study at Badr University in Cairo. The interview was carried out among women ages 40–60 years who visited the Obstetrics and Gynecology clinic at Campus Medical Center. The inclusion criteria comprised women between 40 and 60 years who had consented to participate in this study. In contrast, pregnant and breastfeeding women, women with uncontrolled medical conditions, or those who undergo hormone replacement therapy or cancer treatment were excluded from the study. Menopausal status was classified according to the stages of reproductive aging workshop (STRAW) classification, which divided menopause staging into premenopausal, minor changes in the cycle length, and regularity [18]. Peri-menopausal had menstruation in the previous/past 2–12 months but with increasing irregularity of menses without skipping periods and post-menopausal; no menstrual bleeding in the previous/past 12 months.

Instrument and data collection

Three data collection tools are used; first, the demographic characteristic tool developed by

researchers and used to assess the demographic characteristics of participants women: Age, education, employment status, marital status, household income sufficiency, type of family, controlled family chronic diseases, and BMI. Second, the menopausal stressors symptoms were assessed using the menopause rating scale (MRS) questionnaire. It was developed by Heinemann *et al.*, is composed of 11 items related to menopausal [19], and modified by the researchers for making more specification of symptoms involve other common symptoms of COVID – 19 as (Most common symptoms as mentioned by WHO; fever, dry cough, and tiredness), Since there is a lack of literature on the connection between estrogen, progesterone, COVID-19, and menopause and its potential effects, as well as the similarity of many symptoms reported in some studies, the researchers modified the measurement tool, and its face and content validity are measured by jury of three professors of obstetrics and reliability tested by Cronbach alpha test (r = 0.847) As (less common symptoms: Aches and pains, sore throat, diarrhea, conjunctivitis, headache, loss of taste or smell, rash on the skin, or discoloration of fingers or toes), and (serious symptoms; difficulty breathing or shortness of breath chest pain or pressure loss of speech or movement) [20], it becomes 24 points. Third, the researcher developed the Coping strategies with menopause symptoms questionnaire to include alternative stressors coping methods that women used to cope with menopausal symptoms during COVID-19 pandemic. For instance, this questionnaire contains protective measures for hot flashes, social distances, eating, drinking, support, and other measures. This study determined the prevalence of menopausal symptoms and not the severity of the symptoms. The scoring scale is "0" (absent complaints) and "1" (present complaints). The "coping with menopause symptoms" questionnaire scored as is "1" (used) and "0" for (not used) coping measures. The face and content validity are measured by the jury of three professors of obstetrics, and reliability is tested by the Cronbach alpha test (r = 0.814)

Statistical analysis

Data were coded, tabulated, and analyzed using Statistical Package for the Social Sciences version 20 statistical software. The descriptive statistics were informed of means, standard deviations, frequency, and percentage according to the study objectives. Inferential statistics were informed of Paired t-test and Chi-square test. Probability of error p < 0.05 considered significant.

Results

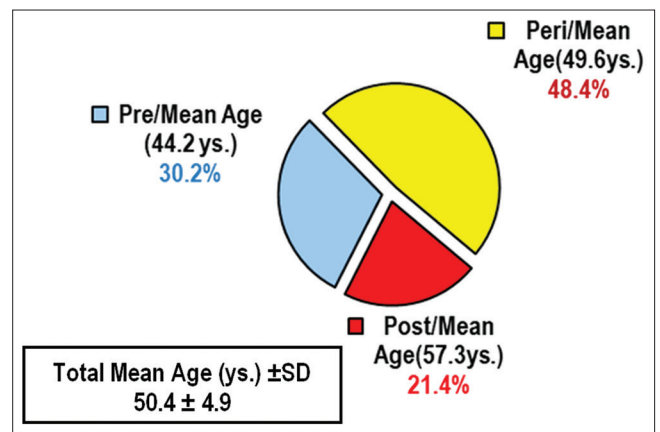Figure 1 illustrates the frequency of menopausal status and their mean age, as nearly

Figure 1: Participants' menopausal status and their mean of age (n = 126)

half of the participants were perimenopausal (48.4%) with a mean age of 49.6 years. Moreover, the pre-menopausal participants were about one-third (30.2%) at a mean age of 44.2 years. At the same time, post-menopausal were nearly one-fifth (21.4%) with a mean age of 57.3 years. Moreover, total mean age ±SD was 50.4 ± 4.9 years.

Table 1 summarizes the menopausal participants demographic characteristics among one hundred and twenty-six women who completed the study. Among these women, 58 (46.1%) were highly educated, and 28 (22.2%) had a basic level of education. Most of the participants, 94 (74.6%), were

Table 1: Menopausal participants demographic characteristics' (n = 126)

Items	n (%)
Education	
Basic	28 (22.2)
Intermediate	40 (31.7)
High	58 (46.1)
Marital status	
Married	94 (74.6)
Divorced/widow	19 (15.1)
Unmarried	13 (10.3)
Residence	
Rural	43 (34.1)
Urban	83 (65.9)
Job	
Worker	22 (17.5)
Employee	62 (49.2)
Academic	42 (33.3)
Activity level	
Usual work (8 h/day)	59 (75.4)
Hard work (> 8 h/day)	31 (24.6)
Medical illness	
Yes	40 (31.8)
No	86 (68.2)
Controlled chronic illness (n = 40)	
Hypertension	12 (30.0)
Diabetic	10 (25.0)
Arthritis	8 (20.0)
Cardiac	4 (10.0)
Asthma	4 (10.0)
Liver	2 (5.0)
Monthly income judged as	
Sufficient	98 (77.8)
Insufficient	28 (22.2)
Type of family	
Nuclear	76 (66.7)
Joint	30 (23.8)
Extend	12 (9.5)
Body weight (BMI)	
Under (< 18.5)	15 (11.9)
Normal (18.5–24.9)	35 (27.8)
Over (25–29.9)	49 (38.9)
Obesity (≥ 30)	27 (21.4)
BMI: Body mass index.	

married, and regarding their residence, most were from urban areas, 83 (65.9%). Further, 59 (75.4%) reported that their daily work hours were about 8 h. Almost half of the participants, 62 (49.2%), were employed, and one-third, 42 (33.3%), were in an academic position. Regarding health conditions, about 86 (68.2%) of the participants were free from any medical conditions, while 40 (31.8%) had controlled chronic medical conditions such as hypertension and diabetes. Most participants, 98 (77.8%), stated that they have sufficient income for living costs. seventy-six (66.7%) participants live with their husbands and offspring (nuclear family). Most of the women are classified according to their body mass index as overweight (25–29.9), obese (≥30), and normal (18.5–24.9) as 27 (21.4%), 49 (38.9%), and 35 (27.8%), respectively

Table 2 displays the prevalence of stressors among participants concerning their menopausal status as assessed by the modified MRS according to most frequent complaints. The three most prevalent menopausal complaints for all women (n = 126) consecutively were sleeping problems 95 (75.4%), joint and muscular discomforts 89 (70.6%), and headaches 83 (65.9 %) regarding somatic symptoms. Although, the most urogenital complaints were loss of sexual desire 93 (73.8), dryness of the vagina 79 (62.7%), and burning during micturition 64 (50.8%). Besides, psychological complaints were fear of infection and death by pandemic 110 (87.3), irritability 96 (76.2), and anxiety 84 (66.1%). In addition to the above, socioeconomical complaints were staying at home and family conflict 112 (88.9), high cost of living by pandemic 99 (87.6), and changes in daily living activities. A high significance (p = 0.001)

level indicates higher menopausal symptoms among participants who belong to perimenopausal and post-menopausal than the pre-menopausal. Psychological complaints were the most complaints, about 89 (87.3%).

Table 3 shows the coping strategies adopted by participants according to their menopausal status. As presented by multivariate analysis, significant relations were found among used coping measures by participants to face menopausal complaints during the pandemic. The post-menopausal women used coping measures most, followed by perimenopausal, then pre-menopausal (p = 0.001). Moreover, the most used physical measures were increasing knowledge about illness 80 (63.5%) and taking the rest 72 (57.1%). The results show that 109 (86.5%) were using the personal protective measures (PPM), while 94 (74.6%) were keeping distance and avoiding crowdedness as the most used protective measures. Whenever praying/getting close to god, 126 (100%) and raising self-esteem with beauty and attractiveness 98 (77.8%) were the most used psychological measures. Furthermore, socioeconomical methods were kept close for social media 120 (95.2%) and taking others' advice 112 (88.9%).

Figure 2 represents the average number of participants who used different coping methods according to their menopausal status during the COVID-19 pandemic lockdown. As shown in the figure, postmenopausal women used coping measures most, followed by perimenopausal, then pre-menopausal (n = 126). Moreover, the socioeconomic measures represented that 95.3 (75.7%) were the highest used measures among all menopausal. The second used

Table 2: Stressors frequency among participants according to menopausal status during coronavirus disease 2019 pandemic lockdown (n = 126)

Menopausal stressors/complaints	All (n = 126)	Premenopausal (n = 38)	Peri-menopausal (n = 61)	Postmenopausal (n = 27)	p
Somatic (physiological)					
Hot flushes, episodes of sweating	79 (62.7)	20 (52.6)	41 (67.2)	18 (66.7)	17.64
Heart discomfort/palpitation tightness	40 (31.7)	4 (10.5)	16 (26.2)	20 (74.1)	0.001*
Sleeping problems	95 (75.4)	17 (44.7)	51 (83.6)	27 (100.0)	
Joint and muscular discomfort	89 (70.6)	21 (55.3)	42 (68.9)	26 (96.3)	
Breathing discomfort	84 (66.7)	15 (39.5)	46 (75.4)	23 (85.2)	
Dry mouth/odorless	75 (59.5)	12 (31.6)	39 (63.9)	24 (88.9)	
Headache	83 (65.9)	19 (50.0)	41 (67.2)	23 (85.2)	
Dryness eyes	68 (53.9)	10 (26.3)	34 (55.7)	24 (88.9)	
Total mean	76.6 (60.8)	14.8 (38.8)	38.8 (63.6)	23.1 (85.6)	
Urogenital					
Pain/burning sensation in vulva/vagina	62 (49.2)	10 (26.3)	34 (55.7)	18 (66.7)	24.68
Burning micturition	64 (50.8)	9 (23.7)	36 (59.0)	19 (70.4)	0.001*
Dryness of vagina	79 (62.7)	14 (36.8)	42 (68.9)	23 (85.2)	
Incontinence/frequency of urine	45 (35.7)	3 (7.9)	20 (32.8)	22 (81.5)	
Loss of sexual desire	93 (73.8)	19 (50.0)	51 (83.6)	23 (85.2)	
Total mean	68.6 (54.4)	11.0 (28.9)	36.6 (60.0)	21.0 (77.8)	
Psychological					
Depressive mood	72 (57.1)	11 (28.9)	37 (60.7)	24 (88.9)	19.61
Irritability	96 (76.2)	20 (52.6)	53 (86.9)	23 (85.2)	0.003*
Anxiety	84 (66.7)	15 (39.5)	46 (75.4)	23 (85.2)	
Mental exhaustion	82 (65.1)	15 (39.5)	44 (72.1)	23 (85.2)	
Fear from infection and death by COVID-19	110 (87.3)	28 (73.7)	57 (93.4)	25 (92.6)	
Total mean	88.8 (70.5)	17.8 (46.8)	47.4 (77.7)	23.6 (87.4)	
Socio-economical					
High cost of living by a pandemic	99 (78.6)	32 (84.2)	44 (72.1)	23 (85.2)	24.30
Increasing medication used	80 (63.5)	13 (34.2)	43 (70.5)	24 (88.9)	0.001*
Staying at home and family conflicts	112 (88.9)	34 (89.5)	54 (88.5)	24 (88.9)	
Loss of family support	83 (65.9)	17 (44.7)	44 (72.1)	22 (81.5)	
Difficult to get health advice	40 (31.7)	10 (26.3)	18 (29.5)	12 (44.4)	
Changing in daily life activities	98 (77.8)	32 (84.2)	54 (88.5)	12 (44.4)	
Total mean	85.3 (67.7)	23.0 (60.5)	42.8 (70.2)	19.5 (72.2)	
Total stressors mean	79.8 (63.4)	16.7 (43.9)	41.4 (67.9)	21.8 (80.7)	21.56
					0.001*

*Statistically significant at p < 0.05. COVID-19: Coronavirus disease 2019.

Table 3: Coping strategies adopted by participants according to their menopausal status during coronavirus disease 2019 pandemic lockdown (n = 126)

Used coping strategies measures	All (n = 126)	Premenopausal (n = 38)	Peri-menopausal (n = 61)	Postmenopausal (n = 27)	p
Physical					
Keep self-busy with other things	60 (47.6)	14 (36.8)	27 (44.3)	19 (70.2)	26.57
Take rest	72 (57.1)	17 (44.7)	35 (57.4)	20 (74.1)	0.001*
Tack healthy food	61 (48.4)	20 (52.6)	30 (49.2)	11 (40.7)	
Avoid weight gain	43 (34.1)	10 (26.3)	22 (36.1)	11 (40.7)	
Increase knowledge about illness	80 (63.5)	24 (63.2)	34 (55.7)	22 (81.5)	
Maintain relaxations techniques	61 (48.4)	13 (34.2)	28 (45.9)	20 (74.1)	
Total mean	62.8 (49.8)	16.3 (42.9)	29.3 (48.1)	17.2 (63.6)	
Protective					
Keep PPM	109 (86.5)	32 (84.2)	50 (82.0)	27 (100.0)	26.87
Increase fluid intake	52 (41.3)	17 (44.7)	25 (41.0)	10 (37.0)	0.001*
Medication (anticoagulants vitamins, analgesia, vaccine	60 (47.6)	8 (21.1)	30 (49.2)	22 (81.5)	
Keep personal hygiene/and beauty measures	90 (71.4)	30 (78.9)	42 (68.9)	18 (66.7)	
Keep ventilation and cleaned disinfected areas	88 (69.8)	21 (55.3)	46 (75.4)	21 (77.8)	
Keep distance and avoid crowdedness	94 (74.6)	20 (52.6)	51 (83.6)	23 (85.2)	
Total mean	82.2 (65.2)	21.3 (56.1)	40.7 (66.7)	20.2 (74.7)	
Psychological					
Not concentrate with symptoms	65 (51.6)	11 (28.9)	32 (52.5)	22 (81.5)	30.43
Hide anxiety and feelings	70 (55.6)	8 (21.1)	39 (63.9)	23 (85.2)	0.001*
Not think about illness	30 (23.8)	8 (21.1)	12 (19.7)	10 (37.0)	
Pray/get closed to God	126 (100.0)	38 (100.0)	61 (100.0)	27 (100.0)	
Make good image of own status	84 (66.7)	20 (52.6)	43 (70.5)	21 (77.8)	
Raise self-feeling with beauty and attractiveness	98 (77.8)	18 (47.4)	58 (95.1)	22 (81.5)	
Total mean	78.8 (62.6)	17.2 (45.3)	40.8 (66.9)	20.8 (77.2)	
Socioeconomical					
Expression self with others	90 (71.4)	24 (63.2)	43 (70.5)	23 (85.2)	24.30
Take others advice	112 (88.9)	34 (89.5)	51 (83.6)	27 (100.0)	0.001*
Try to change surrounding	60 (47.6)	12 (31.6)	30 (49.2)	18 (66.7)	
Feel safe with family	93 (73.8)	18 (47.4)	53 (86.9)	22 (81.5)	
Keep close for social media	120 (95.2)	38 (100.0)	58 (95.1)	24 (88.9)	
Plan costs management	97 (77.0)	18 (47.4)	58 (95.1)	21 (77.8)	
Total mean	95.3 (75.7)	24 (63.2)	48.8 (80.1)	22.5 (83.3)	
Total used measures mean	79.9 (63.4)	19.7 (51.8)	39.9 (65.4)	20.2 (74.7)	26.34
					0.001*

*Statistically significant at p < 0.05. PPM: Personal protective measure.

measures among Pre-/post-menopausal 21.3 (56.1%) and 20.2 (74.7%), respectively, were protective measures. Moreover, the second used measures for perimenopausal 40.8 (66.9%) were psychological aspects.
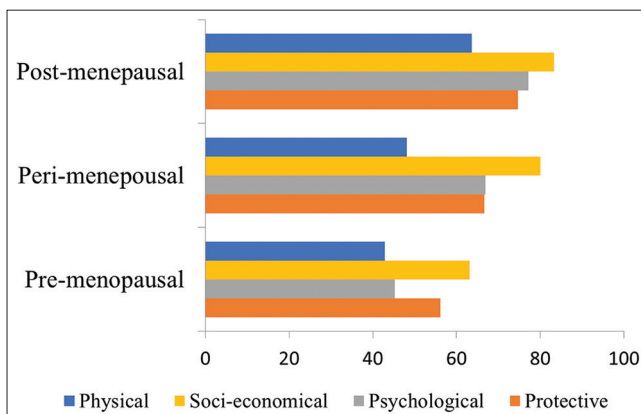

Figure 2: Frequency of coping strategies among participants according to their menopausal status during COVID-19 pandemic lockdown (n = 126)

Discussion

Menopause is a natural part of a woman's life cycle and represents a biological milestone in a woman's life. It has been proven that most women will live a third of their lives through menopause. However, many stressors frequently occur during this period of life with different prevalence, severity, and adaptive strategies that may vary widely between women. In addition, women of menopause are at risk of health problems that increase with the stages of menopause. Nowadays, COVID-19 pandemic is a crisis and the leading cause of many diseases and deaths among the elderly and women, mainly due to physiological changes and their immune systems. Therefore, the present study aimed to assess stressors and coping strategies among menopausal women during the COVID-19 pandemic lockdown

The present study revealed that the women spent nearly 18 years in menopause, with the mean of ±SD of menopause being 50.4 ± 4.9 years. Such a finding is similar to the Egyptian study by Eldin, who revealed a slightly lower difference in mean age at menopause, 46.6 ± 3.4 years [21]. However, the mean age at menopause in the present study was lower than an Egyptian study conducted by Mohammed, who stated that the mean age was 53.6 ± 6.3 years [23]. The difference in the mean age of menopause in these studies might be attributed to the study design, sampling size, and the setting where participants' women were included in the study.

Regarding menopausal status and other demographic characteristics of studied participants, the present study results showed that nearly half of the participants were perimenopausal. Their mean age was 49.6 years, about one-third were premenopausal at a mean age of 44.2 years, and the other one-fifth of the study participants were post-menopausal at a mean age of 57.3 years. Resulted of the present study about the demographic variables of participants, all were

working in the university with usual work hours per day of about 8 h. Still, they spent about 4 h in transportation to and from the campus daily. The educational level of participants varies from basic, intermediate, and higher status. Most of them were married and lived in urban and new cities around the university campus in Egypt. About two-thirds of participants lived in a nuclear family with their husbands and offspring. Their salary, as they stated, is sufficient for their living costs.

In addition, the study revealed that one-third of participants have some controlled chronic diseases, such as diabetes and hypertension. However, most of the women are classified according to their body mass index as overweight (25–29.9) and obese (≥30). In addition, the participants' characteristics include the mean of age, level of education, marital status, type of family, job, and medical illness, even though controlled. Hence, the body mass index does not affect achieving menopause early or late in life. However, the way of responding to symptoms, stressors, and coping measures has differed among those characteristics. The researchers' view corresponds with the results of [24], [25]; they mentioned that some of the women's demographic characteristics compared with the mean age of menopausal make a statistically significant difference between the mean menopausal symptoms and coping strategies among the participants. In contrast, there is no significant association between the ages, education, work hours, marital status, monthly family income, or any disease condition before menopause; when did women achieve menopause.

Concerning the prevalence of stressors among participants by their menopausal status, a high significance (p = 0.001) level indicates higher menopausal symptoms among participants who belong to perimenopausal and post-menopausal than the pre-menopausal. Moreover, post-menopausal by their age as elderlies, fear exposure to infection as reported events about the COVID pandemic [26]. The researchers found that results occur because both perimenopause and post-menopause symptoms lead to increased stress in a woman's body due to gradual decreases in estrogen. In contrast, in pre-menopause, the changes may be less. Furthermore, by age, both categories are liable for systematic disorders, and many studies about pandemics revealed that the elderly were more at risk, making them more stressed. Some studies have reported tiredness, fatigue, hot flashes, joint and muscular discomfort, anxiety, depressed mood, irritability, and physical and mental exhaustion. This could be explained since most of the somatic or psychological symptoms experienced by these middle-aged women are not exclusively a result of changes due to menopause alone. It could also result from other aging-related physical, psychological, or health-related problems [25].

The findings corresponded to a study conducted in India; as mentioned by (Agarwal 2018) [3], the perimenopausal women were noted to experience more somatic symptoms when compared to another menopausal group of women, which was also statistically significant. This can be explained by the fact that estrogen fluctuation during this phase occurs the most; hence, they will experience the most somatic symptoms. Perimenopausal considering the middle age for a woman when she has a lot of responsibility for herself and her family, and according to STRAW, this staging period of rapid changes in mean FSH and Estradiol levels and vasomotor symptoms is most likely to occur which increase feeling with stressors, especially when to similar with COVID -19 symptom [26].

According to stressors among menopausal women during the COVID pandemic, our present study resulted in many differences in the prevalence of stressors than others. The psychological complaints were the highest compared with somatic, urogenital, and socioeconomical. Moreover, the most problems among them were fear of infection and death by pandemic, irritability, and anxiety. The researchers believe that the results differ because the previous studies were related to investigating menopause stressors, and no pandemic threatened women's lives. However, the study findings are compatible with [12]; they found the epidemic causes further aggravations of psychological burden among menopause and increases anxiety, depression, and insomnia, which have significantly impacted physical and psychological health. The findings of other studies regarding stressors and discomforts of menopauses revealed a significant high mean scoring of menopausal symptoms of the studied women by their menopausal status (pre-, peri-, and postmenopausal), and the mean scores of the prevalence of somatic symptoms were significantly high among perimenopausal and post-menopausal describing the many aspects of menopause, including somatic, as well as urogenital as dryness vagina and vasomotor signs are the most stressors among menopause [2], [27].

In summarizing other stressors among menopausal status, we found that sleeping problems, joint and muscular discomforts, and headaches were the majority of complaints regarding menopausal somatic symptoms compared with other studies when hot flashes were the most frequent symptoms reported. The researchers interpreted the difference regarding misrepresentations that hot flashes are one of the signs of infection, such as a high temperature, which led to denial and dealing with them quickly. Still, a lot of thinking about the events of pandemics led to sleep disorders, joint and muscle pain, and headaches. In addition, on studying the other pressures women face during the pandemic, we found that the most frequent urogenital complaints were loss of sexual desire, dryness of the vagina, and burning during micturition. Moreover, most women, especially pre- and perimenopausal, reported neglecting to care for such problems. In addition, fear of pandemic circumstances affected their sexual desire,

which impacted their husband's relations and increased family conflicts. This finding is similar to another study regarding menopause and COVID [13].

Besides staying at home and family conflict, pandemics' high cost of living and changes in daily living activities were the most frequent stressors among socioeconomical complaints. For example, because of the pandemic and the country's commitment to being at home and closing shops, the menopausal women complaint the high prices of goods, medicine, and personal protection tools, in addition to the fact that nearly, a third of the participants were working women and had additional work to improve their income, which stopped with the pandemic. Furthermore, a percentage of the participants had some chronic and stable diseases. Still, with fear of a pandemic, they started taking more medicines and doing more and more checkups to reduce their risk of infection. This interpretation corresponds with [28] when studied menopause and COVID crisis.

According to the different pressures faced by women during the pandemic, the adaptation methods came to be different. The researchers found their findings regarding coping strategies differ from some other studies that as [29], [30], [31]. The present study revealed significant relations among participants' coping measures to face their menopausal complaints during the pandemic. Moreover, the study results represented those post-menopausal women were the most frequently used coping measures, followed by perimenopausal, then pre-menopausal. The researchers found that it is in line with the most frequent stressors perceived by them. This fits with other researchers who found the same results [25].

Moreover, the study revealed that post-menopausal women frequently used coping measures, followed by perimenopausal, then pre-menopausal. Moreover, the socioeconomically measures were the highest used measures among all menopausal women. Whereas the second used measures among pre/post-menopausal were protective measures, compared with the second used measures for perimenopausal were psychological.

Researchers believe that protection against infection comes from the necessary tasks for postmenopausal women because they see themselves as more vulnerable to infection, so they must protect themselves and others. Further, the pre-menopausal know that they are even far from dangerous, but they are the cornerstone of their families. Therefore, it was necessary to follow protective measures to protect their family. Whenever the perimenopausal found that utilizing psychological coping strategies is the second most frequent measure for them; hence, it is the stage of hormonal changes and the women were preoccupied with the events of menopause, which similar to COVID and increased their fears and irritability, which make them alleviate their stressors by such methods as not concentrate with symptoms, hide anxiety and feelings, pray, and get close to god as well as not think about the pandemics.

Regarding coping strategies, the most frequently used physical measures were increasing knowledge and taking rest about the illness represented by most menopausal women who were keen to attend educational seminars organized by the university to confront the pandemic. When the university reduced attendance days, they had more rest times. While using the PPM, keeping distance and avoiding crowdedness were the most used protective measures learned from the pandemic's instructions. Whenever praying/getting close to god and rising self-feeling with beauty and attractiveness were the most used psychological measures.

Conclusion

The present study results indicated that women in menopause during a pandemic do not realize the true causes of many physical, psychological, and socioeconomic stressors. For instance, they lack knowledge of the menopause-associated symptoms of infection, the potentiality of having risks due to age, or the reasons related to menopause somatic changes. In addition, the present study results showed that the high significance (p = 0.001) indicates higher menopausal stressors among participants who belong to perimenopausal and post-menopausal than the pre-menopausal. Psychological complaints were the most complaints among all for 89 (87.3%).

In addition, the analysis representing women's coping strategies is widely different from other studies. The women's adaptation measures and remedies are affected by giving the world COVID-19 outbreak limitation for many activities, social restrains, and shortage of health-care services. The findings revealed that the post-menopausal women were the most in using coping measures, followed by perimenopausal, then pre-menopausal (p = 0.001). Further, among most women, they were getting close to god, increasing knowledge about illness, taking rest, using PPM, keeping distance, and avoiding crowdedness were the most used protective measures.

Nevertheless, the healthcare of these mature women should be kept in mind as menopause may pose a long-term risk to health. Therefore, providers should also ask themselves how to establish better care for the health of this significant part of our population amidst the pandemic. On the other hand, it is essential to highlight that those perimenopausal/menopausal symptomatic women may delay seeking health services, resulting in worsening preexisting illnesses. Therefore, strategies must be adopted to minimize these issues and provide

appropriate guidance to women to manage their health better.

Limitations

This study has several limitations as; some subjects could have been misclassified into the incorrect menopause status group as they miss know about menstrual changes. The participants' responses regarding menopause symptoms/complaints and adaptation methods were widely directed toward fear of COVID infection at that critical age. Although women are interested in menopause, they hold certain false beliefs, and their knowledge about coping is somewhat limited.

Recommendations

1. As isolation becomes the rule and elective medical consultations are postponed, telemedicine emerges as a possible solution to menopausal health with the pandemic.
2. Menopause management checklist tools for remote consultations in primary care are essential.
3. Developing nursing care guidelines during the coronavirus is vital for menopausal well-being and quality of life.

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