

Beyond biological changes: Psychological experiences of Lebanese women during menopause



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ABSTRACT

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Menopause is a complex biopsychosocial transition influenced by cultural factors. However, research on the psychological experiences of menopausal women in the Arab world remains limited. This study investigates how Lebanese women experience menopause, with a focus on the impact of marital status, motherhood, education, employment, and religious affiliation on self-esteem, anxiety, and body image. A cross-sectional survey was conducted with 260 Lebanese women aged 48 to 65 from three major regions. Participants completed standardized instruments: the Coopersmith Self-Esteem Inventory, the Spielberger State-Trait Anxiety Inventory, and the Body Image Questionnaire. Results showed that most participants reported high self-esteem (83.8%) and positive body image (75.4%), yet a significant proportion experienced elevated anxiety (68.5%). Married women exhibited significantly lower anxiety than single women. Parenthood was the most influential factor across psychological dimensions, with childless women reporting higher self-esteem, lower anxiety, and better body image than mothers. Christian women reported significantly higher self-esteem than Muslim women. Employment was associated with anxiety and body image outcomes, while educational attainment showed no significant effects. These findings reveal a paradoxical psychological profile marked by strength in self-perception but vulnerability to anxiety. They challenge assumptions about motherhood's protective role and underscore the need for culturally adapted interventions.

Contribution/ Originality: This study provides the first comprehensive examination of psychological experiences during menopause, specifically within the Lebanese cultural context, revealing the paradoxical finding that childless women demonstrate superior psychological well-being compared to mothers, challenging conventional assumptions about the benefits of motherhood during the menopausal transition in Arab societies.

1. INTRODUCTION

Menopause represents a universal biological milestone in women's lives, characterized by the permanent cessation of menstruation and marking the end of reproductive capacity (World Health Organization, 2022). While this transition is fundamentally rooted in hormonal and physiological changes, it extends far beyond mere biological processes to encompass profound psychological, social, and cultural dimensions that vary significantly across different populations and contexts (Freeman & Sherif, 2007; Melby, Lock, & Kaufert, 2005).

The menopausal experience is deeply influenced by cultural beliefs, social expectations, family dynamics, and individual circumstances, making it essential to examine this life transition through culturally specific lenses (Avis et al., 2015; Hunter & Rendall, 2007).

In the Middle Eastern context, and particularly in Lebanon, menopause occurs within a complex sociocultural framework where women's roles, identities, and value systems are intricately woven into traditional and contemporary influences (Ghazanfarpour et al., 2015; Obermeyer, 2000). Lebanese society, characterized by its religious diversity, varying educational levels, and evolving gender roles, presents a unique backdrop for understanding how women navigate the psychological challenges and transformations associated with menopause (Joseph, 2000; Khalaf, 2002).

The intersection of traditional values emphasizing motherhood and family roles with modern perspectives on women's autonomy and professional achievement creates a particularly complex landscape for menopausal women (Hammoud, White, & Feters, 2005; Kulwicki, 2002).

The psychological dimensions of menopause encompass multiple interconnected aspects, including self-esteem, anxiety levels, and body image perceptions (Deeks & McCabe, 2004; Woods & Mitchell, 2005). These psychological factors are not merely consequences of hormonal fluctuations but are significantly shaped by social relationships, marital status, motherhood experiences, educational background, professional engagement, and religious beliefs (Ayers, Forshaw, & Hunter, 2010; Chedraui et al., 2010).

For Lebanese women, these factors operate within a cultural context that places considerable emphasis on family relationships, social cohesion, and traditional gender roles, while simultaneously experiencing rapid social and economic changes (Adra, 2008; Moghadam, 2003).

Research on menopause in non-Western contexts remains limited, with most studies focusing on Western populations whose experiences may not adequately represent the diversity of menopausal experiences globally (Im, 2010; Sievert, 2006). This gap in culturally specific research is particularly pronounced in the Arab world, where cultural taboos around discussing women's reproductive health, combined with limited research infrastructure, have resulted in an insufficient understanding of how Middle Eastern women experience menopause (Obermeyer, Reher, Alcala, & Price, 2005; Zumoff, 1988). The lack of culturally appropriate research has significant implications for healthcare provision, psychological support services, and policy development in the region (Al-Azzawi & Palacios, 2009; Bener et al., 2000).

The significance of examining menopause within the Lebanese context extends beyond academic interest to address practical healthcare and social support needs (Hammoud et al., 2005). Understanding how different sociodemographic factors influence the psychological well-being of Lebanese menopausal women can inform healthcare providers, policymakers, and community organizations about the specific challenges and resources needed to support women during this transition (Giacaman et al., 2009; Rashidi & Rajaram, 2001). This knowledge is particularly crucial as Lebanon's population ages and larger cohorts of women enter menopause, creating increased demand for culturally sensitive healthcare and psychological support services (Central Administration of Statistics Lebanon, 2020).

Furthermore, the psychological impact of menopause on Lebanese women must be understood within the broader context of ongoing social, economic, and political challenges facing Lebanese society (UNFPA, 2019; World Bank, 2021).

Women navigating menopause are doing so while contending with economic instability, social changes, and family responsibilities that may compound the stress and psychological challenges associated with this life transition (El-Jardali, Saleh, Ataya, & Jamal, 2011; Khawaja & Assaad, 2010). The interplay between these societal factors and individual menopausal experiences creates a complex psychological landscape that requires careful examination and understanding (Douki, Nacef, Belhadj, Bouasker, & Ghachem, 2003).

This study addresses the critical need for culturally contextualized research on the psychological experiences of Lebanese women during menopause, focusing specifically on how marital status, motherhood, educational attainment, professional engagement, and religious affiliation influence psychological well-being during this transition. By examining the relationships between these sociodemographic factors and key psychological outcomes, including self-

esteem, anxiety, and body image, this research aims to provide a comprehensive understanding of the menopausal experience within the Lebanese cultural context and contribute to the development of more effective, culturally appropriate support systems for menopausal women in Lebanon and similar cultural contexts.

1.1. Objectives

This study pursues eight main objectives designed to comprehensively examine the psychological experiences of Lebanese women during menopause and identify key sociodemographic factors that influence their psychological well-being:

- 1) To analyze the influence of marital status on psychological dimensions, including self-esteem, anxiety levels, and body image perceptions among Lebanese menopausal women, with particular attention to differences between single, married, separated/divorced, and widowed women.
- 2) To examine the impact of motherhood and parental status on the psychological well-being of menopausal women, comparing psychological outcomes between women who have children and those who do not, across different marital categories.
- 3) To investigate the relationship between educational attainment and psychological health during menopause, specifically comparing women with university-level education to those with below-university education in terms of self-esteem, anxiety, and body image.
- 4) To assess the role of professional occupation and employment status in shaping the psychological experiences of Lebanese menopausal women, examining differences between employed and non-employed women across the three key psychological dimensions.
- 5) To explore the influence of religious affiliation** on psychological well-being during menopause, comparing the experiences of Muslim and Christian Lebanese women in terms of self-esteem, anxiety levels, and body image perceptions.
- 6) To determine the prevalence and distribution of psychological outcomes (self-esteem levels, anxiety levels, and body image perceptions) among Lebanese menopausal women across different sociodemographic groups.
- 7) To identify significant sociodemographic predictors of psychological well-being during menopause by examining statistical associations between demographic characteristics and psychological outcomes through chi-square analyses and correlation studies.
- 8) To provide evidence-based insights for developing culturally appropriate interventions and support systems for Lebanese menopausal women by understanding how various social, cultural, and demographic factors contribute to their psychological experiences during this life transition.

2. METHODOLOGY

2.1. Research Design

This research employed a cross-sectional, descriptive-analytical study design using a mixed-methods approach that combined quantitative data collection with descriptive analysis techniques.

The study was designed to examine the relationships between sociodemographic factors and psychological well-being among Lebanese women experiencing menopause, providing both statistical analysis of associations and comprehensive descriptive insights into the menopausal experience within the Lebanese cultural context.

2.2. Study Population and Sampling

2.2.1. Target Population

The target population consisted of Lebanese women who had reached menopause, defined as the cessation of menstruation for at least 12 consecutive months, residing in various regions of Lebanon.

2.2.2. Sample Size and Selection

A convenience sampling method was employed to recruit 260 menopausal women aged between 48 and 65 years from diverse Lebanese regions. The sample size was calculated to ensure adequate statistical power for detecting meaningful differences between groups while accounting for the diverse sociodemographic characteristics of the Lebanese population.

2.3. Inclusion Criteria

Participants were required to meet several specific criteria to be eligible for inclusion in the study. All participants had to be Lebanese women between the ages of 48 and 65 years with confirmed menopausal status, defined as the complete absence of menstruation for at least 12 consecutive months. Additionally, participants were required to be current residents of Lebanon from one of the three main geographical regions under study (Northern Lebanon, Beirut and Mount Lebanon, or Southern Lebanon).

Essential prerequisites for participation included the cognitive and legal capacity to provide informed consent and demonstrated willingness to voluntarily participate in the research study.

2.4. Exclusion Criteria

Several exclusion criteria were established to ensure the validity and reliability of the study results. Women who had experienced induced menopause as a result of surgical procedures such as hysterectomy or oophorectomy, or due to medical interventions including chemotherapy or radiation therapy, were excluded from participation to maintain focus on natural menopausal transitions.

Additionally, women with severe psychiatric disorders that could potentially impair their ability to complete the survey accurately or provide reliable responses were not included in the study. Language barriers also constituted grounds for exclusion, as participants needed to be able to communicate effectively in either Arabic or French to ensure proper understanding of the survey instruments.

Finally, any participants who provided incomplete survey responses were excluded from the final analysis to maintain data quality and statistical validity.

2.5. Data Collection

2.5.1. Geographic Distribution

Participants were recruited from three main Lebanese regions to ensure geographic representativity across the country. The distribution included 80 participants (30.8%) from Northern Lebanon, 100 participants (38.4%) from Beirut and Mount Lebanon, and 80 participants (30.8%) from Southern Lebanon. This strategic geographic distribution was deliberately designed to capture regional variations in cultural practices, socioeconomic conditions, and healthcare access that might significantly influence the menopausal experience of Lebanese women. By ensuring representation from all major regions, the study aimed to provide a comprehensive understanding of how geographic and regional factors intersect with the psychological dimensions of menopause across the diverse Lebanese landscape.

2.6. Data Collection Procedure

Data collection was conducted through structured face-to-face interviews and self-administered questionnaires. Trained research assistants, familiar with Lebanese cultural contexts and fluent in Arabic and French, conducted the interviews to ensure cultural sensitivity and accurate data collection. The data collection period extended over three months to accommodate the geographic distribution and ensure adequate participant recruitment across all regions.

2.7. Instruments

Three validated psychological assessment instruments were utilized to measure the key dependent variables:

1. Coopersmith Self-Esteem Inventory (SEI)

The Coopersmith Self-Esteem Inventory was employed to assess participants' self-esteem levels. This widely validated instrument measures attitudes toward the self in social, academic, family, and personal areas of experience. The inventory provides a reliable assessment of self-esteem that has been validated across diverse cultural contexts. Scores were categorized into low and high self-esteem levels based on established cut-off points.

2. Spielberger State-Trait Anxiety Inventory (STAI)

The Spielberger State-Trait Anxiety Inventory was used to measure anxiety levels among participants. This instrument distinguishes between state anxiety (temporary anxiety in specific situations) and trait anxiety (general tendency toward anxiety). The STAI has demonstrated excellent psychometric properties and has been validated for use in Middle Eastern populations. Anxiety levels were classified as low or high based on standardized scoring procedures.

3. Body Image Questionnaire

A validated body image questionnaire was administered to assess participants' perceptions and satisfaction with their physical appearance and bodily changes associated with menopause. The instrument evaluated various dimensions of body image, including body satisfaction, body-related anxiety, and perceived physical attractiveness. Responses were categorized into low and high body image satisfaction levels.

3. FINDINGS AND RESULTS

This section presents the findings from the comprehensive analysis of 260 Lebanese menopausal women aged 48-65 years, examining the relationships between sociodemographic characteristics and psychological well-being during menopause. The results are organized to address each of the study's eight main objectives, providing both descriptive statistics of the sample characteristics and inferential analyses of the associations between various demographic factors and psychological outcomes.

The analysis focuses on three key psychological dimensions: self-esteem, anxiety levels, and body image perceptions, measured using validated instruments including the Coopersmith Self-Esteem Inventory, Spielberger State-Trait Anxiety Inventory, and Body Image Questionnaire. Statistical analyses were conducted using chi-square tests to examine associations between categorical variables, with significance levels set at $p < 0.05$.

The findings reveal important patterns in how Lebanese women experience menopause psychologically, with significant variations observed across different sociodemographic groups. Notably, the results demonstrate that while the majority of participants reported high levels of self-esteem (83.8%) and positive body image (75.4%), a substantial proportion experienced elevated anxiety levels (68.5%) during their menopausal transition. These baseline psychological outcomes serve as the foundation for understanding how various cultural, social, and demographic factors influence the menopausal experience in the Lebanese context.

The sample demonstrated strong geographic representativity across Lebanon's main regions, with equal religious distribution between Muslim and Christian participants, balanced educational levels, and diverse marital and occupational statuses. This diversity allows for meaningful comparisons across different sociodemographic categories and provides insights into the varied experiences of Lebanese women during menopause.

The subsequent tables present detailed analyses examining how marital status, parenthood, educational attainment, professional occupation, and religious affiliation relate to psychological well-being during menopause. These findings contribute to understanding the complex interplay between cultural factors and psychological health during this critical life transition, with implications for developing culturally appropriate support systems for Lebanese menopausal women.

Table 1 presents the sociodemographic characteristics and psychological outcomes of Lebanese menopausal women (N=260).

Table 1. Sociodemographic characteristics and psychological outcomes of Lebanese menopausal women (N=260).

	Participants (N=260)
Average age $\pm$ standard deviation	56.67 $\pm$ 4.84, 45-65 years
45-50 years	33 (12.7%)
51-55 years	65 (25%)
56-60 years	97 (37.3%)
61-65 years	65 (25%)
Region	
North	80 (30.8%)
Beirut	100 (38.4%)
South	80 (30.8%)
Religion	
Muslim	130 (50%)
Christian	130 (50%)
Education level	
Below university level	127 (48.8%)
University or higher	133 (51.2%)
Marital status	
Single	130 (50%)
Married	50 (19.2%)
Separated or divorced	40 (15.4%)
Widowed	40 (15.4%)
Number of children (non-single women)	
No children	60 (46.2%)
With children	70 (53.8%)
Professional occupation	
No	115 (44.2%)
Yes	145 (55.8%)
Self-esteem	
Low level	42 (16.2%)
High level	218 (83.8%)
Anxiety level	
Low level	82 (31.5%)
High level	178 (68.5%)
Body image	
Low level	64 (24.6%)
High level	196 (75.4%)

Table 2 illustrates the distribution of psychological outcomes (self-esteem, anxiety, and body image) by marital status among Lebanese menopausal women.

Table 2. Distribution of psychological outcomes (Self-esteem, anxiety, and body image) by marital status among Lebanese Menopausal women.

		Marital status					p-value
		Single	Married	Separated or divorced	Widowed	Total	
Self-esteem	Low	23 (17.7%)	12 (24%)	2 (5%)	5 (12.5%)	42 (16.2%)	0.087
Self-esteem	High	107 (82.3%)	38 (76%)	38 (95%)	35 (87.5%)	218 (83.8%)	0.087
Self-esteem	Total	130 (100%)	50 (100%)	40 (100%)	40 (100%)	260 (100%)	0.087
Anxiety level	Low	31 (23.8%)	25 (50%)	12 (30%)	14 (35%)	82 (31.5%)	0.008
Anxiety level	High	99 (76.2%)	25 (50%)	28 (70%)	26 (65%)	178 (68.5%)	0.008
Anxiety level	Total	130 (100%)	50 (100%)	40 (100%)	40 (100%)	260 (100%)	0.008
Body image	Low	29 (22.3%)	16 (32%)	5 (12.5%)	14 (35%)	64 (24.6%)	0.062
Body image	High	101 (77.7%)	34 (68%)	35 (87.5%)	26 (65%)	196 (75.4%)	0.062
Body image	Total	130 (100%)	50 (100%)	40 (100%)	40 (100%)	260 (100%)	0.062

Table 3 displays the distribution of psychological outcomes (Self-esteem, anxiety, and body image) by parenthood status among Lebanese menopausal women.

Table 3. Distribution of psychological outcomes (Self-esteem, anxiety, and body image) by parenthood status among Lebanese Menopausal women.

Parenthood impact							
		Married, separated or divorced, widowed without children	Married, separated or divorced, widowed with children	Single	Total	p-value	Self-Esteem
Low	1 (1.7%)	18 (25.7%)	23 (17.7%)	42 (16.2%)	0.001	p-value	High
59 (98.3%)	52 (74.3%)	107 (82.3%)	218 (83.8%)	42 (16.2%)	0.001	Total	60 (100%)
70 (100%)	130 (100%)	260 (100%)	218 (83.8%)	Anxiety Level	Low	5 (8.3%)	46 (65.7%)
31 (23.8%)	82 (31.5%)	<0.0001	218 (83.8%)	High	55 (91.7%)	24 (34.3%)	99 (76.2%)
178 (68.5%)	82 (31.5%)	<0.0001	Total	60 (100%)	70 (100%)	130 (100%)	260 (100%)
178 (68.5%)	Body Image	Low	4 (6.7%)	31 (44.3%)	29 (22.3%)	64 (24.6%)	<0.0001
178 (68.5%)	High	56 (93.3%)	39 (55.7%)	101 (77.7%)	196 (75.4%)	64 (24.6%)	<0.0001
Total	60 (100%)	70 (100%)	130 (100%)	260 (100%)	196 (75.4%)		

Table 4 shows the distribution of psychological outcomes (Self-esteem, anxiety, and body image) by educational level among Lebanese menopausal women.

Table 4. Distribution of psychological outcomes (Self-Esteem, Anxiety, and Body Image) by educational level among Lebanese Menopausal Women.

Educational level					
	Below university level	University or higher	Total	P -value	Self-esteem
Low	21 (16.5%)	21 (15.8%)	42 (16.2%)	0.870	Self-esteem
High	106 (83.5%)	112 (84.2%)	218 (83.8%)	0.870	Self-esteem
Total	127 (100%)	133 (100%)	260 (100%)	0.870	Anxiety level
Low	44 (34.6%)	38 (28.6%)	82 (31.5%)	0.292	Anxiety level
High	83 (65.4%)	95 (71.4%)	178 (68.5%)	0.292	Anxiety level
Total	127 (100%)	133 (100%)	260 (100%)	0.292	Body image
Low	35 (27.6%)	29 (21.8%)	64 (24.6%)	0.282	Body image
High	92 (72.4%)	104 (78.2%)	196 (75.4%)	0.282	Body image
Total	127 (100%)	133 (100%)	260 (100%)	0.282	

Table 5 presents the distribution of psychological outcomes (Self-esteem, anxiety, and body image) by professional occupation status among Lebanese menopausal women.

Table 5. Distribution of psychological outcomes (Self-esteem, anxiety, and body image) by professional occupation status among Lebanese Menopausal women.

Professional occupation					
	No	Yes	Total	p-value	Self-esteem
Low	20 (17.4%)	22 (15.2%)	42 (16.2%)	0.629 Chi-2	Self-esteem
High	95 (82.6%)	123 (84.8%)	218 (83.8%)	0.629 Chi-2	Self-esteem
Total	115 (100%)	145 (100%)	260 (100%)	0.629 Chi-2	Anxiety level
Low	44 (38.3%)	38 (26.2%)	82 (31.5%)	0.038 Chi-2	Anxiety level
High	71 (61.7%)	107 (73.8%)	178 (68.5%)	0.038 Chi-2	Anxiety level
Total	115 (100%)	145 (100%)	260 (100%)	0.038 Chi-2	Body image
Low	35 (30.4%)	29 (20%)	64 (24.6%)	0.05 Chi-2	Body image
High	80 (69.6%)	116 (80%)	196 (75.4%)	0.05 Chi-2	Body image
Total	115 (100%)	145 (100%)	260 (100%)	0.05 Chi-2	

Table 6 shows the distribution of psychological outcomes (Self-esteem, anxiety, and body image) by religious affiliation among Lebanese menopausal women.

Table 6. Distribution of psychological outcomes (Self-esteem, anxiety, and body image) by religious affiliation among Lebanese Menopausal women.

Religion					
	Muslim	Christian	Total	p-value	Self-esteem
Low	29 (22.3%)	13 (10%)	42 (16.2%)	0.007	Self-esteem
High	101 (77.7%)	117 (90%)	218 (83.8%)	0.007	Self-esteem
Total	130 (100%)	130 (100%)	260 (100%)	0.007	Anxiety level
Low	44 (33.8%)	38 (29.2%)	82 (31.5%)	0.423	Anxiety level
High	86 (66.2%)	92 (70.8%)	178 (68.5%)	0.423	Anxiety level
Total	130 (100%)	130 (100%)	260 (100%)	0.423	Body image
Low	35 (26.9%)	29 (22.3%)	64 (24.6%)	0.388	Body image
High	95 (73.1%)	101 (77.7%)	196 (75.4%)	0.388	Body image
Total	130 (100%)	130 (100%)	260 (100%)	0.388	

3.1. Sample Characteristics and Overall Psychological Profile

The demographic profile of the 260 Lebanese menopausal women reveals a diverse and representative sample across multiple dimensions. With an average age of 56.67 years (± 4.84), the majority of participants (37.3%) fell within the 56-60 age range, indicating a sample primarily composed of women in the later stages of menopausal transition. The equal distribution between Muslim (50%) and Christian (50%) participants, along with balanced educational attainment (51.2% university-educated), provides an excellent foundation for examining religious and educational influences on menopausal experiences.

Notably, half of the sample (50%) consisted of single women, which is substantially higher than typical demographic patterns in Lebanese society. This unique distribution, combined with 19.2% married, 15.4% separated/divorced, and 15.4% widowed women, offers valuable insights into how different relationship statuses impact psychological well-being during menopause. Among non-single women, 53.8% had children, providing adequate representation for examining parenthood effects.

The overall psychological profile reveals a complex pattern: while the majority of women demonstrated resilience with high self-esteem (83.8%) and positive body image (75.4%), a concerning 68.5% experienced elevated anxiety

levels. This suggests that while Lebanese menopausal women maintain positive self-regard and body acceptance, anxiety presents a significant psychological challenge during this transition.

3.2. Marital Status and Psychological Well-Being

The analysis of marital status effects reveals significant associations with anxiety levels ($p=0.008$) but not with self-esteem or body image. Married women demonstrated the most favorable anxiety profile, with 50% reporting low anxiety levels compared to only 23.8% of single women. This finding suggests that marital partnership may provide protective psychological benefits during menopause, possibly through emotional support, shared responsibilities, and reduced social stigma associated with being unmarried in Lebanese society.

Interestingly, separated/divorced women showed the highest self-esteem levels (95% high self-esteem) despite experiencing moderate anxiety levels (70% high anxiety). This paradoxical finding may reflect the empowerment and personal growth that can accompany independence after relationship dissolution, even while facing the stressors of single life during menopause.

Widowed women exhibited intermediate anxiety levels (65% high anxiety) and relatively high self-esteem (87.5%), suggesting that while bereavement creates emotional challenges, it may not fundamentally undermine self-worth. The absence of significant differences in body image across marital groups indicates that physical self-perception during menopause may be less influenced by relationship status than by other factors.

3.3. The Profound Impact of Parenthood

Perhaps the most striking findings emerge from the parenthood analysis, which revealed highly significant associations across all three psychological dimensions ($p<0.001$ for all measures).

The results demonstrate a clear hierarchy of psychological well-being: women who are married, separated, divorced, or widowed without children showed the most favorable psychological profiles (98.3% high self-esteem, 91.7% low anxiety, 93.3% positive body image), followed by single women, with mothers experiencing the greatest psychological challenges.

This pattern challenges common assumptions about motherhood providing psychological benefits during menopause. Instead, the data suggest that women without children may experience menopause with greater psychological resilience. Several cultural interpretations emerge: childless women may have fewer caregiving responsibilities during menopause, allowing greater focus on self-care and personal well-being. Additionally, they may have developed alternative sources of identity and fulfillment beyond motherhood, providing psychological protection during this transition.

The finding that mothers experience significantly higher anxiety (91.7% vs. 34.3% in non-mothers) and lower body image satisfaction (44.3% vs. 6.7% low body image) may reflect the complex intersection of menopausal changes with ongoing maternal responsibilities, concerns about aging while still needed by children, and cultural pressures surrounding the "empty nest" syndrome.

3.4. Educational Attainment: Minimal Impact

Contrary to expectations, educational level showed no significant associations with any psychological outcome (all $p>0.05$). This surprising finding suggests that, in the Lebanese context, university education may not provide the psychological advantages during menopause that might be expected. Several interpretations are possible: the relatively high overall education level in the sample (51.2% university-educated) may have reduced variability, or cultural factors specific to Lebanese society may override educational advantages.

Alternatively, this finding may reflect the unique nature of menopausal challenges, which may be more influenced by biological, social, and cultural factors than by educational resources. The lack of educational effects suggests that

psychological support during menopause should be accessible to all women regardless of educational background, as higher education does not appear to confer protective benefits.

3.5. Professional Occupation: Mixed Benefits

Employment status demonstrated significant associations with anxiety ($p=0.038$) and body image ($p=0.05$), but not with self-esteem. Employed women showed higher anxiety levels (73.8% vs. 61.7%) but better body image satisfaction (80% vs. 69.6% positive body image). This pattern suggests that while professional engagement may enhance physical self-perception, possibly through increased social interaction and a sense of purpose, it may also create additional stress during menopause.

The higher anxiety among employed women likely reflects the dual burden of managing menopausal symptoms while meeting professional responsibilities, navigating workplace challenges, and balancing multiple roles. However, the positive body image effects may stem from professional environments that maintain a focus on competence rather than purely physical attributes, or from the financial independence that enables better self-care.

3.6. Religious Affiliation: Self-Esteem Differences

Religious affiliation showed a significant association with self-esteem ($p=0.007$) but not with anxiety or body image. Christian women demonstrated higher self-esteem levels (90% vs. 77.7% in Muslim women). This finding may reflect several cultural and social factors specific to Lebanese society, including different community support systems, varying attitudes toward aging and menopause, or differing cultural narratives about women's roles and value beyond reproductive years.

The absence of religious differences in anxiety and body image suggests that, while religious identity may influence self-worth during menopause, it may not significantly impact emotional distress or physical self-perception. This pattern indicates that religious communities may provide differential support for maintaining positive self-regard while offering similar levels of support for managing emotional and physical challenges.

3.7. Implications for Understanding Lebanese Menopausal Experience

These findings collectively depict Lebanese menopausal women as psychologically resilient concerning self-esteem and body image but vulnerable to anxiety. The results emphasize the critical importance of social relationships, particularly marriage and parenthood status, in shaping psychological well-being during menopause. The protective effects of marriage and the challenges faced by mothers suggest that social support and role transitions are central to the Lebanese menopausal experience.

The minimal impact of education and the mixed effects of employment challenge assumptions about socioeconomic advantages during menopause, suggesting that cultural and social factors may be more influential than individual resources. The religious differences in self-esteem point to the importance of community and cultural identity in maintaining psychological well-being during this transition.

These patterns have important implications for developing culturally appropriate interventions and support systems for Lebanese menopausal women, emphasizing the need for approaches that address anxiety management, support mothers during this transition, and leverage the protective aspects of social relationships and religious community involvement.

4. DISCUSSION

This study provides the first comprehensive examination of the psychological experiences of Lebanese women during menopause, revealing complex patterns of resilience and vulnerability that challenge conventional understanding of this life transition. The findings illuminate how cultural, social, and demographic factors uniquely

intersect to shape psychological well-being during menopause in the Lebanese context, offering important insights for both theoretical understanding and practical intervention development.

4.1. The Paradox of Lebanese Menopausal Psychology

One of the most striking findings is the paradoxical psychological profile of Lebanese menopausal women: high levels of self-esteem and positive body image coexisting with elevated anxiety levels. This pattern diverges from Western research that typically shows more uniform psychological distress or resilience during menopause (Avis et al., 2015; Hunter & Rendall, 2007). The maintenance of positive self-regard and body acceptance despite significant anxiety suggests that Lebanese women may possess cultural resources that protect certain aspects of psychological well-being while remaining vulnerable to emotional distress.

This paradox may reflect the complex intersection of traditional and modern influences in Lebanese society. Traditional cultural values that emphasize women's wisdom and respect for age may support maintained self-esteem, while rapid social changes and uncertain futures contribute to heightened anxiety (Adra, 2008; Moghadam, 2003). The preservation of a positive body image despite physical changes associated with menopause may indicate cultural attitudes that value women beyond purely physical attributes, or, conversely, strong cultural pressures to maintain appearances that motivate continued investment in physical self-care.

4.2. Redefining the Role of Social Relationships

4.2.1. Marriage as Psychological Protection

The significant protective effect of marriage on anxiety levels aligns with broader literature on social support during life transitions (Woods & Mitchell, 2005) but takes on particular meaning in the Lebanese context where unmarried women face substantial social stigma. The finding that married women experience 50% lower anxiety compared to only 23.8% of single women suggests that marital relationships provide crucial emotional buffering during menopause. This protection likely operates through multiple mechanisms: practical support for managing menopausal symptoms, emotional companionship during a challenging transition, and social legitimacy in a culture that highly values marriage.

However, the high proportion of single women in this sample (50%) itself tells an important story about changing Lebanese society. This figure substantially exceeds typical demographic patterns and may reflect evolving attitudes toward marriage, economic constraints affecting family formation, or the impact of Lebanon's ongoing social and economic challenges on traditional life patterns (World Bank, 2021).

4.2.2. The Unexpected Burden of Motherhood

Perhaps the most counterintuitive finding challenges fundamental assumptions about motherhood and psychological well-being during menopause. The data reveal that mothers experience significantly greater psychological distress across all three dimensions compared to childless women, contradicting the common narrative that children provide comfort and meaning during menopause (Deeks & McCabe, 2004).

This finding demands careful cultural interpretation. In Lebanese society, where motherhood is traditionally central to women's identity and social value, the psychological challenges experienced by menopausal mothers may reflect several interconnected factors. First, the "empty nest" syndrome may be particularly acute in a culture where maternal identity is so prominent, creating identity crises as children become independent. Second, continuing caregiving responsibilities for adult children, particularly in the context of Lebanon's economic difficulties, may compound the stress of managing personal menopausal changes.

The extraordinary psychological resilience demonstrated by childless women (98.3% high self-esteem, only 8.3% high anxiety) suggests that these women may have developed alternative sources of identity, meaning, and support that serve them well during menopause. These findings challenge healthcare providers and policymakers to recognize

that mothers may need additional psychological support during menopause, rather than assuming that children provide automatic emotional benefits.

4.3. The Limited Influence of Socioeconomic Factors

4.3.1. Educational Attainment: An Unexpected Non-Factor

The absence of educational effects on psychological outcomes during menopause contradicts extensive literature suggesting that higher education provides psychological resources for managing life transitions (Ayers et al., 2010). Several explanations may account for this unexpected finding in the Lebanese context. First, the relatively high educational level of the sample (51.2% university-educated) may reflect the urbanized, educated populations from which participants were drawn, potentially limiting variability. Second, the unique nature of menopausal challenges may transcend educational preparation, as no amount of formal education fully prepares women for the biological and psychological realities of this transition.

More provocatively, this finding may indicate that in Lebanese culture, traditional wisdom, family support, and cultural knowledge about aging may be more valuable for navigating menopause than formal educational credentials. This interpretation aligns with research suggesting that cultural knowledge and community support often outweigh individual educational resources in collectivistic societies (Obermeyer, 2000).

4.3.2. Employment: A Double-Edged Sword

The mixed effects of employment higher anxiety but better body image capture the complex realities of working women during menopause in contemporary Lebanon. The increased anxiety among employed women likely reflects the "double burden" of managing menopausal symptoms while meeting professional obligations, particularly challenging in Lebanese workplace cultures that may lack understanding or accommodation for menopausal women (El-Jardali et al., 2011).

However, the positive body image effects suggest that professional engagement provides important psychological benefits, possibly through maintaining focus on competence and achievement rather than purely physical attributes. Employment may also provide financial independence that enables better self-care and medical support during menopause. These findings highlight the need for workplace policies that support menopausal women while recognizing the overall benefits of professional engagement.

4.3.3. Religious and Cultural Identity

The significant self-esteem differences between Christian and Muslim women merit careful consideration within Lebanon's complex religious landscape. Christian women's higher self-esteem levels may reflect several factors: different community support structures, varying theological approaches to aging and women's roles, or differential access to resources and social networks (Joseph, 2000).

However, these findings must be interpreted cautiously, as they may reflect broader socioeconomic or regional differences that correlate with religious affiliation rather than religious identity per se. The absence of religious differences in anxiety and body image suggests that, while religious communities may differentially support self-worth, they provide similar levels of emotional and physical support during menopause.

4.4. Implications for Healthcare and Social Support

4.4.1. Rethinking Clinical Approaches

These findings have immediate implications for healthcare providers serving Lebanese menopausal women. The high prevalence of anxiety (68.5%) indicates a critical need for mental health screening and support as standard components of menopausal care. The counterintuitive finding that mothers experience greater psychological distress

suggests that healthcare providers should not assume that women with children have adequate emotional support; indeed, they may require additional resources.

The protective effects of marriage highlight the importance of involving spouses in menopausal care and education, while the challenges faced by single women indicate the need for alternative support systems. Healthcare systems should develop group support programs and community resources.

5. DISCUSSION AND CONCLUSION

This study provides the first comprehensive examination of the psychological experiences of Lebanese women during menopause, revealing complex patterns of resilience and vulnerability that challenge conventional understanding of this life transition. The findings illuminate how cultural, social, and demographic factors uniquely intersect to shape psychological well-being during menopause in the Lebanese context, offering important insights for both theoretical understanding and practical intervention development.

5.1. *The Paradox of Lebanese Menopausal Psychology*

One of the most striking findings is the paradoxical psychological profile of Lebanese menopausal women: high levels of self-esteem and positive body image coexisting with elevated anxiety levels. This pattern diverges from Western research that typically shows more uniform psychological distress or resilience during menopause (Avis et al., 2015; Hunter & Rendall, 2007). The maintenance of positive self-regard and body acceptance despite significant anxiety suggests that Lebanese women may possess cultural resources that protect certain aspects of psychological well-being while remaining vulnerable to emotional distress.

This paradox may reflect the complex intersection of traditional and modern influences in Lebanese society. Traditional cultural values that emphasize women's wisdom and respect for age may support maintained self-esteem, while rapid social changes and uncertain futures contribute to heightened anxiety (Adra, 2008; Moghadam, 2003). The preservation of a positive body image despite physical changes associated with menopause may indicate cultural attitudes that value women beyond purely physical attributes, or, conversely, strong cultural pressures to maintain appearances that motivate continued investment in physical self-care.

5.2. *Redefining the Role of Social Relationships*

5.2.1. *Marriage as Psychological Protection*

The significant protective effect of marriage on anxiety levels aligns with broader literature on social support during life transitions (Woods & Mitchell, 2005) but takes on particular meaning in the Lebanese context where unmarried women face substantial social stigma. The finding that married women experience 50% lower anxiety compared to only 23.8% of single women suggests that marital relationships provide crucial emotional buffering during menopause. This protection likely operates through multiple mechanisms: practical support for managing menopausal symptoms, emotional companionship during a challenging transition, and social legitimacy in a culture that highly values marriage. However, the high proportion of single women in this sample (50%) itself tells an important story about changing Lebanese society. This figure substantially exceeds typical demographic patterns and may reflect evolving attitudes toward marriage, economic constraints affecting family formation, or the impact of Lebanon's ongoing social and economic challenges on traditional life patterns (World Bank, 2021).

5.2.2. *The Unexpected Burden of Motherhood*

Perhaps the most counterintuitive finding challenges fundamental assumptions about motherhood and psychological well-being during menopause. The data reveal that mothers experience significantly greater psychological distress across all three dimensions compared to childless women, contradicting the common narrative that children provide comfort and meaning during menopause (Deeks & McCabe, 2004).

This finding demands careful cultural interpretation. In Lebanese society, where motherhood is traditionally central to women's identity and social value, the psychological challenges experienced by menopausal mothers may reflect several interconnected factors. First, the "empty nest" syndrome may be particularly acute in a culture where maternal identity is so prominent, creating identity crises as children become independent. Second, continuing caregiving responsibilities for adult children, particularly in the context of Lebanon's economic difficulties, may compound the stress of managing personal menopausal changes.

The extraordinary psychological resilience demonstrated by childless women (98.3% high self-esteem, only 8.3% high anxiety) suggests that these women may have developed alternative sources of identity, meaning, and support that serve them well during menopause. These findings challenge healthcare providers and policymakers to recognize that mothers may need additional psychological support during menopause, rather than assuming that children provide automatic emotional benefits.

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The protective effects of marriage highlight the importance of involving spouses in menopausal care and education, while the challenges faced by single women indicate the need for alternative support systems. Healthcare systems should develop group support programs, community resources, and peer networks that can provide the social connection and practical support that marriage might otherwise offer.

5.4.2. Community-Based Interventions

The minimal impact of individual factors such as education, combined with the strong influence of social relationships, suggests that community-based interventions may be more effective than individual-focused approaches. Religious communities, given their differential effects on self-esteem, represent important but underutilized resources for supporting menopausal women. Culturally appropriate programs that work through existing social networks and community structures may be more effective than clinical interventions alone.

5.5. Theoretical Implications

These findings contribute to the theoretical understanding of menopause as a biopsychosocial phenomenon that cannot be understood apart from cultural context. The Lebanese experience demonstrates that Western models of menopausal adjustment may not adequately capture the complexity of this transition in different cultural settings. The protective effects of certain social relationships and the unexpected challenges of others suggest that social support operates in culturally specific ways that require local understanding and intervention approaches.

5.6. Study Limitations and Future Directions

Several limitations must be acknowledged. The cross-sectional design limits causal inference, and the convenience sampling may affect generalizability. The high proportion of single women in the sample, while providing valuable insights, may not represent typical Lebanese demographics. Future research should employ longitudinal designs to track psychological changes throughout the menopausal transition and examine how broader social and economic changes in Lebanon affect women's experiences.

Additionally, qualitative research is needed to understand the mechanisms underlying these quantitative findings. Why do childless women demonstrate such remarkable psychological resilience? How do married women derive psychological protection from their relationships? What specific cultural factors contribute to the overall psychological profile of Lebanese menopausal women?

6. CONCLUSION

This study reveals that Lebanese women's psychological experiences during menopause are shaped by a complex interplay of cultural values, social relationships, and individual circumstances that often operate differently than expected. The findings challenge assumptions about motherhood, marriage, and socioeconomic advantages while highlighting the crucial importance of social connections and cultural identity. These insights provide a foundation

for developing culturally appropriate interventions and support systems that address the specific needs and strengths of Lebanese menopausal women, contributing to a more nuanced understanding of how cultural context shapes this universal biological transition.

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