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Role of Family Relationship and Menopausal Symptom Severity in Psychological Distress among Menopausal Women

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Abstract: Menopause marks a significant change in a woman's life characterized by physiological, psychological and emotional changes (Afridi, 2017). This study looked at how family relations and the intensity of menopause symptoms can affect psychological distress in menopause women. Quantitative research was conducted for 150 women aged 40 to 60 years (M = 50.15; SD = 4.42). Psychological distress was evaluated by the Kessler Psychological Distress Scale – K10 which produced a mean of 22.37 (standard deviation = 7.69). In this study, menopausal symptom severity was evaluated by the Menopause Rating Scale which produced a mean of 16.58 (standard deviation = 8.11). Family APGAR Scale was used which produced a mean of 7.13 (standard deviation = 2.65) to evaluate the family relationships in the women being studied. Pearson correlation analysis found a strong positive association between the severity of menopausal symptoms and psychological distress ($r = .636$, $p < .001$) meaning women with more severe symptoms are experiencing greater levels of psychological distress. There was a significant negative correlation ($r = –.315$, $p < .001$) between family ties and psychological distress indicating that improved family functioning could reduce distress. There was a negative correlation of family interactions with symptom severity. Independent samples t-test showed that there is no significant difference in distress between perimenopausal women (M = 22.13) and postmenopausal women (M = 22.61), $t(148) = −0.381$, $p = .704$. The findings show that psychological distress during menopause involves not

only biological aspects but also social aspects like relations within the family. Strong family ties help in reducing distress whereas vulnerability increases with the increase in severity of the symptoms (Kling et al. 2019; Zhao et al. 2019).

Keywords: *Menopause, Psychological distress, Family Relationships, Menopausal Symptom Severity*

1. Introduction

1.1 *Menopause*

Menopause is defined as the permanent cessation of menstruation resulting from the loss of ovarian follicular activity and is clinically diagnosed after 12 consecutive months of amenorrhea without other pathological or physiological causes (World Health Organization [WHO], 2024). It is a natural biological transition typically occurring between 45 and 55 years and is divided into perimenopause, menopause, and postmenopause (Rössler et al., 2016).

This transition is associated with a range of symptoms including vasomotor disturbances (hot flashes, night sweats), sleep problems, fatigue, mood changes, and cognitive difficulties (Kling et al., 2019; Wen et al., 2024). While some women experience minimal discomfort, others report significant disruption in daily functioning and emotional well-being (Greenblum et al., 2013).

Menopausal experiences vary widely and are influenced not only by biological changes but also by psychological and socio-cultural factors such as beliefs, coping strategies, and support systems (Rubinstain, 2013; Lee et al., 2010). Cultural interpretations also shape the experience, with menopause being viewed either as a loss of fertility or as a transition associated with freedom from reproductive responsibilities (Ali et al., 2020).

The biopsychosocial model provides a useful framework for understanding menopause, emphasizing the interaction of biological, psychological, and social factors (Afridi, 2017). In the Indian context, menopause is often accompanied by role transitions, caregiving responsibilities, and limited mental health awareness, which may influence women's emotional well-being (Kannur & Itagi, 2018a; Karkhanis & Mathur, 2016). Family interactions, therefore, play a significant role in shaping menopausal experiences (Yuan & Ren, 2025; Masood et al., 2016).

1.2 *Psychological Distress in Women Experiencing Menopause*

Psychological distress refers to a state of emotional suffering characterized by symptoms such as anxiety, sadness, irritability, and restlessness (American Psychological

Association [APA], 2018). Women in midlife are particularly vulnerable due to the combined influence of biological changes and psychosocial stressors (Kuck & Hogervorst, 2024).

The menopausal transition is associated with mood disturbances, sleep problems, and anxiety, partly due to changes in neurotransmitter systems (Afridi, 2017; Hu et al., 2016). However, distress is not solely determined by hormonal changes but is also influenced by contextual factors such as life stressors, coping mechanisms, and social support (Nosek et al., 2012; Wang et al., 2022).

Women in midlife often experience multiple stressors including caregiving, work demands, and marital changes, which can intensify psychological distress, especially in the presence of physical discomfort (Kannur & Itagi, 2018a; Kling et al., 2019). Sleep disturbances further contribute to emotional instability and reduced coping capacity (Greenblum et al., 2013).

It is important to distinguish psychological distress from clinical disorders, as many women experience subclinical symptoms that affect quality of life without meeting diagnostic criteria (Yazdanpanahi et al., 2018). Distress exists on a continuum and is influenced by both symptom severity and relational support (Zhao et al., 2019). Strong family support facilitates better adjustment, whereas lack of support may increase emotional vulnerability (Arnot et al., 2021).

1.3 *Menopausal Symptom Severity*

Menopausal symptom severity refers to the intensity and frequency of physical, psychological, and urogenital symptoms experienced during menopause (Kling et al., 2019; Zhao et al., 2019). These symptoms are commonly categorized as vasomotor, psychological, and somatic or urogenital (Lee et al., 2010; Wen et al., 2024).

The impact of menopause depends not only on the presence of symptoms but also on their severity. Women experiencing more intense and frequent symptoms often report greater disruption in daily functioning, relationships, and emotional well-being (Greenblum et al., 2013). Perceived severity plays a key role in determining psychological outcomes, with higher severity associated with increased distress (Rubinstein, 2013; Ali et al., 2020).

Standardized tools such as the Menopause Rating Scale (MRS) allow systematic assessment of symptom severity across domains, enabling examination of its relationship with psychological outcomes (Kling et al., 2019). Research consistently indicates that higher symptom severity is associated with poorer mental health and reduced quality of life.

1.4 *Family Relationships*

Family relationships are a crucial aspect of emotional well-being, particularly in

collectivistic cultures like India where family serves as a primary source of support, identity, and security (Yuan & Ren, 2025; Wang et al., 2022). Family functioning includes communication, emotional support, adaptability, and conflict resolution (Kling et al., 2019).

During midlife, women experience changes in familial roles, including shifts in marital relationships, parenting responsibilities, and caregiving roles, which may influence psychological adjustment (Kannur & Itagi, 2018a). Supportive family environments promote emotional security and help women cope with menopausal changes, whereas strained relationships contribute to distress (Masood et al., 2016; Arnot et al., 2021).

The Family APGAR Scale assesses family functioning across adaptability, partnership, growth, affection, and resolve (Smilkstein, 1978). Research indicates that stronger family support is associated with lower levels of anxiety and depression, while relational conflict may exacerbate emotional and physical symptoms (Wang et al., 2022; Lee et al., 2010).

Family support also functions as a buffer against stress, reducing the psychological impact of menopausal symptoms. Conversely, poor family functioning may intensify distress and contribute to a cycle between relational stress and symptom severity (Greenblum et al., 2013).

1.5 *Interrelationship Between Menopausal Symptom Severity, Family Relationships, and Psychological Distress*

Menopause involves an interaction of biological changes and psychosocial factors, where symptom severity, coping processes, and family dynamics collectively influence psychological distress (Rajput, 2025; Divya et al., 2024).

Having Severe menopausal symptoms such as sleep disturbances and fatigue can increase emotional strain, while supportive family relationships may reduce psychological distress. In contrast, strained family dynamics may intensify both symptom perception and emotional suffering, creating a negative feedback loop (Mathew & Prasad, 2025; Divya et al., 2024).

Thus, examining menopausal symptom severity and family relationships together provides a more comprehensive understanding of psychological distress during menopause.

2. Theoretical Background

The Biopsychosocial Model

The Biopsychosocial Model, proposed by Engel (1977), emphasizes that health and illness are shaped by the interaction of biological, psychological, and social factors. In the

context of menopause, biological changes such as fluctuations in estrogen and progesterone contribute to symptoms including hot flashes, sleep disturbances, and mood changes (Greenblum et al., 2013).

However, these biological factors alone do not explain variations in women's experiences. Psychological factors such as coping style, prior mental health status, and interpretation of symptoms influence emotional outcomes (Lee et al., 2010). Social factors, including family relationships, marital satisfaction, and cultural attitudes, further shape the experience of menopause (Ali et al., 2020).

In the present study, menopausal symptom severity represents the biological component, psychological distress reflects the emotional outcome, and family relationships represent the social dimension. These components interact dynamically in influencing women's well-being during menopause.

2.1 Rationale of the Study

Menopause is an important developmental stage in a woman's life; however, research has largely focused on its biological aspects, with comparatively limited attention to psychological and relational dimensions, particularly in the Indian context (Kannur & Itagi, 2018a; Karkhanis & Mathur, 2016). While several studies have examined menopausal symptoms and psychological distress independently, fewer have explored their interaction with family relationships (Kling et al., 2019).

Existing literature suggests that menopausal transition does not uniformly lead to mental illness, although women may be more vulnerable during this period depending on contextual and psychosocial factors (Rössler et al., 2016; Hu et al., 2016). This highlights the need to examine variables beyond biological changes to better understand psychological distress.

Although social support has been widely studied, limited research has focused specifically on family functioning, often treating support as a general construct rather than examining dimensions such as adaptability, partnership, and emotional bonding (Zhao et al., 2019). This is particularly relevant in collectivistic societies like India, where family plays a central role in emotional well-being (Yuan & Ren, 2025; Masood et al., 2016).

Women in midlife often experience multiple stressors, including caregiving responsibilities, occupational demands, and changes in family roles, which may interact with menopausal symptoms and contribute to psychological distress (Kannur & Itagi, 2018b). Subclinical distress during this phase can affect quality of life, relationships, and productivity (Yazdanpanahi et al., 2018).

Despite this, there is a paucity of research that simultaneously examines menopausal symptom severity, family relationships, and psychological distress using standardized measures within the Indian context. Therefore, the present study aims to address this gap by investigating the combined role of these variables in understanding psychological distress among menopausal women.

3. Methodology

3.1 *Aim*

The aim is to examine the role of family relationships and menopausal symptom severity in psychological distress among menopausal women.

3.2 *Objective*

The objectives of the study were:

1. To study how the severity of menopausal symptoms correlates with psychological distress among menopausal women.
2. To study association of family relationship and psychological distress among menopausal women.
3. To compare psychological distress between perimenopausal and postmenopausal women.

3.3 *Hypotheses*

$H_0$1: There is no significant relationship between menopausal symptom severity and psychological distress among menopausal women.

$H_0$2: There is no significant relationship between family relationships and psychological distress among menopausal women.

$H_0$3: There is no significant difference in psychological distress between perimenopausal and postmenopausal women.

3.4 Variables

Independent Variables

1. Menopausal Symptom Severity
2. Family Relationships

Dependent Variable

1. Psychological Distress

3.5 Sample

The sample of this study included 150 menopausal women aged 40 to 60 years. Seventy-five women were in the perimenopausal stage while seventy-five women were in the post

menopause stage. Convenience sampling method was employed to select participants. The study excluded women with regular menstrual periods, women on HRT, and who underwent hysterectomy so that only menopausal women could be included in the study.

3.6 *Research design*

The research design of this study is quantitative, cross-sectional. Through correlational method, this study examined the correlation of menopausal symptom severity with familial relationship and psychological distress. A comparison was done to observe psychological distress among Perimenopausal and Postmenopausal women. The measurements were analyzed by statistical technique correlation and independent samples t-test using Statistical package for Social Sciences (SPSS).

3.7 Tools

The present study used the following standardized tools to collect the relevant data:

Kessler Psychological Distress Scale: Kessler Psychological Distress Scale (K10), developed by Kessler et al. (2002). It is a self-report scale for measuring non-specific psychological distress over the previous four weeks. The item consists of 10 items related to anxiety and depression symptoms; response is on a 5-point Likert scale (1 to 5). Total scores can be between 10 to 50, and higher scores indicate more distress. The K10 has good reliability and validity with internal consistency (Cronbach's α) between 0.76 and 0.97. It is a reliable screening tool used widely in mental health research contexts.

Menopause Rating Scale: MRS, developed by Heinemann et al. (2004), is a scale that rates menopausal symptoms based on severity and has three domains (somatic, psychological, and urogenital). The measure has 11 items, rated from 0 (No symptoms) to 4 (Very severe symptoms), higher scores indicating greater symptom severity. The MRS works in both clinical and research contexts, with good internal consistency (Cronbach's α >0.8) and excellent test-retest reliability across cultures. The overall severity of menopausal symptoms was captured by the total MRS score.

Family APGAR Scale: The Family APGAR Scale, developed by Smilkstein in 1978, was used to examine family relations. This scale measures family functioning through five dimensions of adaptability, partnership, growth, affection, and resolve. This scaled measure comprises of five items rated on a three-point scale with the total scores of the scale ranging from 0 to 10 with higher scores indicating healthier family dynamics. The Family APGAR is sufficiently reliable and valid within different cultural environments (Cronbach's alpha values between 0.80 and 0.86). It assesses the quality of interpersonal relationships and emotional support available to the individual (Smilkstein, 1978).

3.8 Procedure

The respondents were provided with a Google Forms link to the questionnaires. A total number of hundred and fifty women between the ages of 40 and 60 years were examined in the study. A participant must be perimenopausal or post-menopausal. To ensure homogeneity in our menopausal study sample, women with regular menstrual cycles, those who received hormone replacement therapy HRT and those who had undergone hysterectomy were excluded. They confirmed on a consent form that they were informed about the test and confidentiality. The participants completed the questionnaire after they filled out the consent form.

4. Result

Descriptive statistics, Pearson correlation, and independent samples t-test were employed using SPSS to investigate the influence of menopausal symptom severity and familial relationships on psychological distress in menopausal women.

Table 1 shows the descriptive statistics of the study variables. Participants in the portrayed study had a mean psychological distress score of 22.37 (SD = 7.69) showing moderate level distress. The mean severity score of MRS is 16.58 (SD = 8.11), which shows variability in experienced symptom severity. The family relationship mean score (APGAR) was 7.13 (SD = 2.65), showing that sample has moderate to good perceived functionality of family.

Table 1. *Descriptive Statistics of Variables*

	N	Minimum	Maximum	Mean	Std. Deviation
Age in years	150	40	60	50.15	4.421
Psychological Distress (K10 Total)	150	10	41	22.37	7.688
Menopausal Symptom Severity (MRS Total)	150	0	42	16.58	8.112
APGAR Total	150	0	10	7.13	2.648
Valid N (listwise)	150				

Table 2 presents the Pearson correlation coefficients relating to psychological distress, menopausal symptom severity, and family relations. There is a significant positive correlation between the severity of menopausal symptoms and psychological distress ($r = .636$, $p < .001$),

signifying that as symptoms increase, psychological distress increases. A significant negative relationship was found between family relationship and psychological distress ($r = -.315$, $p < .001$) it means if the perception towards the family functioning becomes better, then the psychological distress reduces. Family relationship is negatively correlated with menopausal symptom severity ($r = -.210$, $p < .05$), suggesting that more family support is associated with lower symptom severity perception.

Table 2. *Pearson Correlation Among Studied Variables*

	Psychological Distress (K10 Total)	Menopausal Symptom Severity (MRS Total)	APGAR Total
Psychological Distress (K10	_	.636**	-.315**
Menopausal Symptom	.636**	_	-.188*
APGAR Total	-.315**	-.188*	_

Table 3 illustrates the comparison of psychological distress between perimenopausal and postmenopausal women. The average psychological distress score for perimenopausal women was 22.13 (SD = 7.29), while the average score for postmenopausal women was 22.61 (SD = 8.11). The result of Levene's test for equality of variances is non-significant so, we can say that the assumption of equal variance was satisfied. Results of the independent samples t-test revealed that the difference in psychological distress scores between the two groups were not statistically significant, $t(148) = -0.381$, $p = .704$. This suggests that the menopausal stage by itself does not alter the level of psychological distress of this group.

Table 3. *Comparison of Psychological Distress Between Perimenopausal and Postmenopausal Women*

	Menopausal Stage	N	Mean	Std. Deviation	Std. Error Mean
Psychological Distress (K10 Total)	Perimenopause	75	22.13	7.292	0.842
	Post menopause	75	22.61	8.107	0.936

Variable	Levene's F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	95% CI (Lower – Upper)
Psychological Distress (K10 Total) Equal variances assumed	1.836	0.177	-0.381	148	0.704	-0.48	-2.968 to 2.008
Psychological Distress (K10 Total) Equal variances not assumed			-0.381	146.368	0.704	-0.48	-2.968 to 2.008

5. Discussion

The purpose of this study was to examine the role of severity of menopausal symptom and family relation on psychological distress in menopausal women. The findings provide important insight into how biological and psychological factors interact during the menopausal transition.

The first objective of the study was to examine the association between severity of menopausal symptoms and psychological distress among women. The results showed that as the menopausal symptoms become more severe (MRS), K10 levels also increase and vice versa. Women who had higher menopausal symptoms were also more distressed. Based on these results null hypothesis stating that there is no significant relationship between menopausal symptom severity and psychological distress was rejected.

The finding echoes the many findings which indicate various menopausal symptoms especially sleep disorders, fatigue, vasomotor issues, and mood changes to be associated with increased stress. A significant association between urogenital and vasomotor symptoms with depression ($\rho = 0.815$, $p < .001$), anxiety ($\rho = 0.831$, $p < .001$), and stress was found among rural Indian women (Divya et al., 2024). A study found that MRS scores were strongly and positively correlated with sadness ($\rho = 0.815$) and anxiety ($\rho = 0.831$) (Shah & Vaghasiya, 2025).

The findings suggest that people may manage the severity of physical symptoms according to emotional susceptibility. From a theoretical standpoint, this finding is consistent with Engel's (1977) biopsychosocial model. Biological Changes Like hormonal changes could cause Physical Pain and altered sleep quality which can further alter mood. Severity of the symptoms do not operate at random. how we perceive and emote to symptoms is also important. Women with serious symptoms might consider menopause could cause interruptions or harm and may worsen psychological problems.

The second objective was to investigate the correlation between familial ties (Family

APGAR) and psychological distress. The findings revealed a substantial inverse correlation between familial bonds and psychological discomfort. Women indicating healthier family dynamics exhibited reduced levels of discomfort. Consequently, the null hypothesis asserting the absence of a substantial link between familial bonds and psychological distress was rejected.

The stress-buffering model of social supports (Cohen & Wills, 1985) is consistent with this. This idea argues that good relationships serve to reduce the harmful effects of stress. The symptoms of menopause may be considered physiological stressors, while strong familial ties may reduce their emotional impact. Earlier studies support this finding. Wang et al. (2022) observed a negative association between family support in congruence with resilience and distress among 858 Chinese women undergoing menopausal transition. The family functioning in Wang et al. (2020) study negatively predicted distress. Therefore, more support is predicted to enhance well-being.

In collectivist societies, like India, family interactions often act as a crucial source of emotional support (Rajput, 2025). According to Mathew and Prasad (2025), adjusting one's response to a stressor can be facilitated through emotional support, collaborative obligations, and open communication within the family. On the other hand, relational pressure can intensify feelings of loneliness and dissatisfaction, leading to discomfort (Divya et al., 2024). Rajput (2025) argued that menopause is not just a biological event; it is a relational event tightly woven within the family.

The third objective was to evaluate psychological distress in women who were perimenopausal and postmenopausal. No major difference in psychological discomfort in both groups was found. Thus, the null hypothesis that there is no significant difference between perimenopausal and postmenopausal women was accepted.

The finding is notable due to the conflicting results from past studies concerning stage differences. A number of studies show more vulnerability during the peri- and post-menopause period, but longitudinal data collected by Kuck and Hogervorst (2024) showed that depression, anxiety and stress didn't significantly vary between pre-, peri- and post-menopausal women ($p > .05$). Freeman et al. (2014) found comparable distress levels between the stages when they included symptoms.

One possible explanation is that psychological distress is influenced more by individual differences and contextual stresses than by menopausal status alone. Women in both phases may experience similar levels of emotional distress depending on the severity of their symptoms and relationships (Wang et al., 2020).

This study shows that biopsychosocial approach (Engel, 1977) is important for this kind of research. During menopause, psychological distress is influenced by the intensity of biological symptoms and social relationships. Combining these elements improves understanding of midlife mental health, according to research findings (Wang et al., 2022).

6. Conclusion

The study examined the role of family relationships and menopausal symptom severity in psychological distress among menopausal women using a quantitative, cross-sectional design. A total of 150 women aged 40–60 years, including 75 perimenopausal and 75 postmenopausal women, participated in the study. Psychological distress was assessed using the Kessler Psychological Distress Scale (K10), menopausal symptom severity using the Menopause Rating Scale, and family relationships using the Family APGAR Scale.

The findings indicate that menopausal symptom severity is positively associated with psychological distress, such that higher symptom severity is linked with greater distress. Family relationships were found to be negatively associated with psychological distress, indicating that better family functioning is related to lower levels of distress. No significant difference was found in psychological distress between perimenopausal and postmenopausal women, suggesting that menopausal stage alone does not influence distress.

On the whole, psychological distress during menopause is influenced by both the severity of symptoms and the relational environment, supporting a biopsychosocial understanding of menopause.

Despite its contributions, the study has certain limitations. The cross-sectional design does not allow for establishing cause-and-effect relationships, and the use of convenience sampling limits generalizability. Data were collected using self-report measures, which may be influenced by response bias or social desirability. Additionally, the study focused only on menopausal symptom severity and family relationships and did not include other factors such as coping styles, personality, or socio-economic stressors.

The findings have important implications for practice and future research. Healthcare providers should integrate psychological assessment with medical management during menopause. Family-based awareness programs may help improve understanding and emotional support, while counseling and psychoeducational interventions may enhance coping strategies and family communication. Routine screening for psychological distress may facilitate early identification and intervention.

Future research may adopt longitudinal designs to examine causal relationships and

include additional psychological variables such as resilience, marital satisfaction, coping strategies, and occupational stress. Comparative studies across different cultural contexts and the use of larger and more diverse samples may improve generalizability. Qualitative approaches may further provide deeper insight into women's experiences during menopause.

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