

# Role of Social Support in Reducing the Severity of Menopausal Symptoms among Women Living in Rural Mysuru, Karnataka: An Analytical Cross-sectional Study

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## INTRODUCTION

Menopause is often an unspoken, unaddressed aspect of a woman's life, especially in countries where women's health is not prioritized due to gender and social norms.<sup>[1]</sup> Despite spending as much as a third of their life in the postmenopausal stage, many women

## ABSTRACT

**Introduction:** Menopause is an unspoken and unaddressed aspect of a women's life, surrounded by many myths and taboos within the Indian context. Although a majority of menopausal women experience moderate to severe symptoms that can affect their physical, emotional, mental, and social well-being, there is poor health literacy as well as health-seeking behavior among them. The importance of social support, especially at a difficult time like menopause, is bound to minimize the severity of menopausal symptoms. **Objectives:** The objective is to assess the severity of menopausal symptoms among women living in rural communities of Mysuru district, and to examine the relationship of perceived social support during menopausal transition to severity of the symptoms. **Materials and Methods:** Between May 2022 and December 2022, a cross-sectional study was conducted among 250 women living in rural communities of Mysuru district, Karnataka. An interviewer-administered survey in Kannada was used to record the severity of menopausal symptoms and associated determinants after completion of informed consent process. **Results:** The average age of study participants was 50.9 (standard deviation [SD]  $\pm 4.6$ ) years. While 77.2% were married, 20.8% were widows. About half (53.6%) belonged to lower socioeconomic class and another 28% belonged to middle class. The mean age at menopause was 47.6 (SD  $\pm 4.24$ ) years; 56.8% reported experiencing moderate-to-severe symptoms; 75.6% reported high social support while 24.4% of women low-to-medium social support. The odds of experiencing moderate-to-severe menopause symptoms were 4.51 (95% confidence interval: 2.337–8.690) times higher among women who received low-to-medium social support as compared to those with high social support. The social support obtained was directly proportional to socioeconomic status and living with spouse. **Conclusion:** The health system should emphasize the role of social support while counseling postmenopausal women. There is a dire need for both community and physician education programs on the social and medical needs of postmenopausal women.

**KEYWORDS:** Menopause, Menopause Rating Scale, rural women's health, social support

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are largely unaware of the symptoms associated with reproductive senescence.<sup>[2]</sup> In low- and middle-income countries, menopause and its associated symptoms are rarely spoken about.<sup>[3]</sup>

Menopause symptoms and their severity vary by age, race, and ethnicity.<sup>[4]</sup> Vasomotor symptoms (hot flashes and night sweats), irritability, mood swings, insomnia, vaginal dryness, concentration problems, mental confusion, stress incontinence, overactive bladder, osteoporosis, headaches, insomnia, and other symptoms are all associated with postmenopausal syndrome.<sup>[2]</sup> Fatigue, depression, impatience, and anxiety are also commonly experienced in the perimenopausal period.<sup>[5]</sup>

Research suggests that women generally consider menopause a natural transition from menstruation and reproduction to aging.<sup>[6]</sup> Menstruation has traditionally been surrounded by myths and taboos among Indian families, and these beliefs negatively impact health-seeking and communication behavior across the reproductive and postmenopausal periods.<sup>[7]</sup> Consequently, many women in India and other traditional societies tend to experience menopausal symptoms in silence, without medical assistance.<sup>[8]</sup> Rural elderly women are particularly impacted by traditional beliefs about menopause, having fewer sources of health information and lacking access to even the most basic healthcare.<sup>[9]</sup> The social support obtained from close ones is reported to act as a shield and has been proven to reduce anxiety, and to cope with the menopausal symptoms among women, thus improving the overall quality of life.<sup>[10]</sup>

Individuals with higher levels of social support, for example, have been reported to have a greater sense of belonging and self-esteem than others who do not have such an advantage.<sup>[11]</sup> Therefore, the role of social support, especially in a challenging period like menopause is significant and bound to reduce the severity of menopausal symptoms. Furthermore, no studies have been conducted to measure the impact of social support on menopausal symptoms in South India. Hence, this study seeks to investigate the severity of menopausal symptoms among rural women, as well as the relationship of perceived social support to symptoms throughout the menopausal transition in Mysuru, South India.

## MATERIALS AND METHODS

A community-based, cross-sectional study was conducted in 26 rural villages of Mysuru district, Karnataka, between May 2022 and December 2022. A convenience sample of postmenopausal women who experienced natural menopause, with missed periods for

more than 1 year and not exceeding 5 years who had the ability to provide informed consent for participation were included in the study. Women who had unnatural menopause such as surgical, chemotherapy, hormonal replacement therapy, medications such as anxiolytics, anti-depressants, antipsychotics, women with known cases of autoimmune diseases such as Cushing's syndrome, thyroid disorders, women with genital pathology, and women with missing period in the past 12 months due to other physiological conditions were excluded from the study.

Before the commencement of the study, the study was reviewed and approved by the institutional ethical committee. An interviewer-administered survey translated in Kannada language was carried out among 250 participants from June 2022 to August 2022. The information on the sociodemographic characteristics of the participants, such as current age and age at menopause, religion, type of family, marital status, education and occupation, and socioeconomic status along with menopausal symptoms and perceived social support was collected.

The Menopause Rating Scale (MRS) was used to assess the perceived severity of the symptoms.<sup>[12]</sup> This rating scale comprised 11 questions grouped under three main domains: somato-vegetative, psychological, and urogenital symptoms. Each of these symptoms was scored from 0 being "none" to 4 being "extremely severe" on a 0–4 Likert-type scale and then assessed for severity. The overall total score ranged from 0 to 44, which helped in determining the severity of menopausal symptoms.

A Multidimensional Scale of Perceived Social Support (MSPSS)<sup>[13]</sup> was used to evaluate the perceived social support among the study participants during the menopausal transition. A 7-point Likert-type scale was used for scoring, with the highest score of 7 assigned for "higher" social support and 0 for "lower" social support, then it was assessed for the level of perceived social support obtained in three domains: friends, family, and spouse/special someone. Similarly, the overall total score ranged from 0 to 84 and was calculated by summing up the individual scores from each domain.

The sample size for the study was calculated based on a previous study that had a total mean score of 20.6 for menopausal symptoms, with 5% absolute precision and 95% level of significance, to yield a sample size of 240, which was rounded off to 250.<sup>[14]</sup>

Data were analyzed using IBM SPSS software, Version 25. Descriptive statistics were expressed as frequencies and percentages. Chi-square test/Fisher's

exact test was used to find out the association between the (a) sociodemographic variables and menopausal symptoms and (b) sociodemographic variables and social support. To find the association between menopausal symptoms and perceived social support, odds ratio (OR) and 95% confidence interval (CI) were computed and interpreted. The menopausal symptoms were categorized based on the severity as mild and moderate-to-severe symptoms, and the social support was categorized into less to medium and high support obtained.

## RESULTS

The present study was conducted among rural women of Mysuru, Karnataka, to assess the severity of menopausal symptoms and their association with perceived social support. The severity of menopausal symptoms was assessed using the MRS. A total of 250 women belonging to 26 rural villages of the Mysuru district were recruited into the study. The age of the study participants varied from 40 to 60 years with a mean age of 50.9 (standard deviation [SD]  $\pm 4.6$ ) years and 44.8% of women were aged 51 and above. The mean age at menopause was 47.6 (SD  $\pm 4.24$ ) years.

Majority of the women (70.4%) were illiterate. Three-fourths of the participants were married and living with their spouses. About 56.4% of women lived in nuclear families and majority (62.8%) were homemakers. Furthermore, women in these areas were primarily agricultural- and home-based workers (64.2%) in the informal economy, workers who survived on precarious livelihoods without basic social protection (24%). The comparison of the sociodemographic profile of women with the MRS found women who experienced menopause at 51 years and above had moderate symptoms (16.4%) [Table 1].

More than half (56.8%) of the women reported experiencing moderate-to-severe menopausal symptoms. Most presenting symptoms experienced by the women were in the psychological domain (71.1%). Individually joint and muscular discomfort was commonly experienced (80.8%). Other symptoms included irritability (68.8%), depressive mood (69.6%), anxiety (66.4%), and physical and mental exhaustion (79.6%). The least presenting symptoms were of urogenital domain (16.4%). Spouse was found to be the significant source of support among these women compared to support from friends and family.

Table 2 compares the sociodemographic profile where the association of marital status and socioeconomic class was found to be statistically significant to the social support received among women ( $P < 0.05$ ).

The unadjusted OR was computed between the severity of menopause symptoms and social support. There was a significant association between MRS and MSPSS among the study participants ( $P < 0.05$ ). The odds of experiencing moderate-to-severe menopausal symptoms were 4 times higher among women who perceived low-to-medium social support (OR: 4.51; CI: 2.337–8.690) as compared to those who received high social support [Table 3].

## DISCUSSION

The present study assessed the severity of menopausal symptoms and their association with the perceived social support among women living in rural Mysuru, Karnataka. The study found that women who perceived low levels of social support also reported more severe menopausal symptoms.

There was no significant difference between the severity of menopausal symptoms in terms of their sociodemographic characteristics in this study. Study also found no or little menopausal symptoms experienced among the women who reached menopause at 45 years of age or below (26.2%), while the symptoms were moderate to severe among the women who reached menopause after 45 years of age (59.6%). However, there was no association between severity of menopausal symptoms and age at menopause. This may be attributed to the smaller number of participants below the age of 45 years.

The present study showed a statistically significant association between perceived social support among women and marital status and socioeconomic class. A study done on Turkish women by Erbil *et al.* found that the social support was higher for women with higher socioeconomic status and being single.<sup>[15]</sup> The present study found a significant association between the menopause rating scale and perceived social support among women. Similar findings were reported by other studies across countries.<sup>[11,14,16]</sup> Social support was found to be a significant predictor for menopausal symptoms by Aloufi *et al.*<sup>[10]</sup> Contrary to our findings, a study conducted in US found that increased social support is not associated with decreased menopausal symptoms.<sup>[17]</sup> Social support that included emotional and informational support improved women's capacity to manage stress and lessen its psychological and physiological effects. The possible chance for differences in the severity of menopausal symptoms in the study might be due to the geographic, and sociodemographic, besides woman's attitudes and knowledge.

The study also had several strengths. This is the first study in India to examine the relationship of the menopausal

**Table 1: Comparison of sociodemographic characteristics of study participants (n=250) with Menopause Rating Scale, Mysuru, 2022**

	n (%)	Severity of menopause symptoms <sup>a</sup>			P
		None/little, n (%)	Mild, n (%)	Moderate to severe, n (%)	
Age of the participants (completed years)					
≤45	35 (14)	6 (17.1)	8 (22.9)	21 (60)	0.396*
46–50	103 (41.2)	23 (22.3)	16 (15.5)	64 (62.1)	
≥51	112 (44.8)	32 (28.6)	23 (20.5)	57 (50.9)	
Education of participants (Modified Kuppuswamy Scale) <sup>b</sup>					
Illiterate	176 (70.4)	46 (26.1)	29 (16.5)	101 (57.4)	0.129**
Primary school (I–IV std)	35 (14)	5 (14.3)	10 (28.6)	20 (57.1)	
Middle school (V–VII std)	19 (7.6)	2 (10.5)	6 (31.6)	11 (57.9)	
High school and above	17 (6.8)	8 (40)	2 (10)	10 (50)	
Occupation of participants (Modified Kuppuswamy Scale) <sup>c</sup>					
Homemaker	157 (62.8)	40 (25.5)	27 (17.2)	90 (57.3)	0.185**
Unskilled worker	61 (24.4)	12 (19.7)	12 (19.7)	37 (60.7)	
Semi-skilled/skilled worker	23 (9.4)	8 (34.8)	3 (13)	12 (52.2)	
Clerical/shop/farm owner	9 (3.6)	1 (11.1)	5 (55.6)	3 (33.3)	
Family type <sup>d</sup>					
Nuclear family	141 (56.4)	36 (25.5)	25 (17.7)	80 (56.7)	0.737*
Joint family	35 (14)	10 (28.6)	5 (14.3)	20 (57.1)	
Three-generational family	74 (29.6)	15 (20.3)	17 (23)	42 (56.8)	
Marital status					
Married	193 (77.2)	51 (26.4)	37 (19.2)	105 (54.4)	0.310*
Never-married/widow/divorced	57 (22.8)	10 (17.5)	10 (17.5)	37 (64.9)	
Family size					
≤4 member	137 (54.8)	34 (24.8)	23 (16.8)	48 (35)	0.311*
5–7 members	88 (35.2)	21 (23.9)	22 (25)	21 (23.9)	
≥8 members	25 (10)	6 (24)	2 (8)	9 (36)	
Socioeconomic class <sup>e</sup>					
Upper class	46 (18.4)	11 (23.9)	8 (17.4)	27 (58.7)	0.957*
Middle class	70 (28)	15 (21.4)	14 (20)	41 (58.6)	
Lower class	134 (53.6)	35 (26.1)	25 (18.7)	74 (55.2)	
Age at menopause of participants (completed years)					
≤45	84 (33.6)	22 (26.2)	18 (21.4)	44 (52.4)	0.860*
46–50	99 (39.6)	22 (22.2)	18 (18.2)	59 (59.6)	
51 and above	67 (26.8)	17 (25.4)	11 (16.4)	39 (58.2)	

\*Chi-square test, \*\*Fisher’s exact test, <sup>a</sup>Severity of menopause symptoms (as per MRS scores): (i) None/little: 0–4; (ii) Mild: 5–8; (iii) Moderate to severe: 9–44, <sup>b</sup>The educational status of participants was classified as: (i) Illiterate (person who cannot write and read with understanding in any language); (ii) Primary school certificate/Literate (a person who has completed any class from 1<sup>st</sup> to 4<sup>th</sup> std and can write and read with understanding in any language); (iii) Middle school certificate (a person who has completed from 5<sup>th</sup> to 7<sup>th</sup> std); (iv) High school and above (a person who has completed any class from 8<sup>th</sup> to 10<sup>th</sup> grade or intermediate or diploma or any graduation degree/professional education), <sup>c</sup>The occupation of the participants was categorized as follows: (i) Unemployed: Includes homemakers, unemployed, retired, and students; (ii) Unskilled worker: Jobs that do not require any education or training; include domestic servants, peons, and watchmen; (iii) Semi-skilled worker: Jobs that require some training; includes factory workers, petty shopkeeper, and car cleaner; (iv) Skilled worker: Jobs that require long training in complicated work; include tailors, drivers, mechanics, masons, and carpenters; (v) Clerical/shop-owner/farmers: Jobs that are repetitive and require training in arithmetic, writing, and reading; include clerk, accountant, typist, farm owner, shopkeeper, and salesman; (vi) Semi-professional: Jobs that require postsecondary education and are routine; include teachers, college lecturers, and junior administrators; (vii) Professional: Jobs that require decision-making, policy formulation, and execution, those requiring creative work, those which involve better systematic capability as well as regulating many individuals or involving the management of a huge amount; including engineers, doctors, architects, advocates, directors, managers, readers and professors, senior administrators, college principals, <sup>d</sup>The family type of the participants was classified as: (i) Nuclear family: It consists of a married couple and their dependent children; (ii) Joint family: It consists of several married couples and their children living in the same household. All the men in the household are related by blood and the women are their wives, unmarried daughters or widows; (iii) Three-generation family: It is when the married children of a couple continue to live in the same household with their parents and have their children, <sup>e</sup>As per B G Prasad’s classification of socioeconomic status: (i) Upper class - per capita income of ≥INR 3931; (ii) Middle class - per capita income of INR 2359–3930; (iii) Lower class - per capita income of ≤INR 2358. MRS: Menopause Rating Scale

**Table 2: Comparison of sociodemographic characteristics of study participants (n=250) with Multidimensional Scale of perceived social support Mysuru, 2022**

	n (%)	Social support (MSPSS) <sup>a</sup>		P
		Low-to-medium support, n (%)	High support, n (%)	
Age (years)				
≤45	35 (14)	24 (68.6)	11 (31.4)	0.960*
46–50	103 (41.2)	69 (67)	34 (33)	
51 and above	112 (44.8)	77 (68.8)	35 (31.3)	
Education (years)				
Illiterate	176 (70.4)	123 (69.9)	53 (30.1)	0.351*
Primary school (I–IV std)	35 (14)	24 (68.6)	11 (31.4)	
Middle school (V–VII std)	19 (7.6)	13 (68.4)	6 (31.6)	
High school and above	20 (8)	10 (50)	10 (50)	
Occupation				
Homemaker	157 (62.8)	110 (70.1)	47 (29.9)	0.287*
Unskilled worker	61 (24.4)	43 (70.5)	18 (29.5)	
Semi-skilled/skilled worker	23 (9.2)	12 (52.2)	11 (47.8)	
Clerical/shop/farm owner	9 (3.6)	5 (55.6)	4 (44.4)	
Type of family				
Nuclear family	141 (56.4)	95 (67.4)	46 (32.6)	0.971*
Joint family	35 (14)	24 (68.6)	11 (31.4)	
Three-generational family	74 (29.6)	51 (68.9)	23 (31.1)	
Marital status				
Married	193 (77.2)	125 (64.8)	68 (35.2)	0.044*
Never married/widow/divorced	57 (22.8)	45 (78.9)	12 (21.1)	
Total number of family members				
≤4 members	137 (54.8)	93 (67.9)	44 (32.1)	0.999*
5–7 members	88 (35.2)	60 (68.2)	28 (31.8)	
≥8 members	25 (10)	17 (68)	8 (32)	
Socioeconomic status				
Upper class	46 (18.4)	29 (63)	17 (37)	0.040*
Middle class	70 (28)	56 (80)	14 (20)	
Lower class	134 (53.6)	85 (63.4)	49 (36.6)	
Age at menopause				
≤45	84 (33.6)	53 (63.1)	31 (36.9)	0.134*
46–50	99 (39.6)	65 (65.7)	34 (34.3)	
51 and above	67 (26.8)	52 (77.6)	15 (22.4)	

\*Chi-square test, <sup>a</sup>Social support (as per Multidimensional Scale of perceived social support): (i) Low-to-medium support: 12–60; (ii) High support: 61–84, <sup>b</sup>The educational status of participants was classified as: (i) Illiterate (person who cannot write and read with understanding in any language); (ii) Primary school certificate/literate (a person who has completed any class from 1<sup>st</sup> to 4<sup>th</sup> std and can write and read with understanding in any language); (iii) Middle school certificate (a person who has completed from 5<sup>th</sup> to 7<sup>th</sup> std); (iv) High school and above (a person who has completed any class from 8<sup>th</sup> to 10<sup>th</sup> grade or intermediate or diploma or any graduation degree/professional education), <sup>c</sup>The occupation of the participants was categorized as follows: (i) Unemployed: Includes homemakers, unemployed, retired, and students; (ii) Unskilled worker: Jobs that do not require any education or training; include domestic servants, peons, and watchmen; (iii) Semi-skilled worker: Jobs that require some training; includes factory workers, petty shopkeeper, and car cleaner; (iv) Skilled worker: Jobs that require long training in complicated work; include tailors, drivers, mechanics, masons, and carpenters; (v) Clerical/shop-owner/farmers: Jobs that are repetitive and require training in arithmetic, writing, and reading; include clerk, accountant, typist, farm owner, shopkeeper, and salesperson; (vi) Semi-professional: Jobs that require postsecondary education and are routine; include teachers, college lecturers, and junior administrators; (vii) Professional: Jobs that require decision-making, policy formulation, and execution, those requiring creative work, those which involve better systematic capability as well as regulating many individuals or involving the management of a huge amount; including engineers, doctors, architects, advocates, directors, managers, readers and professors, senior administrators, college principals, <sup>d</sup>The family type of participants was classified as: (i) Nuclear family: It includes a married couple and their dependent children; (ii) Joint family: It consists of several married couples and their children living in the same household. All the men in the household are related by blood and the women are their wives, unmarried daughters, or widows; (iii) Three-generation family: It occurs when the married children of a couple continue to live in the same household with their parents and has their children, <sup>e</sup>As per B G Prasad's classification of socioeconomic status: (i) Upper class - per capita income of ≥3931; (ii) Middle class - per capita income of 2359–3930; (iii) Lower class - Per capita income of ≤2358. MSPSS: Multidimensional Scale of perceived social support

**Table 3: Association of sociodemographic variables and social support with severity of menopausal symptoms among study participants (n=250)**

Characteristic	OR	Upper bound (95% CI)	Lower bound (95% CI)
<b>Education</b>			
Illiterate	1.46	0.480	4.432
Primary school	3.70	0.865	15.815
Middle school	5.02	0.79	31.89
High school and above	Reference		
<b>Occupation</b>			
Home-maker	0.29	0.031	2.77
Unskilled worker	0.40	0.039	4.15
Semi-skilled/skilled worker	0.22	0.020	2.42
Clerical/shop/farm owners	Reference		
<b>Marital status</b>			
Married	Reference		
Never married/separated/widowed/divorced	1.52	0.662	3.511
<b>Age at menopause</b>			
≤45 years	1.45	0.627	3.335
46–50 years	1.5	0.666	3.364
51 and above	Reference		
<b>Type of family</b>			
Nuclear family	0.78	0.362	1.685
Joint family	0.69	0.250	1.909
Three-generation family	Reference		
<b>Socioeconomic status</b>			
Upper class	Reference		
Middle class	0.71	0.256	1.940
Lower class	0.72	0.282	1.826
<b>Social support</b>			
Low-medium support	4.51	2.337	8.690
High support	Reference		

OR: Odds ratio, CI: Confidence interval

symptoms and perceived social support among post-menopausal women to best of our knowledge. The study contributes to novel findings on the perceived social support of post-menopausal women in rural Mysuru. Our study was not without limitations. The study used interviewer survey to collect information which may be prone to recall bias in self-reporting of the symptoms. The stratification of the relationship of the individual who provided the social support was not done, which could have influenced the study findings. The health literacy would have played a major role in expressing the experience related to menopausal symptoms, which was not assessed. The study tool was translated to local language, but not back translated, which may have affected the accuracy. The data collection was done at their residence during office hours, which would have excluded working women. The data regarding any other health-related ailments or conditions was not collected, which could have also attributed to the severity of the symptoms. There would have been various confounding variables that could have influenced the outcome, which has not been accounted for.

## CONCLUSION

The present study was done to assess the severity of menopausal symptoms and social support among rural women of the Mysuru district. People who perceived low social support also reported to have experienced moderate to severe menopausal symptoms. Despite the support gained by women in rural areas, the study suggests that there is a need for active involvement of family, friends and community in providing the required support during menopause. Seeking social support by menopausal women can be enhanced by their level of awareness of menopausal symptoms. Hence, menopause health related education and community level awareness programs should be developed and implemented among the rural population. Having a solid social network and receiving more social support during menopausal transition may lessen the frequency and severity of menopausal symptoms. Health centres can regularly offer health education programmes to help families understand the value of providing social support for women going through the menopause transition.

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## Conflicts of interest

There are no conflicts of interest.

## REFERENCES

- Borker SA, Venugopalan PP, Bhat SN. Study of menopausal symptoms, and perceptions about menopause among women at a rural community in Kerala. *J Midlife Health* 2013;4:182-7.
- Dalal PK, Agarwal M. Postmenopausal syndrome. *Indian J Psychiatry* 2015;57:S222-32.
- Mohamad Ishak NN, Jamani NA, Mohd Arifin SR, Abdul Hadi A, Abd Aziz KH. Exploring women's perceptions and experiences of menopause among East Coast Malaysian women. *Malays Fam Physician* 2021;16:84-92.
- Zhang L, Ruan X, Cui Y, Gu M, Mueck AO. Menopausal symptoms and associated social and environmental factors in Midlife Chinese women. *Clin Interv Aging* 2020;15:2195-208.
- Deeks AA. Psychological aspects of menopause management. *Best Pract Res Clin Endocrinol Metab* 2003;17:17-31.
- Singh V, Sivakami M. Normality, freedom, and distress: Listening to the menopausal experiences of Indian women of Haryana. In: Bobel C, Winkler IT, Fahs B, Hasson KA, Kissling EA, Roberts TA, editors. *The Palgrave Handbook of Critical Menstruation Studies*. Ch. 70. Singapore: Palgrave Macmillan; 2020.
- Perianes MB, Kissling EA. Translational engagements: Women's experiences of menopause. In: Bobel C, Winkler IT, Fahs B, Hasson KA, Kissling EA, Roberts TA, editors. *The Palgrave Handbook of Critical Menstruation Studies*. Ch. 72. Singapore: Palgrave Macmillan; 2020.
- Nagaraj D, Ramesh N, Devraj D, Umman M, John AK, Johnson AR. Experience and perceptions regarding menopause among rural women: A cross-sectional hospital-based study in South Karnataka. *J Midlife Health* 2021;12:199-205.
- Devi BN, Megala M, Saravanakumar P. Social and health concerns of elderly women in rural area in Tirupur District, Tamil Nadu. *J Family Med Prim Care* 2022;11:4447-51.
- Aloufi B, Hassanien NS. The association of menopausal symptoms and social support among Saudi women at primary health care centers in Taif, Saudi Arabia. *Cureus* 2022;14:e26122.
- Abasi E, Keramat A. The relationship between social support, general health status, and severity of menopause symptoms among postmenopausal women in Northern Iran. *Pakistan J Medical Health Sci* 2020;14:771-3.
- Heinemann K, Ruebig A, Potthoff P, Schneider HP, Strelow F, Heinemann LA, *et al.* The Menopause Rating Scale (MRS) scale: A methodological review. *Health Qual Life Outcomes* 2004;2:45.
- Zimet G, Dahlem N, Zimet S, Farley G. The Multidimensional Scale of perceived social support. *J Pers Assess* 1988;52:30-41.
- Polat F, Orhan I, Şimşek Küçükkelepçe D. Does social support affect menopausal symptoms in menopausal women? *Perspect Psychiatr Care* 2022;58:1062-70.
- Erbil B, Gümüşay M. Relationship between perceived social support and attitudes towards Menopause among women and affecting factors. *Middle Black Sea J Health Sci* 2018;4:7-18.
- Zhao D, Liu C, Feng X, Hou F, Xu X, Li P. Menopausal symptoms in different substages of perimenopause and their relationships with social support and resilience. *Menopause* 2019;26:233-9.
- Arnot M, Emmott EH, Mace R. The relationship between social support, stressful events, and menopause symptoms. *PLoS One* 2021;16:e0245444.