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## **The comparative study on menopausal problems between rural and urban middle aged women**

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### **Abstract**

This study aim to explore the influence of demographic characteristics on menopausal problems among rural and urban middle aged women. The subjects were 160 rural and urban middle aged women was studied during 2015-16. The women who attained menopause and belonging to 40-55 years age range were selected from 8 villages of 4 talukas of Dharwad and Bagalkote Districts. The self structured interview schedule was used to elicit the information regarding general information, history of menopause, effects of menopause, care and management of menopause. It consists of 29 questions, categorized as low, medium and high. The menopausal problems were measured by using Menopause Rating Scale (MRS) developed by Barlin (1992) with 11 items. The responses on each item was scored as 0-4 as none to very severe. SES (Socio Economic Status) scale developed by Agarwal *et al* (2005) was used to assess the socio-economic status of family. The results revealed that 49.37% of respondents aged between 51-55 years, 55% of the belonged to OBC category, 80% of women were housewife and 68.15% were belonged to middle SES. 15% and 27.50% of the women reported high knowledge in rural and urban women respectively. In Dharwad, among rural women 60% respondents reported moderate menopausal problems and 27.50% were had severe problems. While among urban, half (50%) of the participants pointed out they had moderate menopausal problems followed by 37.50% had mild problems. In Bagalkote district, 50% of rural women had moderate and 35% of the respondents had severe menopausal problems. Incase of urban women, 57.50% of women had moderate followed by 27.50% suffering from mild menopausal problems. The age, SES and education were negatively significantly associated with menopausal problems and occupation was positively highly significantly associated with menopausal problems. Concluded that there is need of education and empowering of women to overcome menopausal problems.

**Keywords:** menopause, middle-age, problems

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### **Introduction**

Middle age is one of the turning point in women's life as it brings many changes. It roughly starts in the early forties, when for most of the people it is the best period in their life when their achievement is at the highest point. Midway between the challenges of adulthood and despair of old age, comes the compulsory menopausal change in women. Middle age in women includes the gradual winding down of the reproductive system and ending of the child bearing years (Ali *et al.*, 2013) [1]. The menopause is a natural phenomenon which occurs in all women when their finite number of ovarian follicles are depleted. As a result, oestrogen and progesterone hormone levels fall, and luteinising hormone (LH) and follicle stimulating hormone (FSH) increase in response. Menstruation becomes erratic and eventually stops and there are a number of secondary effects described as 'menopausal symptoms' see under 'Presentation', below. The climacteric, menopausal transition stage, or perimenopause, is the period of change leading up to the last period. The menopause itself is a retrospective diagnosis of the time when menstruation permanently ceases. It can only be defined with certainty after twelve months' spontaneous amenorrhoea (Sagdeo *et al.*, 2013) [7].

During the transition to menopause, women may experience vasomotor, urogenital, psychosomatic, and psychological symptoms, as well as sexual dysfunction. The prevalence of each of these symptoms related to menopause varies across ethnic and socioeconomic groups, and between rural and urban women (Sagdeo *et al.* 2012). Some researchers have observed socioeconomic (e.g., working status and income); lifestyle (e.g., smoking and dietary practices); and biological variables (e.g., body weight and parity) as predictors of menopausal symptoms. A pan India survey conducted during 2014 Bangalore by Institute for Social and Economic Change, Bangalore has highlighted that a typical Indian woman fears with regards to her menopausal health (Salik *et al.*, 2015) [8]. The study from 1,00,000 women, across 26 states. The findings of the ISEC survey highlighted that on an average nearly 4 percent of Indian women are already menopausal between the ages of 29-34 years. It goes up to 8 percent in the case of women between 35 and 39 years. This is shocking because normal menopause starts between the ages of 45 and 55 years, with a mean age of around 51 years worldwide. Hence the study was conducted with an aim to know menopausal problems faced by rural and urban women.

## Material and Methods

The present study was conducted among women who attained menopause and belonging to 35-55 years age range were selected from 4 villages of 2 talukas of Dharwad District, Karnataka state. The tools for the study were the self-structured questionnaire to elicit the information regarding general and family information. Menopausal symptoms were assessed by using Menopause rating scale developed by Berlin, 1992 to know the age related decline of physical and mental capacity. It consists of 11 questions divided into 3 sub scale such as Psychological subscale (4 to 7), Somatic Subscale (1, 2, 3 and 11) and Urogenital Subscale (8 to 10). The respondent has to indicate her problems with intensity of each are by using 5 point likert scale. Then the responses on each item was scored as 0-4 as none to very severe. The total score was categorized as low (0-14), medium (15-29) and high (30-44) further it was divided into somatic, psychological and urinary symptoms. To assess Socio Economic Status (SES) of the family assessed by using SES scale used developed by Agrawal, 2005. The scale consists of 22 statements which assess education, occupation, monthly per capital income from all sources, family possessions, number of children, number of earning members in family, education of children, domestic servants in home, possession of agricultural land and non-agricultural land along with animals and social status of the family.

## Results and Discussion

The demographic characteristics of the respondents included age, education, occupation, caste, number of children and socio-economic status of postmenopausal women are presented in Table 1. In the rural women of Dharwad 50 per cent belonged to 51-55 years, while 30 per cent belonged to 46-50 years and 20 per cent were to aged between 40-45 years. Among urban women of Dharwad district similar trend was observed i.e. majority (52.50 %) belonged to 51-55 years, while 25 per cent in 46-50 years and 22.50 per cent belonged to 40-45 years. In case of rural women of Bagalkote, 45 per cent belonged to 51-55 years, while 42.50 per cent belonged to 46-50 years and 15 per cent in 40-45 years. In case of urban, 45 per cent, 42.50 per cent and 12.50 per cent women belonged to 51-55, 46-50 and 40-45 years respectively. Totally 49.37 per cent belonged to 51-55 years, while 33.12 per cent of women aged between 46-50 years and 17.50 per cent in 40-45 years of aged. With respect to occupation 80 per cent of rural women of Dharwad were found to be housewives, while 12.50 per cent of the women involved in farm activities, 5 per cent working in government jobs and only 2.50 per cent of women were working in private jobs. Whereas in urban area, 37.50 per cent women found to be housewife, while 52.50 per cent working in government employee and 12.50 per cent working in private employee. In case of Bagalkote, 22.50 per cent, 27.50 per cent women were involved in household and farm activities respectively, and 50 per cent working in private sectors, whereas in urban women 60 per cent women were found to be housewife, while 30 per cent working in government sectors and 10 per cent of women working in private sectors. Totally 50 per cent women were housewife, 10 per cent involved in farm activities, 21.25 per cent were working in government sectors and 18.75 per cent were working in private sectors in Bagalkote district. In case of respondent's education rural women of Dharwad, 62.50 per cent found to illiterate, 27.50 per cent respondents completed their primary level of education, 5 per

cent high school as well as college education. Whereas 20 per cent of urban women were illiterate, 12.50 per cent of respondent completed primary school, 7.50 per cent had their high school, while 20 per cent of respondents completed their college and 40 per cent possessed graduation or post graduation. Whereas in Bagalk, 77.50 per cent of rural respondents found illiterate, while 20 per cent completed primary school and only 2.50 per cent the women had their high school level of education. Among urban women, 25 per cent found illiterate, 30 per cent of women were had primary school education, 15 per cent of respondents completed their high school, while 7.50 per cent college and 22.50 per cent of the women possessed degree or post graduation level of education.

Overall 46.25 per cent found illiterate, 22.50 per cent were had their primary school, 7.50 per cent college and 8.31 per cent were completed college level of education. The respondents among Dharwad district, 35 per cent rural women belonged to upper caste, while 45 per cent belonged to OBC caste, 12.50 per cent dalits and 7.50 per cent tribals. Similarly in Dharwad district urban women, 72.50 per cent belonged to OBC caste, while 20 per cent belonged to upper caste, 5 per cent dalits and only 2.50 per cent tribal caste. In case of Bagalkote district, 50 per cent of rural women belonged to OBC caste followed by 27 per cent dalits caste, while 12.50 per cent belonged to upper caste and 10 per cent tribals caste. Similar trend was seen in urban women of Bagalkote On the whole 55 per cent women belonged to OBC followed by 26.25 per cent in upper caste, 13 per cent in dalits and 5.65 per cent in tribals category. It is clearly pointed out that 52.50 per cent of the Dharwad rural women possessed 3-4 children followed by 20 per cent with 5-6 children, 15 per cent had 1-2 children and 12.50 per cent possessed more than six children. Whereas in Dharwad urban, 47.50 per cent women possessed 1-2 children followed by 35 per cent with 3-4 children, 12.50 per cent with 5-6 children and only 5 per cent possessed more than 6 children. In case of Bagalkote rural women, 47.50 per cent of the women possessed 3-4 children followed by 30 per cent with more than six children, 15 per cent with 5-6 children and 7.50 per cent of respondents possessed 1-2 children. Whereas in Bagalkote urban women, 40 per cent possessed 3-4 children followed by 35 per cent with 1-2 children, 15 per cent and 10 per cent possessed more than six and 5-6 children respectively. Overall 43.75 per cent women possessed 3-4 children followed by 26.25 per cent had 1-2 children, 15.63 per cent with 5-6 children and 14.38 per cent possessed more than 6 children.

With respect to Socio-Economic Status in Dharwad district, 70 per cent of rural women belonged to middle class of SES followed by 27.50 per cent to poor and 2.50 per cent to high class of SES. Whereas among urban women, 75 per cent belonged to middle class SES category followed by 17.50 per cent to high SES and 7.50 per cent of them belonged to poor SES. In case of Bagalkote district, 52.40 per cent of rural postmenopausal women belonged to middle SES followed by 47.50 per cent belonged to poor SES and none of the respondents belonged to high SES category. Among urban women, 65 per cent belonged to middle SES category followed by 25 per cent and 10 per cent of women belonged poor and high SES category respectively.

Responses regarding history of menopause among women of Dharwad and Bagalkote are shown in Table 2. In Dharwad, women's age at menarche was 12.7 years and 12.85 years for rural and urban women respectively. In Bagalkote district, it was

found to be 12.63 years and 12.75 years for rural and urban women respectively. With respect to age at attainment of menopause. In Dharwad rural women, age at attainment was 42.70 years of age, while in urban women 43.25 years of age. From Bagalkote, age of menopause found to be 44.72 years and 44.67 years for rural and urban women respectively.

In Dharwad, 100 per cent of rural women felt menopause as natural phenomenon. Whereas in urban women, 10 per cent of them reported menopause as disease. Whereas in Bagalkote, majority (97.50%) of rural expressed menopause as natural phenomenon and only 2.50 per cent of them perceived it as disease. Among urban 85 per cent of them perceived menopause as natural phenomenon and remaining 15 per cent as disease.

With respect to bleeding during menopause, majority of rural women (62.50 %) reported 3-5 days bleeding during menopause, while 22.50 per cent of them experienced 2-10 days and 15 per cent of the women reported they had 11-15 days of bleeding during menopause in Dharwad. Among urban women, 72.50 per cent of them reported 3-5 days of bleeding, while 17.50 per cent of them experienced 6-10 days and only 10 per cent of the women had 11-15 days of bleeding during menopause.

Whereas in Bagalkote, 60 per cent of rural women experienced 3-5 days of bleeding during menopause followed by 32.50 per cent of women had 6-10 days and 7.50 per cent of them faced 11-15 days of bleeding during menopause. Among urban women, 57.50 per cent of them had 3-5 days of bleeding, followed by 37.50 per cent of the women faced 6-10 days of bleeding and only 5 per cent of them experienced 11-15 days of bleeding. In Dharwad, majority (65%) of rural women suffered from menopausal symptoms between 35-40 years of age, while 35 per cent of the women experienced these symptoms between 45-50 years of age. Whereas in urban women, 55 per cent of them suffered from menopausal symptoms between 35-40 years of age, while 30 per cent and 15 per cent of the women reported these symptoms aged between 45-50 years and 50-55 years of age respectively.

In case of Bagalkote, 45 per cent of women reported menopausal symptoms between 35-40 years, while 32.50 per cent and 22.50 per cent of them suffered from these symptoms between 45-50 years and 50-55 years of age respectively. Among urban women, 40 per cent of women reported symptoms between 35-40 years followed by 32.50 per cent of them experienced symptoms between 45-50 years and 27 per cent of them reported symptoms aged between 50-55 years of age.

The response related to know the menopausal symptoms among women of Dharwad and Bagalkote district is shown in table 3. With respect to Dharwad rural women, in somatic problems, most of them (65%) reported joint pain followed by 32.50 per cent of them having sleeping discomfort followed by 27.50 per cent reported hot flushes among rural women. In psychological subscale, 15 per cent of rural women reported irritability, followed by 12.50 per cent physical and mental exhaustion and 7.5 per cent of respondents reported depressive mood as well as anxiety. In case of urban women, 42.50 per cent of them sleeping problems, followed by 40 per cent of them had hot flushes, 37.50 per cent suffered from joint and muscular discomfort and only 2.5 per cent of the women were having heart discomfort. In psychological symptoms 10 per cent of them expressed irritability, followed by 7.50 per cent of them reported

psychological and mental exhaustion. In Urogenital sub scale, 2.5 per cent of the women expressed bladder as well as dryness of vagine. Due to decrease in hormonal secretion are experienced by middle aged women, menopausal symptoms such as hot flushes, sleeplessness, joint pain and other discomforts (Kavita *et al.* 2012).

In case of Bagalkote rural women in somatic subscale, majority (77%) of them reported sleeping problem and 75 per cent of women had muscular discomfort followed by 62.50 per cent of them had hot flushes and sweating. In psychological subscale, 22.50 per cent of them reported physical and mental exhaustion, followed by 7.5 per cent the women suffered from irritability and 5 per cent of women showed depressive mood as well as anxiety. In Urogenital subscale, 2.50 per cent of women had bladder problems. Among urban women, 67.50 per cent of them reported joint pain followed by 50 per cent had sleeping problems and 45 per cent hot flushes and sweating. In psychological problems, 5 per cent of women reported psychological and mental exhaustion and 2.50 per cent of them showed irritability, depressive mood as well as anxiety. In Urogenital subscale, 7.50 per cent of the women reported 7.5 per cent had bladder problems followed by 2.5 per cent of them showed dryness of vagina. Avanie *et al.* (2013) reported that after onset of menopause, postmenopausal women experienced higher prevalence of somatic problems (44.66 %) followed by 34.44 per cent psychological and only 10 per cent of them reported urogenital symptoms.

The results of menopausal symptoms among middle aged women according to residential area table 4. In Dharwad district, 60 per cent of the women experienced moderate menopausal symptoms, 27.50 per cent reported severe and 12.50 per cent of them had mild symptoms of menopause. Among urban women, 50 per cent of the women reported moderate, while 37.50 per cent of them showed mild and 12.50 per cent were indicated severe symptoms of menopause. Whereas in Bagalkote district, 50 per cent rural women experienced moderate symptoms, while 35 per cent of them reported severe and 15 per cent expressed mild symptoms of menopause. Whereas from urban women, 57.50 per cent, 27.50 per cent and 15 per cent of them were reported moderate, mild and severe menopausal symptoms respectively. On the whole, 54.38 per cent of the women suffered moderate symptoms, while 23.13 per cent reported mild and 22.5 per cent of the women expressed severe symptoms of menopause. There was significant relationship and association observed between menopausal symptoms and locality of Dharwad. The difference in menopausal symptoms between rural and urban women is given in. The mean scores of menopausal symptoms of rural women were higher ( $16.50 \pm 6.17$ ) than mean scores of urban women ( $13.62 \pm 8.35$ ) in Dharwad. The 't' value 2.92 was found to be significant hence there was significant difference in menopausal symptoms between rural and urban women of Dharwad.

In case of Bagalkote, there was significant difference in 't' value of 2.76 in menopausal symptoms of rural and urban women. The mean value of menopausal symptoms in rural women is higher ( $22.47 \pm 3.71$ ) than mean value of ( $20.22 \pm 3.57$ ) urban women. Martinez *et al.* (2013) [5] found that there was a greater frequency of menopausal symptoms in rural women than urban women. The women experienced symptoms included hot flushes, depression, joint pain and tingling. A study conducted by Alwi *et al.* (2010) [2] reported that rural women were experienced more menopausal problems than urban women.

The relationship between menopausal symptoms of postmenopausal women belonging to different Socio-Economic Status (SES) category is indicated in Table 5. In case of Dharwad district rural women, 48.48 per cent of them expressed moderate menopausal symptoms, while 34.48 per cent and 17.24 per cent of the women reported mild and moderate menopausal symptoms respectively women belonged to middle SES category. While 45.46 per cent showed moderate, 36.26 per cent of them reported severe menopausal symptoms and only 18.18 per cent of the women exhibited mild menopausal symptoms belonged to poor SES category. There was negatively significant relationship found between SES and menopausal symptoms.

Whereas in Dharwad district urban women, 28.57 per cent of them showed mild, 57.14 per cent reported moderate and 14.29 per cent expressed severe menopausal symptoms belonged to high SES category. In case of middle SES group women, 10 per cent of them mild menopausal symptoms, 76.66 per cent showed moderate symptoms and 13.33 per cent expressed severe menopausal symptoms. In case of poor SES group women, 66.67 per cent of them reported severe menopausal symptoms, while 33.33 per cent of the women expressed moderate menopausal symptoms. There was negatively significant relationship found between SES status of respondents and menopausal symptoms. Nisar and Soho (2012) <sup>[6]</sup> observed that there was significant association of symptoms found with menopausal status ( $p < 0.05$ ). A study conducted by Ali *et al.* (2013) <sup>[1]</sup> reported that socio-

economic status of women and income level of family and reproductive factors are negatively influencing and correlated with menopausal symptoms.

In case of Bagalkote district rural women, 38.09 per cent of women showed mild, while 52.39 per cent reported moderate and 9.52 per cent expressed severe status of menopausal symptoms belonged to middle SES category. Among poor SES category women, 15.79 per cent had mild symptoms, 36.85 per cent and 47.36 per cent of women reported moderate and severe menopausal symptoms respectively. There was negatively significant relationship observed between menopausal symptoms and SES.

Whereas Bagalkote district urban women, 50 per cent of urban women showed mild menopausal symptoms, while 10 per cent reported moderate as well as severe menopausal symptoms belonged to high SES category. In middle SES urban women group, 19.23 per cent, 57.69 per cent and 23.88 per cent of them reported mild, moderate and severe menopausal symptoms respectively. In poor SES category 10 per cent of women reported mild menopausal symptoms, 40 per cent and 50 per cent of women expressed moderate and severe menopausal symptoms respectively. There was negatively significant relationship found between SES categories and menopausal symptoms among urban women. There was non-significant association observed between socio-economic status and menopausal symptoms among rural and urban women of Dharwad and Bagalkote.

**Table 1:** Demographic characteristics of postmenopausal women of Dharwad and Bagalkote

SI No	Variables	Dharwad		Bagalkote		Total (N=160)
		Rural (n=40)	Urban (n=40)	Rural (n=40)	Urban (n=40)	
I	Age (years)					
	40 – 45	8 (20.00)	9 (22.00)	6 (15.00)	5 (12.50)	28 (17.50)
	46 – 50	12 (30.00)	10 (25.00)	14 (35.00)	17 (42.50)	53 (33.13)
	51 – 55	20 (50.00)	21 (52.00)	20 (50.00)	18 (45.00)	79 (49.37)
II	Occupation of women					
	Housewives	32 (80.00)	15 (37.50)	9 (22.50)	24 (60.00)	80 (80.00)
	Farm women	5 (12.50)	0 (0.00)	11 (27.50)	-	16 (10.00)
	Government employed (teachers, bank works)	2 (5.00)	21 (52.50)	-	12 (30.00)	34 (21.25)
	Private employed (hostel cooks, clerks)	1 (2.50)	5 (12.50)	20 (50.00)	4 (10.00)	30 (18.75)
III	Education of women					
	Illiterate	25 (62.50)	8 (20.00)	31 (77.50)	10 (25.00)	74 (46.25)
	Primary	11 (27.50)	5 (12.50)	8 (20.00)	12 (30.00)	36 (22.50)
	High school	2 (5.00)	3 (7.50)	1 (2.50)	6 (15.00)	12 (7.50)
	College	2 (5.00)	8 (20.00)	-	3 (7.50)	13 (8.13)
	>graduation and Post Graduate	-	16 (40.00)	-	9 (22.50)	25 (15.60)
IV	Caste					
	Upper caste	14 (35.00)	8 (20.00)	5 (12.50)	15 (37.50)	42 (26.25)
	OBC	18 (45.00)	29 (72.00)	20 (20.00)	21 (52.50)	88 (55.00)
	Dalits	5 (12.50)	2(5.00)	11 (27.00)	3 (7.50)	21 (13.12)
	Tribals	3 (7.50)	1 (1.25)	4 (10.00)	1 (2.50)	9 (5.65)
V	No of Children					
	1 – 2	6 (15.00)	19 (47.50)	3 (7.50)	14 (35.00)	42 (26.25)
	3 – 4	21 (52.50)	14 (35.00)	19 (47.50)	16 (40.00)	70 (43.75)
	5 – 6	8 (20.00)	5 (12.50)	6 (15.00)	4 (10.00)	23 (14.38)
	> 6	5 (12.50)	2 (5.00)	12 (30.00)	6 (15.00)	25 (15.63)
VI	Socio-Economic Status					
	High	1 (2.50)	7 (17.50)	-	4 (10.00)	12 (7.50)
	Middle	28 (70.00)	30 (75.00)	21 (52.40)	26 (65.00)	105 (65.62)
	Poor	11(27.50)	3 (7.50)	19 (47.50)	10 (25.00)	43 (26.88)

\*Figures in the parenthesis indicates percentage

**Table 2:** Responses regarding history of menopause among women of Dharwad and Bagalkote N=160

Sl No	Particulars *Multiple responses	Dharwad		Bagalkote	
		Rural (n=40)	Urban (n=40)	Rural (n=40)	Urban (n=40)
A	Age				
	Age at menarche (years)	12.70	12.85	12.63	12.75
	Age at menopause (years)	42.70	43.25	44.72	44.67
B	Perception menopause				
	Natural phenomena	40 (100)	36 (90.00)	39 (97.50)	34 (85.00)
	Disease	-	4 (10.00)	1 (2.50)	6 (15.00)
C	Duration of bleeding during menopause				
	3 – 5 days	25 (62.50)	29 (72.50)	24 (60.00)	23 (57.50)
	6 – 10 days	9 (22.50)	7 (17.50)	13 (32.50)	15 (37.50)
	11 – 15 days	6 (15.00)	4 (10.00)	3 (7.50)	2 (5.00)
D	Age at which menopausal symptoms experienced				
	35 – 40 years	26 (65.00)	22 (55.00)	18 (45.00)	16 (40.00)
	45 – 50 years	14 (35.00)	12 (30.00)	13 (32.50)	13 (32.50)
	50 – 55 years	-	6 (15.00)	9 (22.50)	11 (27.00)

Figures in the parenthesis indicates percentage

**Table 3:** Menopausal symptoms of postmenopausal women of Dharwad and Bagalkote N=160

Sl No	Menopausal symptoms (*Multiple responses)	Dharwad		Bagalkote	
		Rural (n=40)	Urban (n=40)	Rural (n=40)	Urban (n=40)
I	Somatic Subscale				
1	Hot flushes, sweating	11 (27.50)	16 (40.00)	25 (62.50)	18 (45.00)
2	Heart discomfort (unusual awareness of heart beat, heart skipping, heart racing, tightness)	-	1 (2.50)	-	-
3	Sleep problems (difficulty in falling asleep, difficulty in sleeping through, waking up early)	13 (32.50)	17 (42.50)	31 (77.50)	20 (50.00)
4	Joint and muscular discomfort (pain in the joints, rheumatoid complaints)	26 (65.00)	15 (37.50)	30 (75.00)	27 (67.50)
II	Psychological Subscale				
5	Irritability (feeling nervous, inner tension, feeling aggressive)	6 (15.00)	4 (10.00)	3 (7.50)	1 (2.50)
6	Depressive mood (feeling down, sad, mood swings)	-	3 (7.50)	2 (5.00)	1 (2.50)
7	Anxiety (inner restless, feeling panicky)	3 (7.50)	-	2 (5.00)	1 (2.50)
8	Physical and mental exhaustion (general decrease in performance and concentration, forgetfulness)	5 (12.50)	3 (7.50)	9 (22.50)	2 (5.00)
III	Urogenital subscale				
9	Bladder problems (difficulty in urinating, increased need to urinate, bladder incontinence)	-	1 (2.50)	1 (2.50)	3 (7.50)
10	Dryness of vagina (sensation of dryness or burning in the vagina)	-	1 (2.50)	-	2 (5.00-)
11	Sexual problems (change in sexual desire, in sexual activity and satisfaction)	-	-	-	-

Figures in the parenthesis indicates percentage

**Table 4:** Frequency distribution of menopausal symptoms of postmenopausal women N = 160

Districts	Locality	Menopause symptoms			N	r- value	$\chi^2$	Mean/ SD	t-value
		Mild	Moderate	Severe					
Dharwad	Rural	5 (12.50)	24 (60.00)	11 (27.50)	40 (100)	0.29*	26.07*	16.50(6.17)	2.919*
	Urban	15 (37.50)	20 (50.00)	5 (12.50)	40 (100)			13.62(8.35)	
Bagalkote	Rural	6 (15.00)	20 (50.00)	14 (35.00)	40 (100)	0.75**	31.02*	22.47(3.71)	2.76*
	Urban	11 (27.50)	23 (57.50)	6 (15.00)	40 (100)			20.22(3.57)	

Figures in the parenthesis indicates percentage

\*significant at 0.05 level \*\*significant at 0.01 level

**Table 5:** Correlation coefficient between menopausal symptoms and Socio-Economic Status among rural and urban women of Dharwad and Bagalkote N=160

Area	Locality	SES	N	Menopausal symptoms			Modified $\chi^2$	r-value
				Mild	Moderate	Severe		
Dharwad (n=80)	Rural (n=40)	Middle	29	10 (34.48)	14 (48.28)	5 (17.24)	0.98 <sup>NS</sup>	-0.21*
		Poor	11	2 (18.18)	5 (45.46)	4 (36.36)		
	Urban (n=40)	High	7	2 (28.57)	4 (57.14)	1 (14.29)	2.13 <sup>NS</sup>	-0.34*
		Poor	30	3 (10.00)	23 (76.66)	4 (13.33)		
Bagalkote (n=80)	Rural (n=40)	Middle	21	8 (38.09)	11 (52.39)	2 (9.52)	0.65 <sup>NS</sup>	-0.35*
		Poor	19	3 (15.79)	7 (36.85)	9 (47.36)		

	<b>Urban (n=40)</b>	High	4	2 (50.00)	1 (10.00)	1 (10.00)	1.71 <sup>NS</sup>	-0.27*
		Middle	26	5 (19.23)	15 (57.69)	16 (23.88)		
		Poor	10	1 (10.00)	4 (40.00)	5 (50.00)		

Figures in the parenthesis indicates percentage \*significant at 0.05 level NS - non significant

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