

EXPERIENCE OF MENOPAUSAL PROBLEMS IN NORTH KARNATAKA: A MIXED RESEARCH

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Introduction

Natural or spontaneous menopause is a transition phase from the reproductive to the nonreproductive phase in a woman's life. It occurs with the final menstrual period which is known to occur after 12 months of amenorrhea for which there are no obvious pathological and physiological causes (Afonso et al., 2012). Menopause is not a disease, but rather the point in a woman's life at which she is no longer fertile, and menstrual ceased. Menopause is the time point at which a woman has not had a menstrual period for 12 months. Peri menopause is the time leading up to menopause, and the symptoms of the transition can take 2 to 10 years (Kannur and Itagi., 2019). Natural menopause occurs when the ovaries naturally decrease their production of the sex hormone estrogen and progesterone; there are no menstrual periods for 12 consecutive months; and no other biological or physiological cause account for this (Badaruddoza et al., 2010). Surgical menopause is when surgery, rather than the natural aging process, causes women to go through menopause. Surgical menopause occurs after an oophorectomy, a surgery that removes the ovaries. The ovaries are the main source of estrogen production in the female body. Their removal triggers immediate menopause, despite the age of the person having surgery. While surgery to remove the ovaries can operate as a stand-alone procedure, it's sometimes performed in addition to hysterectomy to reduce the risk of developing chronic disease. Period-stop after a hysterectomy. But having a hysterectomy doesn't lead to menopause unless the ovaries are removed too. During the menopausal transition the hormonal changes will take place that affect many biological systems and it can be distressing. The signs and symptoms of menopause involves central nervous system related disorders; metabolic, weight, cardiovascular and musculoskeletal changes; urogenital and sexual dysfunction the physiological basis of these manifestations is emerging as complex and related but not limited to, estrogen deprivation (Chaturvedi et al., 2015). Hence the study was conducted to study the menopausal problems experienced by middle aged women using a mixed

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methods approach.

Materials and Methods

QUAN-qual mixed research method design was used with full informed consent from participants. The study was conducted in three phases as follows,

F In first phase of the study prevalence was conducted by door-to-door survey from 9512 middle aged women from Dharwad and Bagalkote districts of North Karnataka.

F In second phase quantitative study was conducted by using Menopause Rating Scale to assess the levels of menopausal problems experienced by 480 working and non-working women including rural and urban areas.

F In third phase qualitative study was conducted among 12 menopausal women were purposively selected for the study included three women who attended natural menopause and three women who underwent hysterectomy. The interviews were recorded, all the recordings were listened again and again carefully in order to get a clear sense of participant's explanation and views. They were transcribed into text and analyzed. The data analysis was performed simultaneously with data collection. The meaningful units were extracted from the participants in the form of open codes. After that, the codes were reviewed for several times and those which had similarity were classified into themes and sub-themes. Peer debriefing and member checking were used as strategies of rigor in the study.

Materials

F Menopause Rating Scale (MRS): MRS developed by Berlin (1992) was used to know the age-related decline of physical and mental capacity. The tool consists of 11 questions about the menopausal symptoms. The scale has three categories such as somatic (1, 2, 3 and 11), psychological (4, 5, 6 and 7) and urogenital (8, 9 and 10) problems. The statements were rated on five-point likert scale depending on the severity of symptoms as '0' for 'none' '4' for 'very severe'.

Results and discussion

Table 1. Prevalence of menopausal women in rural and urban area of Dharwad and Bagalkote districts

Districts	Locality	No. of women contacted (9512)	Type of menopause		Total menopausal women (n=4225)
			Natural (n=3648)	Surgical (n=577)	
Dharwad	Rural	2020	853 (92.52)	69 (7.48)	922 (100)
	Urban	1600	1199 (88.30)	159 (11.70)	1358 (100)
Bagalkote	Rural	3290	639 (91.81)	57 (8.19)	696 (100)
	Urban	2602	957 (76.62)	292 (23.38)	1249 (100)

Table 1 represents menopausal women in the districts of Dharwad and Bagalkote reveals distinctive patterns based on locality and the type of menopause. In Dharwad's rural areas, 92.52% of women experienced natural menopause, while 7.48% underwent surgical menopause. In the urban setting, a higher percentage of women (88.30%) underwent natural menopause, compared to 11.70% who experienced surgical menopause. Moving to Bagalkote, a similar trend emerges in rural areas, with 91.81% experiencing natural menopause and 8.19% undergoing surgical menopause. However, in Bagalkote's urban regions, a noteworthy shift is observed, where 76.62% of women experienced natural menopause, while a higher percentage (23.38%) underwent surgical menopause. Comparatively, Dharwad exhibits a consistently higher percentage of natural menopause across both rural and urban localities.

Table 2: Demographic characteristics of menopausal women

N=480

Characteristics		Variables	Dharwad		Bagalkote	
			Rural (n=120)	Urban (n=120)	Rural (n=120)	Urban (n=120)
Age (years)	35-39	20 (16.67)	16 (13.33)	23 (19.17)	14 (11.67)	
	40 – 45	31 (25.83)	28 (23.33)	36 (30.00)	34 (28.33)	
	46 – 50	38 (31.67)	37 (30.84)	32 (26.67)	41 (34.17)	
	51 – 55	31 (25.83)	39 (32.50)	29 (24.16)	31 (25.83)	
Occupation	Non-working	Housewife	60 (50.00)	60 (50.00)	60 (50.00)	60 (50.00)
		Working	Farm laborers	31 (25.83)	22 (18.33)	36 (30.00)
	Self employed		11 (10.00)	15 (12.50)	10 (8.33)	20 (16.67)
	Daily wagers		18 (15.00)	23 (19.17)	14 (11.67)	27 (22.50)
Education	High school	10 (8.33)	20 (16.67)	15 (12.50)	18 (15.00)	
	Primary	45 (37.50)	68 (56.67)	35 (29.17)	49 (40.83)	
	Illiterate	65 (54.17)	32 (26.67)	70 (58.33)	53 (44.17)	
Caste	Upper caste	35 (29.17)	30 (25.00)	17 (14.17)	12 (10.00)	
	OBC	47 (39.17)	66 (55.00)	53 (44.17)	59 (49.17)	
	Dalits	25 (20.83)	15 (12.50)	31 (25.83)	28 (23.33)	
	Tribals	13 (10.83)	9 (7.50)	19 (15.83)	21 (17.50)	
No of children	1 – 2	19 (15.83)	46 (38.33)	13 (10.83)	34 (28.33)	
	3 – 4	61 (50.83)	47 (39.17)	87 (72.50)	62 (51.67)	
	5 – 6	40 (33.33)	27 (22.50)	20 (16.67)	24 (20.00)	
SES of the family	Upper High	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	
	High	9 (7.50)	20 (16.67)	11 (9.17)	17 (14.17)	
	Upper Middle	32 (26.67)	42 (35.00)	26 (21.67)	57 (43.33)	
	Lower Middle	51 (42.50)	39 (32.50)	48 (40.00)	25 (20.83)	
	Poor	28 (23.33)	19 (15.83)	35 (29.17)	21 (17.50)	
	Very poor	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	

Figures in the parenthesis indicates percentage

Table 2 provides a comprehensive overview of the demographic characteristics of menopausal women in Dharwad and Bagalkote districts, categorized by locality (rural and urban). Examining the age distribution, the majority of women in all groups fall within the 46-50 age range, with Dharwad's rural areas having the highest percentage at 31.67%. In terms of occupation, a significant proportion across all regions are non-working housewives, constituting 50% of the population in each category. The educational profile reveals disparities, with a higher percentage of illiterate women in rural areas compared to urban counterparts in both districts. The caste distribution indicates that OBCs comprise the largest percentage in all groups, with Dharwad's urban areas having the highest OBC representation at 55%. The number of children per family varies, with the majority having 3-4 children, particularly pronounced in Bagalkote's rural areas at 72.50%. Socioeconomic status (SES) distribution shows a prevalence of lower-middle-class families, and Dharwad's urban areas stand out with 35% falling into the upper-middle SES category.

Table 2b: Menopausal problems among working and non-working women

N=480

Menopausal problems (*Multiple responses)	Rural		Urban	
	Working (n=120)	Non- working (n=120)	Working (n=120)	Non- working (n=120)
Somatic				
Hot flushes, sweating	42 (35.00)	57 (47.50)	45 (37.50)	59 (49.17)
Heart discomfort (unusual awareness of heart beat, heart skipping, heart racing, tightness)	12 (10.00)	5 (4.16)	8 (6.67)	14 (11.67)
Sleep problems (difficulty in falling asleep, difficulty in sleeping through, waking up early)	60 (50.00)	69 (57.50)	62 (51.66)	67 (58.84)
Joint and muscular discomfort (pain in the joints, rheumatoid complaints)	82 (68.33)	75 (62.50)	75 (62.50)	71 (59.17)
Psychological				
Irritability (feeling nervous, inner tension, feeling aggressive)	69 (57.50)	63 (52.50)	72 (60.00)	67 (55.83)
Depressive mood (feeling down, sad, mood swings)	66 (55.00)	47 (39.17)	49 (40.83)	69 (57.50)
Anxiety (inner restless, feeling panicky)	43 (35.83)	35 (29.17)	38 (31.67)	47 (39.17)
Physical and mental exhaustion (general decrease in performance and concentration, forgetfulness)	73 (60.83)	59 (49.17)	54 (45.00)	56 (46.67)
Urogenital				
Bladder problems (difficulty in urinating, increased need to urinate, bladder incontinence)	7 (5.83)	10 (8.33)	12 (10.00)	15 (12.50)
Dryness of vagina (sensation of dryness or burning in the vagina)	7 (5.83)	8 (6.67)	10 (8.33)	8 (6.67)
Sexual problems (change in sexual desire, in sexual activity and satisfaction)	5 (4.17)	6 (5.00)	7 (5.83)	9 (7.50)

Figures in the parenthesis indicates percentage

Table 2b elucidates the spectrum of menopausal problems among working and non-working women in rural and urban settings, shedding light on the multifaceted nature of these experiences. In the realm of somatic issues, hot flushes and sweating emerge as prevalent concerns, with percentages ranging from 37.50% to 49.17% across all groups. Joint and muscular discomfort is also notably widespread, affecting 62.50% to 68.33% of women, suggesting a significant physical aspect to menopausal challenges. Moving to psychological problems, irritability and depressive mood stand out, impacting 52.50% to 60.00% of women, indicating the emotional toll of menopause. Anxiety is reported by 29.17% to 39.17% of women, emphasizing the need to address mental health aspects during this life stage. Physical and mental exhaustion is a pervasive issue, affecting 45.00% to 60.83% of women across different categories. In the urogenital domain, bladder problems are reported by 5.83% to 12.50% of women, underlining the importance of addressing urinary concerns. Dryness of the vagina and sexual problems are also indicated, with percentages ranging from 5.00% to 8.33%, emphasizing the need for holistic healthcare that considers intimate aspects of well-being. The data underscores that menopausal problems are complex and multifaceted, affecting women across various domains, both somatic and psychological. The variation in percentages between working and non-working women, as well as across rural and urban contexts, highlights the importance of tailoring interventions to specific needs.

Hmm...I underwent menopause at the age of 43 years, during normal menstruation.. I used to get irritated and was restricted to some works. It made me to feel weak but after cessation of menstruation (beaming face)..... no regular cycles, feeling good, healthy and... more ever I feel like a man(smiles!!)

Table 2c: Distribution of working and nonworking women by menopausal problems N = 480

Area	Occupation	Problems	Category			χ^2	r- value
			Mild	Moderate	Severe		
Rural	Non-working (n=120)	Somatic	25 (20.83)	61 (50.83)	34 (28.33)	38.12**	0.53**
		Psychological	50 (41.67)	48 (40.00)	22 (18.33)		
		Urogenital	73 (60.83)	32 (26.67)	15 (12.50)		
	Working (n=120)	Somatic	26(21.667)	57 (47.50)	37 (30.83)		
		Psychological	31 (25.83)	48 (40.00)	41 (34.17)		
		Urogenital	61 (50.83)	36 (30.00)	23 (19.17)		
Urban	Non-working (n=120)	Somatic	28 (23.33)	52 (43.33)	40 (33.33)	40.17**	0.43*
		Psychological	20 (16.67)	46 (38.33)	54 (45.00)		
		Urogenital	55 (45.83)	38 (31.67)	27 (22.50)		
	Working (n=120)	Somatic	39 (32.50)	57 (47.50)	24 (20.00)		
		Psychological	19 (15.83)	53 (44.17)	48 (40.00)		
		Urogenital	78 (65.00)	29 (24.17)	13(10.83)		

Figures in the parenthesis indicates percentage *significant at 0.05 level

**Significant at 0.01 level

Table 2c delves into the distribution of menopausal problems among working and non-working women in rural and urban areas, offering insights into the severity of somatic, psychological, and urogenital issues. The χ^2 values and r-values provide statistical significance and the strength of association, respectively. In rural non-working women, somatic problems are notably prevalent, with 50.83% experiencing moderate severity. Psychological problems exhibit a more balanced distribution, with 41.67% reporting mild severity. Urogenital problems are most pronounced, affecting 60.83% at a mild level. The χ^2 value of 38.12 indicates a significant association between occupation and somatic problems, emphasizing the impact on non-working women. The r-value of 0.53 suggests a moderate association, highlighting the influence of occupation on the severity of somatic problems. Conversely, among rural working women, somatic problems are distributed more evenly, with 47.50% experiencing moderate severity. Psychological problems show a balanced distribution, with 40.00% reporting moderate severity. Urogenital problems are prevalent, affecting 50.83% at a mild level. The χ^2 value of 40.17 demonstrates a significant association between occupation and somatic problems for working women. The r-value of 0.43 indicates a moderate association, emphasizing the influence of occupation on the severity of somatic problems.

In urban non-working women, somatic problems exhibit a balanced distribution, with 43.33% experiencing moderate severity. Psychological problems show an interesting trend, with 38.33% reporting moderate severity. Urogenital problems are significant, affecting 45.83% at a mild level. The χ^2 value of 40.17 indicates a significant association between occupation and somatic problems, emphasizing the impact on non-working women. The r-value of 0.43 suggests a moderate association, highlighting the influence of occupation on the severity of somatic problems. Finally, among urban working women, somatic problems are distributed more evenly, with 47.50% experiencing moderate severity. Psychological problems show a balanced distribution, with 44.17% reporting moderate severity. Urogenital problems are most pronounced, affecting 65.00% at a mild level. The χ^2 value of 40.17 demonstrates a significant association between occupation and somatic problems for working women. The r-value of 0.43 indicates a moderate association, emphasizing the influence of occupation on the severity of somatic problems.

Table 2d: Comparison of category wise menopausal problems among non-working and working women

N = 480

Area	Occupation	Problems	Mean±SD	F- value	C.D. ±S.E.m
Rural	Non-working (n=120)	Somatic	8.47±1.75	12.57*	1.081±0.352
		Psychological	6.40± 1.98		
		Urogenital	3.77±1.99		
	Working (n=120)	Somatic	12.36± 1.44	11.38*	1.079±0.348
		Psychological	7.48±1.12		
		Urogenital	3.68± 1.05		
Urban	Non-working (n=120)	Somatic	11.66±1.87	13.46*	1.093±0.470
		Psychological	6.60±1.12		
		Urogenital	4.62±2.41		
	Working (n=120)	Somatic	9.25±3.54	11.62*	1.071±0.342
		Psychological	7.36±2.01		
		Urogenital	3.08±2.34		

Table 2d provides a comparison of menopausal problems among non-working and working women in rural and urban areas, revealing mean values, standard deviations, F-values, and critical differences (C.D.) with standard error (S.E.m). This statistical analysis helps elucidate differences in the severity of somatic, psychological, and urogenital problems based on occupational status. In rural non-working women, the mean somatic problem score is 8.47±1.75, significantly lower than their working counterparts with a mean of 12.36±1.44. This discrepancy is supported by a high F-value of 12.57, indicating a statistically significant difference. The critical difference of 1.081±0.352 underscores the substantial variation in somatic problems between these groups. Similarly, in urban non-working women, the mean somatic problem score is 11.66±1.87, higher than that of urban working women (9.25±3.54), further supported by a significant F-value of 13.46. The critical difference of 1.093±0.470 highlights the notable distinction in somatic problems between non-working and working urban women.

Concerning psychological problems, rural non-working women exhibit a mean score of 6.40±1.98, slightly lower than the mean of 7.48±1.12 observed in their working counterparts. The F-value of 11.38 indicates a significant difference, emphasizing the impact of occupation on psychological well-being. In the urban context, non-working women present a mean psychological problem score of 6.60±1.12, while urban working women have a

mean of 7.36 ± 2.01 , with a significant F-value of 11.62. The C.D. of 1.071 ± 0.342 suggests a noticeable difference in psychological problems between non-working and working urban women. In terms of urogenital problems, no significant differences are observed between non-working and working women in both rural and urban settings, as indicated by F-values below the critical threshold.

In qualitative analysis three themes were developed the results as follows,

I) Physical sign and symptoms

A quote by natural menopausal women

"It feels like I am sitting in hot room or on a hot pan.....feels my body is completely burning and I am for sure it is not fever.....as it is only for few minutes and then I become relaxed. All of these symptoms I experience suddenly at my feet, back and neck and also suffering from too much of joint pain and even I am not able to do heavy work like before.....

Another woman who underwent hysterectomy expressed

Menopausal period is very problematic.....specially for my health..... means too much of abdominal pain, most nights I feel very hot... sometimes I have experienced like having bath at night .Mmm..(sighs)..... then I cannot get sleep. I remember one day I felt like whole room was spinning around me..... after that I suddenly woke up and felt like it was a last moment of my life.

Another woman reported

"Yes (with emphasis) after menopause I have joint problems, BP and diabetes and sometimes have feeling of heartburning sensation. Other than this..... I not able to sleep I wake-up in between sleep and again going back to sleep is very difficult to me".

II) Psychological signs and symptoms

A quote by women who had natural menopause before 6 years reported

You know now a days.... I get angry very easily..... for example if my husband and children ask one more time to explain any work or my opinion... I suddenly get hyper and start scolding them like anything..... because of it I become unhappy later and get irritated about myself.

Hysterectomy women expressed

Sometimes I go to market to purchase things..... before going I list in my mind.... but when I reach the market... I simply cannot recall why I came hereI start getting confused . You know sometimes in home also..... simply I go to kitchen and start thinking what I have to doyou know I go blank.....

A quote from women who had natural menopause before 9 years

I experienced mood swings. You know... my nature basically is to be clam and quite. Now, I am very sensitive. I don't have control on my emotions. Suddenly I started getting irritated and loose my temper. I used to shout on my family members. They felt.... I tortured them. Sometimes I didn't feel like talking to anyone.

III) Urogenital signs and symptoms

Another respondent said

There is a feeling of itching in urinary part, it is so awkward..... but sometimes I can tolerate it and control the temptation to scratch ... but it is difficult. I consulted doctor he prescribed an ointment and I am using it regularly now.

A quote from woman who underwent hysterectomy

"After surgeryeven now after 8 years... I have uncomfortable feeling due to itching and swelling.....you know....I feel numb in these areas..... means feeling like as if a doctor has give anesthetic injection....that means like unsensetional..... so I am continuously on medicationmeans I am taking tablets regularly".

Another hysterectomy woman expressed

"Yes(remembers)..... before I reached menopause..... nearly for 6 months to1 year I feeling burning sensation while urinating and even I had no control over urination..... so I started avoiding to go outside from home.....to market places, functions and relatives home".

A quote from women who had natural menopause before 11 years

"I am not having control on my bladder....I need to empty my bladder urgently...It never happened before ...I think my vagina has become dry, sometime there is a feeling of itching also".

Conclusion

The study concludes that these diverse accounts of respondents collectively emphasize the need for a holistic approach to menopausal care, addressing both the physical and psychological aspects. Healthcare providers should tailor interventions to alleviate specific symptoms, offering support and guidance to enhance the overall quality of life for women navigating this transformative stage. Moreover, fostering open communication and awareness can contribute to a more empathetic understanding of the challenges women face during menopause, promoting a culture of inclusivity and support.

References

1. Afonso, F. R., Hachul, H., Kozasa, E. H., Oliveira, S. D., Goto, B. S., Rodrigues, B. S., Tufik, S. D. and Leite, J. R., 2012, Yoga decreases insomnia in postmenopausal women: a randomized clinical trial. *J. North American Menop. Soc.*, 19 (2):186-193.
2. Akkuzu, G., Kecialan, B. and Orsal, O., 2017, Women's attitudes towards menopause and influencing factors, *TurkiyeKlinikleri. J. Med. Sci.*, 29 (3): 666-674.
3. Akkuzu, G., Orsal, M. and Kealan, R., 2018, Women's attitudes towards menopause and influencing factors. *J. Med. Sci.*, 29(3):666-674.
4. Akoijam, M. D., Dular, S. K. and Yadav, R., 2015, A descriptive study to assess the level of knowledge and attitude regarding menopause among menopausal women in selected rural areas in Faridabad. *Int. J. Adv. in Nur. Mgt.*, 3(1):7-13.
5. Ali, G., Kecialan, B. and Orsal, O., 2015, Marital satisfaction and influencing factors among menopausal women. *TurkiyeKlinikleri. J. Med. Sci.*, 29 (3): 666-674.
6. Alonso, N. F., Cuadros, J. L., Chedraui, P., Mendoza, M. and Faustino, R. P., 2015, Obesity is related to increased menopausal symptoms among Spanish women. *Int. J. Menop. Soc.*, 16 (5): 105-117.
7. Alraek, T. and Malterud, K., 2015, Acupuncture for menopausal hot flashes: A qualitative study about patient experiences. *J. Alternative and Complementary Med*, 15 (2):153-158.
8. Amore, M., Donato, P. D., Papalini, A., Berti, A., Palareti, A., Carla, F. G. and Aloysio, D. D., 2014, Psychological status at the menopausal transition: An Italian epidemiological study. *J. Maturita*, 4(8): 115-124.
9. Avin, A. B., 2016, A study to assess the average age of menopause and menopause associated symptoms among rural women in Mangalore, Karnataka. *N. J. Community Med*, 7(5): 400-408.
10. Badami, S., Hundekar, P. S., Itagi, S. and Yenagi, G. V., 2013, Relationship between physical health and stress level of urban and rural working and non-working post-menopausal women. *J. Humanities and Soc. Sci.*, 17(4): 21-34.
11. Badaruddoza, N., Kaur, N. and Barna, B., 2010, Inter-relationship of Waist-to-Hip Ratio (WHR), Body Mass Index (BMI) and subcutaneous fat with blood pressure among university-going Punjabi Sikh and Hindu menopausal women. *Int. Med. Med. Sci.*, 1 (2): 5-12.

12. Balan, P., 2017, A study of menopausal symptoms in women after hysterectomy with retained ovaries. *Int. J. Med. and Health Res.*, 3 (3): 53 -59.
13. Berlin., 1992, Menopause Rating Scale for to know the age-related decline of physical and mental capacity. *Center Epidemiol. Health Res.*, 16(2):16-23.
14. Chaturvedi, A., Nayak, G., Nayak, A. G., Sharma, V. and Rao, A., 2015, Efficacy of yoga in balancing the deranged biochemical profile in healthy perimenopausal women hailing from South Kanara district of Karnataka, India. *J. Biomed. and Pharm. Sci.*, 5(45): 20-25.
15. Kannur D and Itagi. S., 2019, Prevalence of menopause and menopausal problems in Dharwad and Bagalkote districts, India. *Int J CurrMicrobiol App Sci.* 8(7): 2618-2626.