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Research paper

Assessment of menopausal symptoms awareness among women in Bharatpur, Nepal

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Abstract

Background: Menopause signifies the end of a woman's reproductive phase, characterized by the cessation of ovarian hormone production and the termination of menstrual cycles, typically occurring between the ages of 45 and 55. The transition involves a range of physical and psychological symptoms manifesting before, during, and after menopause.

Method: This cross-sectional analytical study assessed the level of awareness regarding menopausal symptoms among women in Bharatpur-9, Chitwan. A non-probability sampling technique was used to select 257 respondents. Data were collected using a semi-structured interview schedule and analyzed with SPSS version 20.0.

Results: Among the respondents, 53.3% were aged 40-49 years (Mean ± S.D.; 48.84 ± 6.27), and 69.3% experienced menarche between ages 13-15. A majority (59.9%) had not yet reached menopause. Knowledge of menopausal symptoms was as follows: joint pain (90.7%), sleep problems (90.7%), irritability (90.7%), hot flushes (22.2%), anxiety (22.2%), sadness (22.2%), vaginal dryness (22.6%), loss of interest in sex (25.7%), palpitations (18.7%), and decreased visual acuity (9.3%). Statistical significance was found between awareness levels and factors such as religion (p=0.00), ethnicity (p=0.00), educational status (p=0.006), family type (p=0.043), cessation of menstruation (p=0.013), and cause of menopause (p=0.00). Overall, 53.7% of respondents had average knowledge about menopausal symptoms.

Conclusion: The study concluded that over half of the respondents possessed average awareness of menopausal symptoms. Hence, there is a need for women to receive correct and comprehensive information regarding menopausal symptoms and their management.

Keywords: *Menopausal Symptoms; Menopause Awareness; Women's Health; Menopausal Transition; Symptom Management.*

1. Introduction

1.1. Background of the study

Menopause is a biological process marking the end of a woman's reproductive capacity, characterized by the permanent cessation of ovarian follicular activity and the subsequent decline in circulating estrogen and progesterone levels. This transition typically occurs between the ages of 45 and 55 and is associated with various physiological and psychological changes, including vasomotor symptoms, genitourinary syndrome, and increased risk for osteoporosis and cardiovascular disease (Dutta, 2016).

Menopause, while not classified as an illness, is associated with several health conditions that can increase mortality in menopausal women. The physiological changes during menopause include vaginal atrophy, bone demineralization, behavioral alterations, urinary issues, increased adiposity, and diminished sexual desire (Kalhan, et al., 2020). Knowledge of menopausal symptoms and their complications enables women to manage these changes more effectively and prevent serious, irreversible consequences through appropriate treatments (Shrestha, 2016). The prevalence of menopausal symptoms varies by region, with reported incidences of 74% in Europe, 36-50% in North America, 45-69% in Latin America, and 22-63% in Asia. In the United States, 85% of postmenopausal women experience symptoms at some point in their lives (Menopause Epidemiology and Demographics, 2021). The average age of menopause in Western countries is 51 years, compared to 46 years in India and 48.7 years in Nepal (Bhandari, Amatya & Giri, 2020). A cross-sectional study in Kathmandu found that menopausal symptoms affected daily activities in 59.3% of postmenopausal women, with severe impacts reported by 1.9%, reduced work efficiency by 58.8%, and hindered social activities in 43.2% (Prajapati, 2020).

Menopausal issues are a significant health concern in Nepal, where many women are unaware of the condition and its associated symptoms. The onset of menopause can be particularly traumatic for women unfamiliar with these changes, highlighting the importance of awareness and education about menopause and its symptoms to empower women to make informed health decisions (Gyawali, Subedi, Yasmin & Pandey, 2016), (Lee & Suh,2010).

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1.2. Literature review

Nishant et al. (2008) examined the severity of menopausal symptoms and quality of life in Pakistani women, finding that 78.79% had inadequate knowledge and 15.8% were aware of menopausal symptoms. Commonly reported symptoms included backache (75.66%), insomnia (63.44%), vasomotor symptoms (59.4%), night sweats (45.19%), and memory loss (62.10%). Similarly, Mujahid, Siddiqui, and Hussain (2013) investigated the awareness of menopausal symptoms among 205 young Pakistani women of different educational backgrounds at Dr. Ziauddin Hospital, Karachi. The mean age of respondents was 34.34 ± 3.8 years. The study found that 65.9% had completed intermediate or higher education, and 57.6% had sought information about menopause, with doctors being the source for 53.4%. Only 43.4% knew what menopause was, and 58% were aware of the average age of menopause in Pakistan.

Anjum et al. (2013) conducted a study on the awareness and perception of menopause among 93 Pakistani women over 42 years old at Civil Hospital, Karachi. The study found that 59.14% had knowledge of menopause, 33.33% were aware of its symptoms, and 10.75% knew about its treatment. Additionally, 44.09% were satisfied with its cessation, while 40.86% wanted it to continue. Furthermore, 69.89% desired education on menopause, and 47.31% felt the need for medical treatment. In the same year, Vijayalakshmi, Ramesh, and Eileen (2013) found prevalent symptoms among Northern Indian women included tiredness (92.90%), headache (88.80%), joint discomfort (76.20%), and sleeplessness (54.40%). Paudyal and Nepal (2014) conducted a study at Lumbini Medical College (LMC) involving 142 women aged 40-60 years, revealing that half of the respondents were between 40-44 years old, 99.3% were married, and 57.7% were literate. The study found that 74.6% of respondents were menstruating women, with friends and relatives being the main source of information on perimenopausal symptoms for 81.2% of the participants. Knowledge levels on perimenopausal symptoms were poor for 63.4%, fair for 33.8%, and good for only 2.8% of respondents.

Swaraj et al. (2017) studied menopausal health status among Nepalese women, revealing that 59.2% were unaware of menopausal health problems. The most commonly known symptoms were abnormal bleeding (17.65%), sweating (15.75%), hot flushes (14.95%), and joint pain (14.25%). The most experienced symptoms were joint pain (36.8%), hot flushes (29.2%), and irregular bleeding (29.1%), with 29.3% consulting health workers and 46.3% accepting menopause as a part of life. Moreover, Leena, Joseph, and Ackee (2017) found among 100 postmenopausal women in India that only 19.5% of symptomatic women sought treatment, and 77.9% had positive perceptions of menopause. Prajapati (2020) examined the awareness of menopausal symptoms and their effect on daily life among 160 postmenopausal women attending the female outpatient department of Patan Hospital, Nepal. The study showed that 81.2% of the women had inadequate awareness of menopausal symptoms, which affected daily activities in 59.3% of the cases, work efficiency in 58.8%, and social activities in 43.2%. Educational, marital, and occupational status were significantly associated with awareness levels, and the symptoms had a notable impact on daily life. Similarly, Sharma et al. (2021) surveyed 203 postmenopausal women aged 45-60 years in selected wards of Tokha Municipality, Kathmandu. The study revealed that over half (50.2%) were unaware of menopausal symptoms, and 59.6% reported that menopause-related symptoms affected their daily work activities.

The literature review highlights the varying levels of awareness regarding menopausal symptoms among women in different regions and settings. Multiple studies indicate that knowledge of menopausal symptoms is generally poor, with significant impacts on daily life, work efficiency, and social activities. There is a clear need for enhanced health education and awareness programs to improve the understanding of menopausal symptoms and appropriate health practices among women.

1.3. Rationale and significance of the study

The hormonal changes associated with menopause can significantly impact physical, emotional, mental, and social well-being. The severity and nature of symptoms experienced during menopause vary among individuals and can affect daily activities and quality of life (World Health Organization [WHO], 2021). Studies highlight the limited knowledge regarding menopausal symptoms among women. For instance, Paudyal and Nepal (2014) found that among 142 women aged 40-60 at Lumbini Medical College Teaching Hospital, 63.4% had poor knowledge, 33.8% had fair knowledge, and only 2.8% had a good level of knowledge about perimenopausal symptoms. Similarly, Prajapati (2020) revealed that 81.2% of 160 postmenopausal women in Kathmandu had inadequate awareness of menopausal symptoms. In Pakistan, Nishant et al. (2008) reported that 78.79% of women had inadequate knowledge of menopausal symptoms. Commonly reported symptoms included backache (75.66%), insomnia (63.44%), vasomotor symptoms (59.4%), night sweats (45.19%), and memory loss (62.10%).

These studies indicate that awareness of menopausal symptoms is generally low. Premenopausal women require access to quality health services and supportive communities and systems. However, menopause is often not discussed within families, communities, workplaces, or healthcare settings. Consequently, women may not recognize their symptoms as related to menopause or be aware of available counseling and treatment options. Therefore, assessing the level of awareness regarding menopausal symptoms among women in the community is crucial. The findings of this study will provide baseline data for further research on similar topics and help health academicians disseminate knowledge about menopausal symptoms, ultimately improving the quality of life for postmenopausal women. This study aims to assess the awareness of menopausal symptoms among the women of Bharatpur-9, Chitwan. Specifically, it seeks to determine the overall level of awareness and examine the association between this awareness and selected demographic variables. The research question guiding this investigation is: What is the level of awareness regarding menopausal symptoms among the women of Bharatpur-9, Chitwan?

The study employs a conceptual framework where the dependent variable is the awareness regarding menopausal symptoms. The independent variables include socio-demographic factors such as age, religion, ethnicity, education status, education level, occupation, economic status, and the status of menopause. By exploring these variables, the study aims to identify potential correlations and provide insights into the factors influencing awareness levels among this population.

2. Methodology

2.1. Research design

This study employs a cross-sectional analytical design to evaluate the awareness of menopausal symptoms among women residing in Bharatpur-9, Chitwan. This design allows for the assessment of awareness levels at a specific point in time and facilitates the analysis of associated demographic factors. The research was conducted in Bharatpur-9, Chitwan, purposively selected for its diverse population and defined geographic boundaries. Bharatpur-9 is part of the Bharatpur metropolitan city in Bagmati Province, encompassing an area of 5.3 square kilometers with a population of 9,116 (4,240 males and 4,776 females). The area is characterized by a variety of ethnic groups living in a stable environment.

The target population comprised women aged 40-60 years residing in Bharatpur-9, Chitwan. This demographic was chosen due to its relevance to the study of menopausal symptoms.

2.2. Research study population and selection criteria

The study focused on women aged 40-60 years residing in Bharatpur-9, Chitwan, as this demographic is particularly relevant to the study of menopausal symptoms. This age range encompasses the typical onset and progression of menopause, making it an ideal group for assessing awareness and experiences related to menopausal changes.
The selection criteria for participants included specific inclusion and exclusion parameters to ensure the study's relevance and accuracy. Eligible participants were women aged 40-60 years living in Bharatpur-9. In contrast, those excluded from the study were women younger than 40 or older than 60 years, as well as those who were mentally ill, chronically ill, or disabled (e.g., visually impared). Additionally, women who did not provide informed consent were also excluded from the study. This selection process was designed to focus on a representative sample while ensuring that the participants could contribute valid and reliable data regarding menopausal symptoms.

2.3. Sampling technique and size

A non-probability purposive sampling method was employed. Houses within the selected ward were purposively chosen, starting from the first house to the left of the ward office. In cases where multiple eligible women resided in a single house, one woman was selected at random. Data collection continued until the required sample size was achieved.
The sample size was calculated using the formula:

Sample size (n) = Z^2pq/E^2
[Where: Z = 1.96, Error (E) = 5% = 0.05, Prevalence (p) = 18.8% (Prajapati, 2020) = 0.188, q = 1 - p = 1 - 0.188 = 0.812]

Now, substituting the values:

$n = (1.96)^2 * 0.188 * 0.812 / (0.05)^2 = 3.8416 * 0.188 * 0.812 / 0.0025 = 0.5868 / 0.0025 = 234.5 \approx 234$

Considering a 10% non-response rate:

10% of 234 = 10/100 * 234 = 23.4 ≈ 23, Total Sample Size (n) = 234 + 23 = 257
Hence, the total sample size is 257.

2.4. Data collection/ analysis procedure and ethical considerations

Data collection was conducted using a semi-structured interview schedule, which was meticulously developed in both English and Nepali to accommodate the linguistic needs of the participants and ensure comprehensibility. The instrument was organized into three distinct sections: Part I focused on gathering socio-demographic data, Part II addressed gynecological information, and Part III assessed awareness regarding menopausal symptoms. This structured approach allowed for a comprehensive collection of relevant information, facilitating a thorough analysis of the participants' awareness and experiences related to menopause.
Content validity was established through literature review and consultations with experts. The instrument was initially developed in English, translated to Nepali, and then back-translated to ensure accuracy. Reliability was tested by pretesting the instrument on 10% of the sample in a similar setting, Bharatpur-10. Formal authorization for the study was obtained from the relevant institutional authority following a request submitted by the college. Data collection was personally conducted by the researcher to ensure consistency and accuracy. The process involved administering a semi-structured interview schedule in Nepali, tailored for women over the age of 40, in alignment with the study's objectives. Each interview, lasting approximately 15-20 minutes, was conducted after obtaining informed consent from the participants. Data collection took place from 18th to 24th of 2079. To minimize potential biases, the researcher employed rigorous methods to maintain objectivity throughout the data collection phase.
Approval for the study was obtained from Shree Medical and Technical College and ethical clearance from the Shree Medical and Technical College Institutional Review Committee (SMTC-IRC). Administrative permission was secured from Bharatpur Municipality. Participants were informed about the study's nature and purpose, and written informed consent was obtained. Confidentiality was assured, and participants were free to withdraw at any time.
The collected data underwent a thorough process of coding, checking, reviewing, and organizing to ensure accuracy and completeness. The data were then entered into MS Excel before being imported into the Statistical Package for the Social Sciences (SPSS) version 20.0 for analysis. Descriptive statistical methods were utilized to present data in terms of frequency and percentages. Additionally, inferential statistical techniques, specifically the chi-square test, were employed to examine associations between awareness of menopausal symptoms and selected demographic variables.

3. Results and data analysis

The analysis was conducted using a descriptive cross-sectional analytical research design, aligned with the study's research questions and objectives. The findings are systematically presented across various tables to facilitate a clear understanding of the data. Specifically, Table 1 illustrates the socio-demographic characteristics of the respondents, while Table 2 presents their gynecological information. Table 3 and Table 4 focus on the respondents' awareness of menopausal symptoms, with Table 5 detailing their overall level of awareness. Finally, Table 6 explore the associations between the respondents' level of awareness and selected socio-demographic variables. This structured approach ensures a comprehensive examination of the data and highlights key patterns and relationships pertinent to the study.

Table 1: Respondents' Sociodemographic Characteristics (Age, Religion, Ethnicity, Marital Status, Educational Status, Educational Level, Occupation, Family Type), N= 257

Variable	Frequency	Percentage (%)
Age		
40-49	137	53.3
50-59	120	46.7
min.=40, max.=59, Mean±SD (48.84±6.27)		
Religion		
Hindu	225	87.5
Buddhist	32	12.5
Ethnicity		
Dalit	9	3.5
Janajati	32	12.5
Bhramin/Chhetri	216	84
Marital status		
Married	241	93.8
widow	16	6.2
Educational status		
Illiterate	8	3.1
Literate	249	96.9
Education level (n= 249)		
General literate	40	15.6
Basic level	113	44
Secondary level	78	30.7
Bachelor and above	17	6.6
Occupation		
Housemaker	257	100
Family type		
Nuclear	174	67.7
Joint	83	32.3

Table 1 provides an overview of the socio-demographic characteristics of the respondents. It reveals that 53.3% of the participants were aged between 40 and 49 years. The majority, 87.5%, adhered to Hinduism, and 84% identified as Brahmin/Chhetri. As seen from the Figure 1, almost all respondents (96.9%) were literate, and 100% were housewives. A significant majority (93.8%) were married, and 67.7% lived in nuclear families.

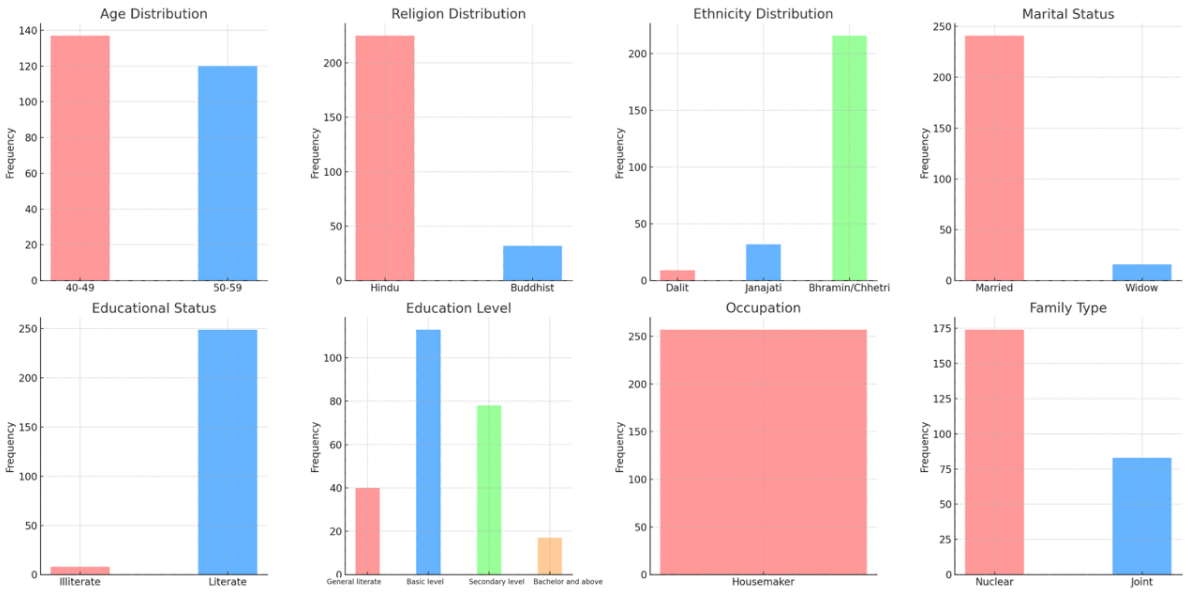


Fig. 1: Analytical Charts of Respondents' Sociodemographic Characteristics.

Table 2: Respondents' Gynecological Information (Age at Menarche, Menstruation Stop or Not, Cause of Menopause, Irregular Menstruation), N=257

Variable	Frequency	Percentage (%)
Age at menarche (in complete years)		
13-15	178	69.3
16-18	79	30.7
Mean±SD(15.5±0.683)	min.= 13	max.=18
Menstruation stop or not		
Yes	103	40.1
No	154	59.9
Cause of menopause(n=103)		
Natural	87	84.4
Surgical	16	15.6
Irregular menstruation(n=154)		
Yes	0	0
No	154	100

The gynecological information of the respondents is presented in Table 2. It shows that more than half (69.3%) experienced menarche between the ages of 13 and 15 years. In terms of menstrual cessation, 59.9% had not yet stopped menstruating, while 84.4% experienced natural menopause as represented in Figure 2.

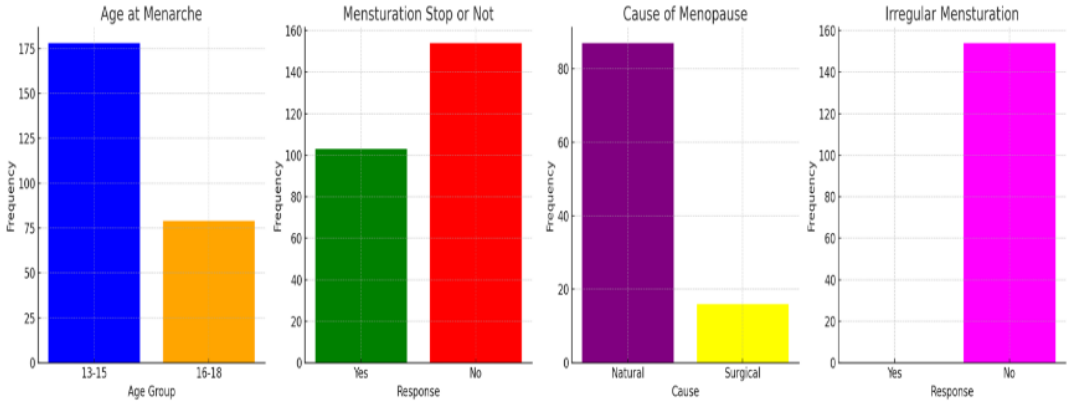


Fig. 2: Analytical Charts of Respondents' Gynecological Information.

Table 3: Respondents' Awareness Regarding Menopausal Symptoms (Meaning, Age of Menopause, Cause, Beginning Sign, Symptoms), N= 257

Variable	Correct Answer	Frequency	Percentage (%)
Meaning of menopause	Cessation of menopause for 12 months	257	100
Age of menopause	45-55	88	34.2
Cause of menopause	Normal body process	257	100
Beginning sign of menopause	Irregular menstruation	257	100
Symptoms			
Hot flushes/ night sweats	yes	57	22.2
Vaginal dryness	yes	58	22.6
Joint pain	yes	233	90.7
Loss of interest in sex	yes	66	25.7
Palpitation	yes	48	18.7
Decrease vision acuity	yes	24	9.3
Sleep problem	yes	233	90.7
Anxiety	yes	57	22.2
Sadness	yes	57	22.2
Irritability	yes	233	90.7

Table 3 illustrates the respondents' awareness of menopausal symptoms. All participants (100%) were aware of the meaning of menopause, but only 34.2% knew the typical age of onset. Awareness was high regarding the causes of menopause (100%) and common symptoms like joint pain (90.7%), sleep problems (90.7%), and irritability (90.7%). However, the Figure 3 shows that only 22.2% were aware of hot flushes, anxiety, and sadness, while awareness of vaginal dryness was at 22.6%, loss of interest in sex at 25.7%, palpitations at 18.7%, and decreased vision acuity at 9.3%.

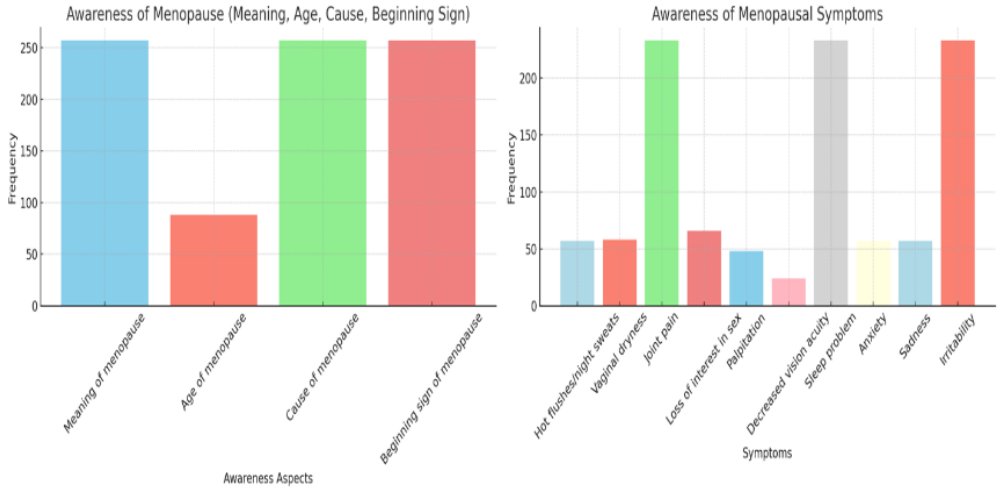


Fig. 3: Analytical Charts of Respondents' Awareness Regarding Menopausal Symptoms.

The respondents' awareness of complications and management strategies for menopausal symptoms are represented in Table 4. Knowledge about sleep disorders was high (93.8%). Awareness of management techniques for hot flushes was notably high for smoking cessation (100%) and avoidance of hot and spicy meals (73.2%), though less so for deep breathing (20.2%). Awareness of adequate sleep and activities to reduce irritability was at 51.4%, and knowledge about the effectiveness of calcium supplements in managing menopausal symptoms was 70.8% as depicted in Figure 4.

Table 4: Respondents' Awareness Regarding Menopausal Symptoms (Complications, Management), N= 257

Variable	Correct Answer	Frequency	Percentage (%)
Complications of menopausal symptoms*			
Urinary incontinence	yes	59	23
Obesity	yes	41	16
Osteoporosis	yes	233	90.7
Sleep disorders	yes	241	93.8
Decrease sexual desire	yes	95	37
Management of hot flushes*			
Avoid eating hot and spicy meals	yes	188	73.2
Avid hot and crowded places	yes	186	72.4
Giving up smoking	yes	257	100
Deep breathing	yes	52	20.2
Drink coffee less	yes	90	35
Adequate sleep and activities effective to decreased irritability	yes	132	51.4
Effectiveness of calcium supplement in menopausal women	yes	182	70.8

* Multiple Response

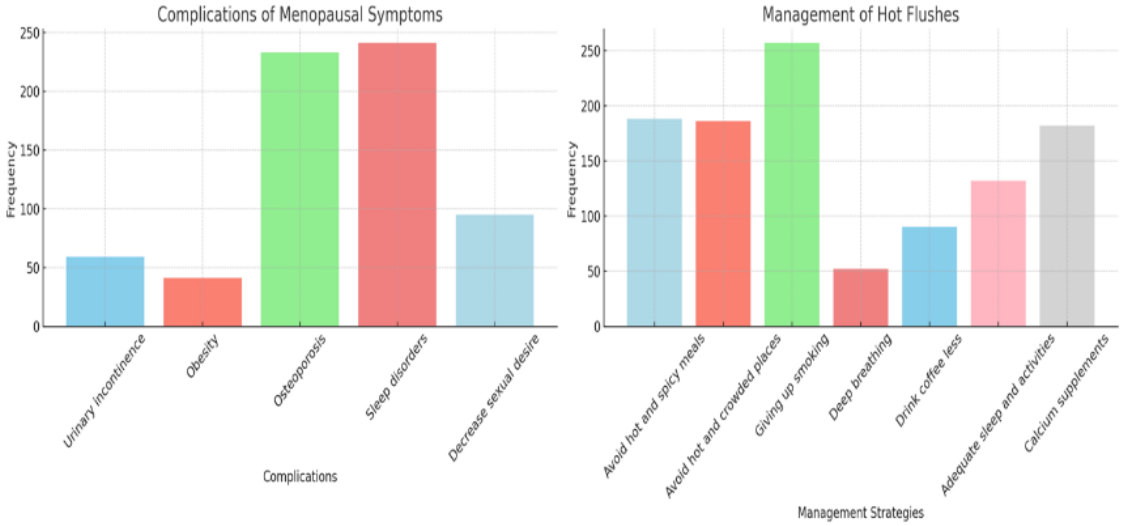


Fig. 4: Analytical Charts of Respondents' Awareness Regarding Menopausal Symptoms.

Table 5: Respondents' Level of Awareness on Menopausal Symptoms, N= 257

Variable	Frequency	Percentage (%)
Poor (0-49%)	103	40
Average (50-75%)	138	53.7
Good (76-100%)	16	6.2
Total	257	100

Mean±SD(1.66±0.591) min.=1 max.=3

Table 5 summarizes the overall level of awareness regarding menopausal symptoms. A majority (53.7%) demonstrated average knowledge, 40% had poor knowledge, and only 6.2% had good knowledge.

Table 6: Association Between Respondents' Level of Awareness and Socio Demographic Variables, N=257

	Level of Awareness				
Variable	Poor	Average	Good	Chi-square	p-value
Age				0.635	0.728
40-49	58(42.31%)	71 (51.8%)	8 (5.8%)		
50-59	45(37.5%)	67 (55.8%)	8 (6.7%)		
Religion				20.246	<0.001*
Hindu	79(35.1%)	130 (57.8%)	16 (7.1%)		
Buddhist	24(75%)	8 (25%)	0		
Ethnicity				21.776	<0.001*
Dalit	4(44.4%)	5 (55.6%)	0		
Janajati	24(75%)	8 (25%)	0		
Bramhin/Chhetri	25(34.7%)	125 (57.9%)	16 (7.4%)		
Marital status				2.492	0.288*
Married	95(39.4%)	130 (53.9%)	16 (6.6%)		
Widow	8(50%)	8 (50%)	0		
Educational status				10.171	0.006*
Illiterate	0	8 (100%)	0		
Literate	103(41.4%)	130 (52.2%)	16 (6.4%)		
Family type				6.304	0.043*
Nuclear	78(44.8%)	88 (50.6%)	8 (4.6%)		
Joint	25(30.1%)	50 (60.2%)	8 (9.6%)		
Menstruation stop or not				8.635	0.013*
Yes	30(29.1%)	65 (63.1%)	8 (7.8%)		

No	73(47.4%)	73 (47.4%)	8 (5.2%)		
Cause of menopause(n=103)				16.414	<0.001*
Natural	30(34.5%)	49 (56.3%)	8 (9.2%)		
Surgical	0	16 (100%)	0		

Significance level at 0.05 *likelihood ratio.

The association between the level of awareness and socio-demographic variables is examined in Table 6. Statistically significant associations were found between the level of awareness and variables such as religion (p-value = 0.00), ethnicity (p-value = 0.00), educational status (p-value = 0.006), family type (p-value = 0.043), cessation of menstruation (p-value = 0.013), and the cause of menopause (p-value = 0.00). According to Figure 5, these findings suggest that socio-demographic factors significantly influence awareness levels regarding menopausal symptoms.

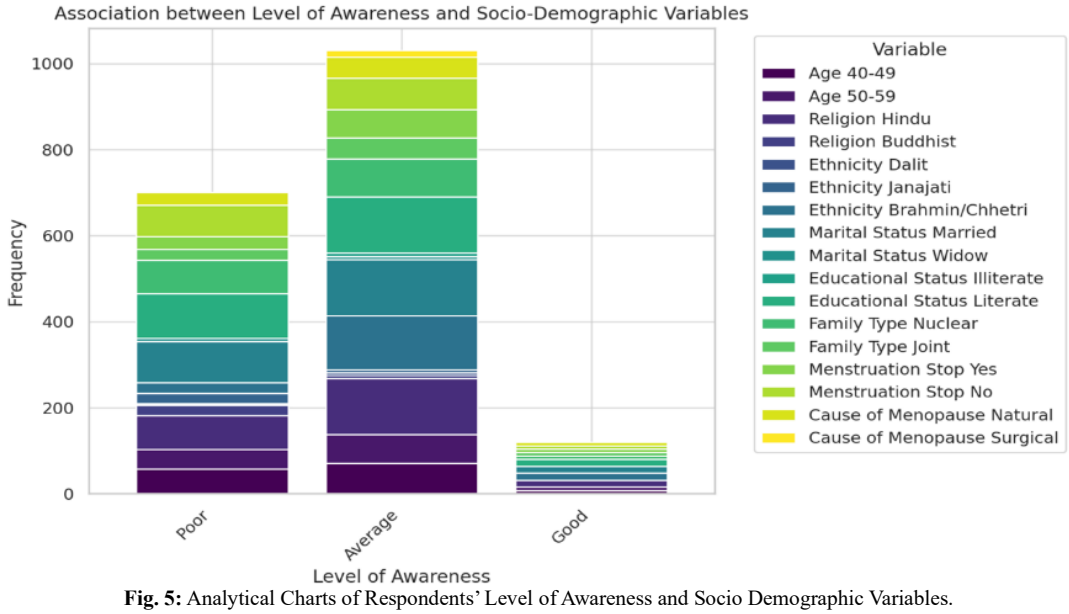


Fig. 5: Analytical Charts of Respondents' Level of Awareness and Socio Demographic Variables.

4. Discussion and recommendation

This section provides a comprehensive analysis of the study's findings, concluding with implications and recommendations. The discussion contextualizes the results in comparison to existing literature, while the conclusions are drawn from these findings.

The cross-sectional analytical study aimed to evaluate the level of awareness regarding menopausal symptoms among women in Bharatpur-9, Chitwan, involving 257 respondents. The primary objectives were to determine the level of awareness and its correlation with various socio-demographic variables. Data collection employed a non-probability sampling technique and was facilitated through a semi-structured interview schedule. The data was analyzed using SPSS software version 20.0.

4.1. Findings related to socio-demographic characteristics

The study revealed that 53.3% of respondents were aged between 40 and 49 years, with a mean age of 48.84 ± 6.27 years. This finding aligns with Bhandari et al. (2017), who reported a median menopause age of 48.3 years, and Nitin et al. (2014), whose study identified a mean menopausal age of 48.35 years.

Regarding religious affiliation, 87.5% of respondents identified as Hindu, and 12.5% were Buddhist. Ethnic composition showed that 84% of the respondents were Brahmin/Chhetri, while 16% belonged to other groups, such as Dalit or Janajati. In terms of education, 44% had only basic literacy, and 6.6% had attained a bachelor's degree or higher. All respondents (100%) were housewives. Marital status revealed that 93.3% were married, and 6.2% were widowed. Most respondents (67.7%) lived in nuclear families, while 32.3% were part of joint families.

These findings highlight the demographic profile of the study population and suggest that while some results align with existing literature, particularly concerning the age of menopause, other socio-demographic aspects such as religion, ethnicity, and family structure may not have been widely explored in previous research. This indicates a need for further studies to address these gaps and explore the implications of these demographic factors on menopausal awareness and health outcomes.

4.2. Findings related to gynecological information

The study examined gynecological aspects relevant to menopause, revealing that 69.3% of respondents experienced menarche between ages 13 and 15, while 30.7% entered menarche between ages 16 and 18. The majority of respondents (59.9%) had not yet experienced cessation of menstruation, indicating that a significant proportion were premenopausal. Additionally, 84.4% of respondents reported undergoing natural menopause. The lack of comparable studies limits the ability to directly contrast these findings; however, these results provide foundational insights into the gynecological profiles of women in this study.

4.3. Findings related to respondents' awareness of menopausal symptoms

Awareness of menopausal symptoms varied among respondents. Notably, only 22.2% of respondents were aware of hot flushes and sweating as symptoms of menopause. This finding is in contrast to Madhu Kumar et al. (2012), which reported a higher awareness level of

56.8%. However, it is somewhat consistent with Shanta, Shankar, Nawazia, and Susmita (2016), who found that 32.1% of their respondents were aware of these symptoms.
Conversely, the study demonstrated that 90.7% of respondents recognized sleep disturbances as a menopausal symptom. This result significantly contrasts with the 29.9% reported by Sameer, Mahesh, Neha, and Mather (2016), highlighting a discrepancy in awareness levels across different studies.
Awareness of palpitation as a symptom was reported by 48% of respondents, aligning with Shanta et al. (2016), who observed a 35.7% awareness level. Sadness was identified as a menopausal symptom by 22.2% of respondents, corroborating findings from Shanta et al. (2016) and Beth et al. (2014), which reported awareness levels of 30.7% and 30%, respectively.
The study found that 90.7% of respondents were aware of irritability as a symptom, a finding that supports Arifa (2015), who reported a similar awareness level of 96.1%. Conversely, only 22.2% of respondents recognized anxiety as a symptom, which is markedly lower than Shanta et al. (2016), who found a 67.9% awareness level. Sexual problems were identified by 25.7% of respondents, aligning with Nisher et al. (2011) and Shanta et al. (2016), who reported 34.2% and 31.4% awareness levels, respectively. Bladder problems were recognized by 23% of respondents, consistent with Rahman et al. (2011) and Syed, Siti, and Verna (2010), who reported awareness levels of 12.8% and 13.8%.
Finally, 22.6% of respondents were aware of vaginal dryness as a menopausal symptom, closely aligning with Shanta et al. (2016), who reported 25.5%. Additionally, 90.7% recognized joint and muscular discomfort, which is supported by Afria (2015), who found a 93.8% awareness level. These findings highlight significant variations in awareness of menopausal symptoms and underscore the need for targeted educational interventions to address gaps in knowledge and improve overall awareness among women.

4.4. Findings related to respondents' level of awareness

The analysis of the respondents' level of awareness regarding menopausal symptoms indicates varied results compared to existing literature. The study found that only 6.2% of respondents demonstrated a good level of awareness. This finding is notably lower than Shams (2018), which reported an 18.8% prevalence of good awareness. This discrepancy suggests that the respondents in this study had less comprehensive knowledge about menopausal symptoms compared to the sample studied by Shams. In terms of fair awareness, 53.7% of respondents in this study fell into this category. This proportion is significantly higher than the 11% reported by Shams (2018), indicating a greater degree of moderate understanding among the current study's participants. This difference may reflect variations in educational interventions or access to information between the populations studied.
Conversely, 40% of respondents were classified as having a poor level of awareness regarding menopausal symptoms. This finding is markedly lower than the 70.2% reported by Shams (2018). The lower proportion of poor awareness in this study could suggest improvements in general knowledge or differing demographic characteristics that influence awareness levels.
Overall, the disparities in awareness levels between this study and Shams (2018) highlight the need for further investigation into the factors contributing to these differences, such as variations in educational outreach or socio-cultural influences.

5. Conclusion

The study revealed that most respondents showed average knowledge of menopausal symptoms. The findings indicated that awareness of menopausal symptoms was significantly associated with various sociodemographic factors, including ethnicity, religion, educational status, occupation, family type, cessation of menstruation, and the perceived causes of menopause. These associations underscore the necessity for targeted educational interventions to enhance awareness and understanding of menopausal symptoms. Providing accurate information through diverse channels, including mass media, is crucial to improving awareness and managing symptoms effectively.
The primary limitation of this study is its focus on a single community within Bharatpur-9, Chitwan, which may not be representative of broader populations. Additionally, the relatively small sample size restricts the generalizability of the findings. These limitations suggest that caution should be exercised when extrapolating the results to other settings or populations.
The findings from this study offer valuable baseline data for future research on menopausal symptoms. They provide insights that could assist educators, healthcare professionals, and policymakers in designing and implementing effective awareness programs tailored to this age group. The data can guide the development of targeted educational strategies and interventions aimed at improving knowledge and management of menopausal symptoms. To enhance the generalizability of the findings, future research should expand to include a larger and more diverse sample across multiple communities. Conducting similar studies on a broader scale would provide a more comprehensive understanding of menopausal awareness and could inform more effective public health strategies.

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