A Community Based Comparative Study on Menopausal Health Issue of Urban and Rural Women of Northern India Specially Bihar

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Conflict of interest: Nil

Abstract

Background: Women's health throughout menopause is a significant issue since it affects their happiness and quality of life. This research aims to examine the similarities and differences in menopausal health concerns experienced by urban and rural women in Bihar, Northern India.

Methodology: Women from both urban and rural areas of Bihar were included in a cross sectional study to facilitate comparison. The Study was conducted at JNKTMC from January 2022 to December 2022. Women amid menopause, aged 45 to 60, were the primary demographic. Sampling methods included randomly drawing from pools of people living in both urban and rural locations. Healthcare utilization, Menopausal symptoms, and demographics were all collected using a standard questionnaire. Chi-square tests and t-tests were used to assess the data and determine whether or not there was a significant difference between the characteristics of urban and rural women.

Results: Two hundred and fifty women lived in metropolitan regions, while the remaining 250 lived in rural areas, for 500 participants. Those in rural areas were found to have a significantly higher prevalence of menopausal symptoms than those in urban areas (p < 0.05). Rural women rated hot flushes, nocturnal sweats, and mood swings as more severe (p < 0.01). Furthermore, women in rural areas were less likely to seek medical attention for menopausal symptoms than those in urban areas (p < 0.05).

Conclusions: This research shows menopausal health concerns are more prevalent among urban than rural women in Bihar. Menopausal symptoms are more common and severe in rural areas, where women also have more trouble getting medical care. These results highlight the importance of developing specialized programs and expanding access to healthcare services to meet the unique requirements of women in both urban and rural settings. Healthcare practitioners and policymakers should work together to create comprehensive menopausal health initiatives that increase knowledge, broaden access, and give women the support they need during this time.

Categories: Healthcare Technology, Other.

Keywords: Menopause, Menopausal Health Issues, Urban Women, Rural Women, Bihar, Healthcare Utilization, Disparities.
Introduction

Menopause, a biological condition that happens naturally to women between 45 and 55, usually affects them. It is characterized by the final phase of a woman's reproductive life and the end of menstruation. The ageing process and the loss of ovarian follicles cause a decrease in hormone production, especially estrogen and progesterone, which causes menopause [1]. The hormonal changes that occur during menopause can have a variety of negative repercussions on a woman's physical, mental health, and emotional state. Hot flashes, evening sweats, vaginal dryness, disturbed sleep, mood swings, reduced libido, and changes in bone density are typical symptoms. A woman with these symptoms may have discomfort, sleep difficulties, and mental distress. Long-term health hazards are also associated with menopause [2]. Osteoporosis, a disorder characterized by decreased bone density and greater susceptibility to fractures, is made more likely by the fall in estrogen levels. Lack of estrogen is also linked to a higher risk of cardiovascular diseases like heart disease and stroke. Menopause can also cause weight gain and alter body composition, which increases the risk of metabolic diseases, including diabetes and obesity [3]. Menopause can have an impact on women's mental and emotional health in addition to their physical health. Hormonal changes can influence melancholy, anxiety, irritability, and mood swings. Memory and focus may deteriorate in some women, including cognitive function [4]. It is significant to remember that each woman's experience of menopause will have a different effect on her health. The intensity and duration of menopausal symptoms might vary depending on several variables, including genetics, lifestyle, general health, and access to healthcare. Cultural and societal attitudes on menopause might also influence women's experiences and perspectives of this stage of life [5]. It is essential to comprehend how menopause affects women's health to provide proper care and support during this time. Women can better manage their health and well-being and maintain a good quality of life during and after menopause by recognizing and addressing the difficulties and symptoms related to menopause.

Significance of study

The study of menopausal health in urban and rural settings, especially in Northern India and focusing on the state of Bihar, is essential. Healthcare facilities, resources, and access can vary widely between urban and rural settings. Better hospitals, more medical specialists, and more clinics can all be found in urban regions. However, problems like a lack of medical facilities and doctors could be more common in rural areas, and this is especially true in the state of Bihar [6]. Examining menopausal health in both contexts allows us to pinpoint inequities in care and create tailored solutions to close them. Differences in the sociocultural environments of urban and rural areas may shape women's experiences and perspectives of menopause. Women's views on menopause, understanding of menopausal health, and access to healthcare may be influenced by factors such as education, occupation, social status, and cultural beliefs [7]. With this knowledge, we can create culturally sensitive interventions and educational programs to better serve women's needs in both urban and rural Bihar. Lifestyle, occupational, and environmental factors vary significantly between urban and rural communities.

The likelihood of being exposed to industrialization, air pollution, and sedentary lifestyles is higher in urban regions. In contrast, the possibility of being exposed to agriculture and traditional practices is higher in rural areas. The health of women going through menopause may be affected by these
variations. Understanding the prevalence and severity of menopausal symptoms and related health concerns requires studying these issues in the context of environmental and lifestyle factors [8]. Healthcare provision, social norms, and accessibility may affect urban and rural women's health-seeking behaviour. Gynaecologists, menopause experts, and support groups may be more accessible to urban women [9]. Rural women may employ traditional healers and home remedies because they have trouble accessing medical institutions. If we understand menopausal women's health-seeking habits in both settings, we can improve healthcare utilisation, awareness, and support. Menopausal health studies in urban and rural Bihar can inform healthcare and policy [10]. The findings can help policymakers and healthcare providers identify menopausal care needs, challenges, and opportunities. Customised policies, programmes, and interventions can improve menopausal care and health outcomes. Understanding menopausal health issues in urban and rural Northern India, especially Bihar, is vital. This type of study can improve healthcare, access, and support for women going through this transition.

**Literature Review**

Women in both urban and rural areas confront unique problems and opportunities during menopause, illuminated by the literature on menopause and menopausal health issues. Much research has been done on menopause and its effects in both urban and rural settings. Menopausal symptoms like hot flashes, night sweats, and mood swings are common in both urban and rural women, according to some studies. Some studies have found that menopausal symptoms are more common and severe in metropolitan women than rural women. These differences may be the result of differences in lifestyle and stress levels. A woman's quality of life during menopause can suffer equally in the city as in the country. Women in urban areas may have more stress and less well-being than women in rural areas because of longer job hours, higher expectations, and more responsibilities [11]. Menopausal quality of life for rural women may be diminished by factors such as poverty, lack of medical treatment, and cultural expectations.

Women in urban areas have easier access to healthcare, including gynaecologists, support groups, and menopausal clinics. Distance, lack of transportation, and a shortage of available healthcare specialists are all factors that might make it difficult for women in rural areas to get the menopause treatment they need. Research shows that rural women need better access to healthcare and more education on menopause [12]. Women in urban areas have a greater understanding of menopause and its effects on health, perhaps due to greater access to education and information.

Women in rural areas may have fewer resources and be more likely to rely on myths and old wives' tales regarding menopause. Women in both urban and rural areas need to be educated about menopause and its treatment to make educated healthcare decisions and access the care they need. Health after menopause is greatly influenced by socioeconomic status. Access to information, healthcare services, and lifestyle treatments for the management of menopausal symptoms may be more available to women in urban areas due to their higher levels of education and economic means.

It can be challenging for rural women to cope with menopause because of their lower socioeconomic status and less available resources. The research stresses the need to examine menopause and menopausal health issues in urban and rural settings. By Supporting women's health and well-being...
throughout menopause in both contexts calls for individualized interventions, better access to healthcare, greater public understanding, and the elimination of socioeconomic gaps.

**Previous studies**

There is a dearth of research into menopausal health in Northern India and the state of Bihar. Only a small number of studies, however, have shed light on menopause-related factors in this area. In both urban and rural parts of Bihar, women were surveyed for their menopausal symptom prevalence and severity [14]. Hot flashes, evening sweats, mood swings, and vaginal dryness were all symptoms reported by women in the research, regardless of context. There was a difference in the prevalence and severity of symptoms between city and country dwellers, with citydweller women reporting more frequent and severe symptoms. The effects of menopause on women’s well-being in Bihar were also studied [15]. Physical health, mental health, and social relationships were all found to be profoundly impacted by menopause.

Conclusions Menopausal women in Bihar need interventions and support structures to enhance their quality of life. Scholar et al. also did a qualitative study examining how women in Bihar felt about and dealt with menopause. Researchers found that women's cultural ideas and practices significantly impacted how they understood and dealt with menopausal symptoms. The findings of this study highlight the need for culturally relevant approaches to menopause healthcare, as many women depend on home remedies and herbal treatments for symptom management. Researchers examined how menopausal women in rural Bihar sought and used medical attention. Due to cost, accessibility, and trust, the study found that women often favoured informal healthcare providers, such as local healers and traditional practitioners. The findings highlighted the importance of involving these providers to guarantee safe and efficient care of menopausal health concerns.

**Research Gaps**

Pointing up information gaps and emphasising the research's importance and relevance is crucial. Northern India, notably Bihar, lacks menopausal research. This gap highlights the need for regional menopause-related studies to inform policy and practise. Urban and rural women's health during menopause has been studied, but more research is needed to understand the discrepancies. We can improve menopausal medicines by understanding the disparities between urban and rural women. Cultural norms influence menopause perception and management, according to research.

Northern India, particularly Bihar, lacks studies on menopause-related cultural variables. Investigating cultural aspects is crucial to produce culturally relevant menopause health therapies. Socioeconomic position impacts menopausal health, but more research is needed to uncover Bihar's socioeconomic drivers. Socioeconomic and demographic characteristics can help identify inequities and create effective interventions for at-risk groups. Menopausal women in Bihar have been neglected in healthseeking and healthcare use studies. By researching factors including provider preferences, impediments to access, and use patterns, gaps can be identified and solutions developed to improve healthcare utilisation and outcomes. This study fills these gaps in knowledge about menopausal health issues in Northern India, particularly Bihar.

It will improve the health and well-being of menopausal women in this region by offering localised insights, identifying determinants affecting health outcomes, and influencing targeted interventions and policies.
Methodology Study Design

Cross-sectional comparative analysis, a method of research, was used by researchers from the University of Bihar in Northern India to assess the menopausal health of women residing in the state's urban and rural districts.

Selection Criteria and Target Population

Women undergoing menopause between the ages of 45 and 60 were included in the study's target demographic. Women of the appropriate age living in either the urban or rural parts of Bihar were welcome to participate.

Sampling Methods and Sample Size Calculation

Multiple rounds of sampling were conducted. First, places in Bihar, both cities and villages, were chosen at random. Second, within each area, lucky households were selected. The predicted prevalence of menopausal symptoms, the level of precision sought, and the level of confidence all played roles in determining the sample size. There were 500 participants, including 250 women from urban regions and 250 women from rural areas.

Data Collection Tools and Procedures

To collect information on menopausal symptoms, healthcare utilization, and demographics, a structured questionnaire was created. Prior to its actual use, the questionnaire was evaluated to ensure its validity and reliability. Participants were interviewed face-to-face by trained interviewers, who then administered the questionnaire. All individuals provided informed consent, and ethical considerations were taken into account.

Data Analysis

Statistical programs were used to analyze the data once it was placed into a database. Participants' socio-demographics were summarized using descriptive statistics. Differences in menopause symptom prevalence, severity, and healthcare access were analyzed using chi-square tests and t-tests comparing urban and rural women. The cut-off for statistical significance was 0.05.

Ethical Considerations

The Institutional Review Board approved the study, guaranteeing that the participants' rights and confidentiality would be respected during the survey. All participants consented after being fully informed, and their privacy was protected. This study's methodology thoroughly examines the differences in menopausal health concerns experienced by women in Bihar's urban and rural settings. It uses trusted methods of data collecting and proper statistical analyses to draw valid conclusions based on a sample representative of the entire population.

Table 1: Prevalence of Menopausal Symptoms among Urban and Rural Women in Bihar

<table>
<thead>
<tr>
<th>Menopausal Symptom</th>
<th>Urban Women (%)</th>
<th>Rural Women (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hot Flashes</td>
<td>45.2</td>
<td>56.8</td>
</tr>
<tr>
<td>Night Sweats</td>
<td>38.6</td>
<td>49.2</td>
</tr>
<tr>
<td>Mood Changes</td>
<td>51.8</td>
<td>61.3</td>
</tr>
</tbody>
</table>

Table 1 presents the prevalence rates of typical menopausal symptoms among urban and rural women in Bihar. The data show that rural women had a higher prevalence of menopausal symptoms than urban women. Specifically, 56.8% of rural women experienced hot flashes, compared to 45.2% of urban women.
Similarly, a higher percentage of rural women reported night sweats (49.2% vs 38.6%) and mood changes (61.3% vs 51.8%) compared to their urban counterparts.

Table 2: Severity Scores of Menopausal Symptoms among Urban and Rural Women in Bihar

<table>
<thead>
<tr>
<th>Menopausal Symptom</th>
<th>Urban Women (Mean Score)</th>
<th>Rural Women (Mean Score)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hot Flashes</td>
<td>3.4</td>
<td>4.2</td>
</tr>
<tr>
<td>Night Sweats</td>
<td>2.9</td>
<td>3.7</td>
</tr>
<tr>
<td>Mood Changes</td>
<td>3.8</td>
<td>4.5</td>
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</table>

Table 2 displays the severity scores of menopausal symptoms among urban and rural women in Bihar. The data indicate that rural women had higher mean severity scores for all three symptoms than urban women. For instance, rural women had a mean severity score of 4.2 for hot flashes, while urban women scored 3.4. Similar patterns were observed for night sweats and mood changes, suggesting menopausal symptoms are more severe among rural women in Bihar.

Table 3: Healthcare Utilization for Menopausal Health Issues among Urban and Rural Women in Bihar

<table>
<thead>
<tr>
<th>Healthcare Utilization</th>
<th>Urban Women (%)</th>
<th>Rural Women (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regular Check-ups</td>
<td>64.2</td>
<td>38.9</td>
</tr>
<tr>
<td>Consultation with a Doctor</td>
<td>72.5</td>
<td>56.3</td>
</tr>
<tr>
<td>Use of Medications</td>
<td>51.3</td>
<td>31.8</td>
</tr>
</tbody>
</table>

Table 3 illustrates the healthcare utilization rates for menopausal health issues among urban and rural women in Bihar. The data reveal that urban women had higher healthcare utilization rates than rural women. For example, 72.5% of urban women consulted with a doctor for menopausal health issues, while only 56.3% of rural women did the same. Similar patterns were observed for regular check-ups and the use of medications, indicating that urban women are more likely to seek healthcare services for menopausal health issues than their rural counterparts.

These tables visually represent the findings, allowing for easy comparison between urban and rural women in terms of prevalence rates, severity scores, and healthcare utilization for menopausal health issues. The interpretation highlights the differences observed and underscores the importance of addressing healthcare disparities and improving access to menopausal health services in rural areas. The findings suggest that rural women in Bihar may face barriers such as limited access to healthcare facilities, lower awareness of available services, or socioeconomic factors influencing healthcare-seeking behaviour.

Discussion

Our findings are consistent with those of other research that have found differences in health outcomes during menopause between urban and rural communities. Differences in lifestyle, financial status, and access to healthcare may all contribute to the greater prevalence and severity of menopausal symptoms among rural women. These results highlight the importance of developing specialized interventions and healthcare services for rural women during menopause. Women's health initiatives, healthcare practitioners, and legislators can all benefit greatly from considering the implications of this study's findings. First, healthcare practitioners need to recognize the difficulties rural women encounter in coping
with menopausal symptoms and take measures to increase rural women's access to high-quality care a top priority. This research provides evidence that policymakers can use to call for reforms and spend resources to narrow the urban-rural healthcare gap. To guarantee that all women in Bihar have access to menopausal health services, women's health organizations can use this data to develop and roll out tailored interventions like community-based education initiatives, mobile healthcare units, and telemedicine platforms.

**Recommendations**

Urban and rural women alike need to be made aware of menopause, its symptoms, and the help that is out there. Methods for achieving this goal include holding health education workshops and awareness campaigns in the local media. Create menopausal clinics, train doctors and nurses well, and stock up on life-saving drugs and treatments by funding healthcare infrastructure improvements in America's rural communities.

Think beyond the box to expand availability by implementing telemedicine, rural outreach initiatives, and mobile medical clinics. Healthcare practitioners and women in underserved areas can better communicate through partnerships with local community organizations and NGOs. Encourage partnerships between medical professionals, government officials, and women's health groups to create effective policies and programs for menopause care. To achieve this goal, it may be necessary to collaborate with local community leaders, NGOs, and government organizations to provide comprehensive and coordinated care for women experiencing menopause.

**Future Research**

Women in Bihar, both in the city and the country, have unique health challenges throughout menopause, and we know very little about them. Socioeconomic gaps, cultural attitudes, and healthcare access hurdles are all possible explanations that should be investigated in future research. Understanding the changing nature of menopausal symptoms and healthcare-seeking behaviour requires longitudinal analysis following women's health outcomes across time. Women's experiences, perspectives, and preferences on menopausal health services in urban and rural settings can be better understood through qualitative research methods.

**Conclusion**

In conclusion, this paper presents the findings of a community-based study that compared the health concerns of urban and rural women experiencing menopause in the Indian state of Bihar. This study aimed to compare and contrast the prevalence rates, symptom severity, and healthcare utilization of these two groups. The study's results showed substantial differences in menopausal symptoms between women living in urban and rural areas. Compared to their urban counterparts, rural women showed a higher prevalence rate and more severe symptoms. The lower rate of healthcare consumption among rural women is another evidence of the lack of menopausal treatment available there. These results significantly impact practitioners, policymakers, and women's health initiatives. Healthcare service providers should consider the unique difficulties experienced by women living in rural locations and work to expand the availability of high-quality services in these communities. Policymakers must address healthcare inequalities through new regulations and more funding. Women's urban and rural Bihar health initiatives should develop focused interventions to increase women's access to menopausal health care.
Several suggestions can be made based on the results of the investigation. Among these are boosting menopausal education and awareness, bolstering rural healthcare infrastructure, expanding access to healthcare through novel methods, and encouraging cross-sector partnerships. More investigation into the causes of the observed differences in menopausal health problems is required. Insights gained through longitudinal studies monitoring changes in women's health over time and qualitative studies investigating women's experiences and preferences would be beneficial. In sum, this study adds to the body of knowledge by illuminating the disparities in menopausal health care between women in Bihar's urban and rural settings. We can eliminate the inequalities we've found and put the methods we've developed into practice. In that case, we can help women in Bihar and beyond who are going through the menopause transition and boost their health and quality of life.

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