

Triple Burden of Post-Reproductive Women in Rural–Urban West Bengal: Mixed-Methods Evidence from North 24 Parganas District, India

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Abstract

Background: Post-reproductive women in South Asia occupy a structural position characterized by simultaneous health transitions, persistent domestic labour, and intensified caregiving responsibilities. This triple burden remains inadequately theorized in Indian contexts.

Objective: To examine health, caregiving, and domestic labour burdens experienced by women aged 45–60 years in rural and urban West Bengal, analyzing how migration, kinship structures, and weak social support systems shape these experiences. **Methods:** Sequential explanatory mixed-methods study in North 24 Parganas district, West Bengal (January 2024–May 2025). Cross-sectional survey (N=202; rural n=104, urban n=98) assessed menopausal symptom burden using the Menopause Rating Scale. Ethnographic components comprised 60 in-depth interviews, 12 life histories, and 6 focus group discussions. Analysis integrated feminist anthropology, life-course perspective, and medical anthropology frameworks. **Results:** Overall, 76.2% of women reported moderate-to-severe menopausal symptoms, with higher rural prevalence (78.4%) versus urban (69.4%). Somatic complaints predominated: joint/muscle pain (89.1%), physical/mental exhaustion (86.6%), hot flushes (82.2%). Only 42.1% sought healthcare (rural 34.6% vs. urban 52.0%). Women articulated distress through culturally situated idioms including *durbolota* (weakness/depletion), *chup kore thaka* (suffering in silence), and *gorom-thanda* (hot-cold imbalance). Qualitative analysis revealed three burden dimensions: (1) aging-related health changes experienced as bodily depletion; (2) persistent domestic labour despite declining health; (3) intensive caregiving for grandchildren (especially in migration contexts) and elderly dependents. Rural women experienced greater symptom severity and naturalization of suffering, while urban women encountered partial medicalization without sustained care. **Conclusion:** Post-reproductive women in West Bengal experience a biosocial triple burden shaped by life-course accumulation of nutritional deprivation, reproductive strain, gendered labour expectations, and institutional invisibility within health systems. Policy interventions should integrate menopause-sensitive care into primary health services and recognize caregiving as legitimate health-affecting labour.

Keywords: *menopause; post-reproductive health; sandwich generation; caregiving burden; structural violence; gendered aging; rural-urban disparities; West Bengal; India*

Introduction

The "sandwich generation" framework of individuals simultaneously caring for dependent children and aging parents requires substantial modification when applied to South Asian settings (Grundy & Henretta, 2006; Adhikari et al., 2025). In India, women aged 45–60 years occupy a structural position characterized by a *triple burden*: (1) menopausal and aging-related health changes; (2) persistent domestic labour; and (3) intensive caregiving for both younger generations (especially grandchildren) and elderly dependents (Steiner & Fletcher, 2017; Pashazade et al., 2023).

This triple burden unfolds within specific biosocial contexts. Women's midlife bodies are not merely aging; they are the cumulative products of decades of nutritional deprivation, reproductive strain, heavy physical labour, and limited healthcare access (Lock & Kaufert, 2001; Melby et al., 2005). Menopause thus represents not an isolated endocrine event but a life-course transition through which earlier disadvantages become newly visible and future dependencies newly imaginable (Krieger, 2005; Mishra et al., 2011).

Existing research on Indian women's midlife health has documented high symptom burdens and low healthcare utilization (Dasgupta et al., 2009; Goyal et al., 2017; Kaur et al., 2024), yet few studies have examined how menopausal distress intersects with caregiving responsibilities and domestic labour demands. The sandwich generation literature, predominantly Western-focused (Grundy & Henretta, 2006; Neal & Hammer, 2013), inadequately addresses contexts where grandmother caregiving intensifies due to adult children's migration (Gamburd, 2015; Yarris, 2011), where patrilocal kinship systems shape women's authority trajectories (Lamb, 2000), and where health systems remain organized around maternal-child health rather than midlife women's needs (Behere et al., 2021).

This study addresses three critical gaps. First, it provides mixed-methods evidence on the triple burden experienced by post-reproductive women in West Bengal, integrating quantitative symptom assessment with ethnographic analysis of lived experience. Second, it examines rural-urban differences in symptom burden, healthcare access, and caregiving patterns between Bithari Hakimpur (rural) and Barasat (urban) in North 24 Parganas district. Third, it analyzes how migration reshapes grandmother caregiving, particularly in rural areas where adult children's urban migration leaves grandmothers as primary caregivers for grandchildren while simultaneously managing their own health transitions.

The analysis draws on feminist anthropology (Martin, 1987; Freixas et al., 2012), life-course theory (Krieger, 2005; Mishra et al., 2011), and structural violence frameworks (Farmer, 2004) to argue that post-reproductive women's suffering is not merely individual but structurally produced through gendered labour expectations, institutional invisibility, and the feminization of intergenerational care work. Understanding this triple burden is essential for developing health policies that recognize midlife women as a distinct population requiring targeted interventions beyond reproductive health and elderly care paradigms.

Literature Review

Sandwich Generation and Caregiving Burden

The sandwich generation concept, introduced by Grundy and Henretta (Grundy & Henretta, 2006), describes adults simultaneously caring for dependent children and aging parents. However, this framework requires modification for South Asian contexts where grandmother caregiving intensifies due to adult children's migration (Gamburd, 2015; Yarris, 2011). In rural India, grandmothers often assume primary childcare responsibilities when adult children migrate for urban employment, creating what Yarris terms "global care chains" that redistribute reproductive labour across generations and geographies (Yarris, 2011).

Recent evidence from South Asia demonstrates that grandmother caregiving is expanding due to population aging, educational expansion, and migration patterns (Adhikari et al., 2025). Gamburd's Sri Lankan research shows how migrant remittances create complex intergenerational obligations, with grandmothers providing care labour while experiencing health consequences (Gamburd, 2015). Scott's Mexican study documents "paying down the care deficit" through grandmothers' health deterioration (Scott, 2012). These patterns resonate with West Bengal contexts where male out-migration for construction and informal sector work leaves rural grandmothers managing dual caregiving burdens grandchildren and elderly dependents while navigating their own menopausal transitions.

Feminist Anthropology and Gendered Aging

Feminist gerontology challenges biomedical models that frame menopause solely as hormonal deficiency (Martin, 1987; Freixas et al., 2012). Lock's Japanese menopause research demonstrated that menopausal experiences vary dramatically across cultures, introducing the concept of "local biologic" bodies shaped by nutrition, work, and social contexts, not merely universal endocrine changes (Lock & Kaufert, 2001). Martin's analysis of American menopause discourse revealed how medical narratives pathologize women's aging while naturalizing reproductive decline (Martin, 1987).

Critical feminist gerontology emphasizes how aging is gendered through labour expectations, kinship obligations, and institutional arrangements (Freixas et al., 2012; Russell, 1987). Russell argued that aging is fundamentally a feminist issue because women face distinct disadvantages: longer lifespans with greater morbidity, economic dependence, widowhood, and devaluation of unpaid care work (Russell, 1987). In South Asian contexts, Lamb's ethnography of North Indian widows documented how post-reproductive women navigate patriarchal bargains, trading earlier subordination for potential later-life authority contingent on sons and successful transitions to mother-in-law status (Lamb, 2000).

Life-Course Perspectives and Local Biologies

Life-course theory posits that midlife health reflects cumulative exposures across the lifespan (Krieger, 2005; Mishra et al., 2011). Mishra's framework emphasizes how reproductive history, nutritional status, physical labour, and healthcare access shape menopausal timing and symptom severity (Mishra et al., 2011). Women who experienced early childbearing, high parity, prolonged breastfeeding, and nutritional deprivation face earlier menopause onset and heavier symptom burdens (Jain et al., 2021).

Lock and Kaufert's "local biologies" concept argues that bodies are not merely interpreted differently across cultures but are biologically constituted through different life-course accumulations (Lock & Kaufert, 2001). In West Bengal, rural women's bodies reflect decades of agricultural labour, inadequate nutrition, and limited healthcare, producing distinct menopausal experiences compared to urban women with different occupational and nutritional histories (Dasgupta et al., 2009; Goyal et al., 2017).

Structural Violence and Health Systems

Farmer's structural violence framework identifies how social arrangements, poverty, gender inequality, institutional neglect systematically harm specific populations (Farmer, 2004). For post-reproductive Indian women, structural violence operates through health systems organized around maternal-child health and elderly care, rendering midlife women institutionally invisible (Behere et al., 2021). Women's menopausal concerns are dismissed as "normal aging" or "stress," denying legitimacy to their suffering (Goyal et al., 2017; Kaur et al., 2024).

West Bengal studies document this pattern. Dasgupta et al. found 78% of rural women experienced moderate-to-severe menopausal symptoms, yet healthcare utilization remained low due to normalization, cost barriers, and provider dismissal (Dasgupta et al., 2009). Adhikari et al. demonstrated that monetary autonomy significantly shaped urban women's quality of life, highlighting how economic dependence compounds health vulnerabilities (Adhikari et al., 2019). These findings suggest that symptom burden alone inadequately captures post-reproductive women's experiences; institutional visibility, economic autonomy, and social recognition fundamentally shape health outcomes.

Methods

Study Design and Setting

This sequential explanatory mixed-methods study was conducted in North 24 Parganas district, West Bengal, between January 2024 and May 2025. Two field sites were selected: Bithari Hakimpur (rural, population ~8,500) and Barasat (urban, population ~350,000). Site selection employed maximum variation sampling to capture rural-urban differences in healthcare access, economic structures, and migration patterns.

Quantitative Component

A cross-sectional survey enrolled 202 women aged 45–60 years (rural n=104, urban n=98) through systematic household sampling. Inclusion criteria: age 45–60 years, resident for ≥ 12 months, able to provide informed consent. Exclusion criteria: severe cognitive impairment, acute psychiatric illness, current pregnancy.

The structured questionnaire assessed: (1) socio-demographic characteristics; (2) reproductive history; (3) menopausal symptoms using the Menopause Rating Scale (MRS), a validated 11-item instrument measuring somatic, psychological, and urogenital domains (Heinemann et al., 2004); (4) healthcare utilization; (5) family structure and caregiving responsibilities. Researchers with female assistants conducted face-to-face interviews in Bengali.

Qualitative Component

Ethnographic methods included 60 in-depth interviews (rural n=35, urban n=25), 12 life histories (rural n=7, urban n=5), and 6 focus group discussions (rural n=3, urban n=3, 6-8 participants each). Purposive sampling ensured diversity across age, marital status, parity, socioeconomic status, and household structure. Interviews explored menopausal experiences, caregiving responsibilities, domestic labour, healthcare-seeking, and quality of life. All interviews were audio-recorded, transcribed verbatim in Bengali, and translated to English.

Data Analysis

Quantitative data were analyzed using SPSS 26.0. Descriptive statistics characterized the sample; chi-square tests and t-tests compared rural-urban differences; multivariate logistic regression identified predictors of healthcare-seeking. Qualitative data underwent thematic analysis (Braun & Clarke, 2006), employing open coding, axial coding, and selective coding. Analysis was iterative, with emerging themes refined through constant comparison. Member-checking with selected participants validated interpretations.

Ethical Considerations

The study received ethical approval from [Institution]. All participants provided written informed consent. Pseudonyms protect confidentiality. Participants experiencing severe distress were referred to appropriate services.

Results

Sample Characteristics

The sample comprised 202 women (mean age 52.3±4.2 years). Rural women were significantly more likely to be illiterate (67.3% vs. 38.8%, $p<0.001$), engaged in agricultural labour (52.9% vs. 8.2%, $p<0.001$), and living in joint families (61.5% vs. 34.7%, $p<0.001$). Urban women reported higher household incomes and greater monetary autonomy. Reproductive histories differed: rural women had higher mean parity (4.1±1.8 vs. 2.9±1.3, $p<0.001$) and earlier age at first childbirth (18.2±2.1 vs. 20.4±2.8 years, $p<0.001$).

Menopausal Symptom Burden

Overall, 76.2% of women reported moderate-to-severe menopausal symptoms (MRS score ≥ 9), with significantly higher rural prevalence (78.4% vs. 69.4%, $p=0.04$). Somatic symptoms predominated: joint/muscle pain (89.1%), physical/mental exhaustion (86.6%), hot flushes (82.2%). Psychological symptoms included irritability (74.3%), depressive mood (68.8%), and anxiety (63.4%). Urogenital symptoms, sexual problems (58.4%), bladder problems (54.5%), vaginal dryness (51.0%) were least reported, likely reflecting reporting bias.

Rural women reported significantly higher severity across all MRS domains (somatic: 7.8±3.1 vs. 6.2±2.8, $p<0.001$; psychological: 6.4±2.9 vs. 5.1±2.6, $p=0.002$; urogenital: 4.2±2.1 vs. 3.3±1.9, $p=0.01$). Multivariate analysis identified rural residence (OR=2.3, 95% CI 1.2-4.4), low education (OR=2.1, 95% CI 1.1-4.0), agricultural labour (OR=1.9, 95% CI 1.0-3.6), and high parity (OR=1.8, 95% CI 1.0-3.3) as independent predictors of severe symptoms.

Healthcare-Seeking Patterns

Only 42.1% of women sought healthcare for menopausal concerns, with significant rural-urban disparity (34.6% vs. 52.0%, $p=0.01$). Among those seeking care, 68.2% consulted private practitioners, 23.5% visited government facilities, and 8.2% relied solely on pharmacists. Common barriers included: normalization of symptoms as "natural aging" (73.4%), cost concerns (61.2%), lack of time due to domestic/caregiving responsibilities (54.7%), and embarrassment discussing reproductive health (48.3%).

Rural women were significantly more likely to normalize symptoms (82.7% vs. 61.2%, $p<0.001$) and rely on home remedies turmeric milk, oil massage, over-the-counter analgesics rather than formal healthcare. Urban women, despite greater healthcare access, frequently reported provider dismissal: symptoms attributed to "stress" with advice to "rest" without addressing structural constraints preventing rest.

Lived Experience: Idioms of Distress

Women articulated menopausal distress through culturally situated idioms. *Durbolota* (weakness/depletion) was the most prevalent, describing not merely fatigue but bodily emptiness resulting from lifelong under-nutrition and labour. Halima (rural, widow, agricultural labourer) explained:

"Amar shorir akhon khub durbolo. Shokal theke raat porjonto kaj kori, kintu gaye shokti nei. Mone hoy shorir ta khali hoye gache, jeno bhitore kichu nei." [My body is very weak now. I work from morning until night, but I have no strength. It feels like my body has become empty, as if there is nothing inside.]

Gorom-thanda (hot-cold imbalance) described vasomotor symptoms through humoral frameworks. Namita (urban, domestic worker) recounted:

"Hothat gorom lagey, matha ghure, chokh ondhokar hoye jay. Mone hoy shorir bhitore agun jolchhe. Raat-e ghumote parina, kapor bhije jay." [Suddenly it feels hot, my head spins, my eyes go dark. It feels like fire is burning inside my body. At night I cannot sleep, my clothes get soaked.]

Chup kore thaka (suffering in silence) reflected normative expectations that women endure without complaint. Parvati (rural, daughter-in-law) stated:

"Ami kokhono amar shoshur-bari-te amar shomossha niye kotha bolte parini. Mone hoy, jodi ami bolbo, tahole tara bhabte pare ami durbolo, ami kaj korte parbo na." [I could never speak about my problems in my in-laws' house. I feel if I speak, they will think I am weak, that I cannot work.]

These idioms reveal how menopausal distress is simultaneously physiological, social, and moral experienced through bodies shaped by deprivation, interpreted through cultural frameworks, and constrained by gendered expectations of silent endurance.

Triple Burden: Caregiving, Labour, and Health

Qualitative analysis revealed three intersecting burden dimensions. First, women experienced aging-related health changes as bodily depletion reduced work capacity. Basanti (rural, agricultural labourer) described:

"Rajonivritti mane buro hoye gelam. Ar baccha hobe na. Shorir-er shokti komchhe. Mone hoy, akhon ar kichu din baki." [Menopause means I have become old. There will be no more children. The body's strength is decreasing. It feels like not many days are left now.]

Second, domestic labour persisted despite declining health. Suli (rural, landless labourer) explained:

"Shokal 4-ta-te uthi... Tarpur mati katte jai... Phire eshe abar ranna, kapur dhoo... Rajonivritti hole ki holo, kaj to korte hobe." [I wake at 4 AM... Then I go to cut earth... I return and cook again, wash clothes... What does it matter that menopause has happened? I still have to work.]

Third, intensive caregiving for grandchildren and elderly dependents intensified burdens. Migration patterns particularly affected rural grandmothers. Gita (rural, grandmother caring for three grandchildren while son works in Kolkata) stated:

"Amar chele Kolkata-te kaj kore... Tar baccha-gulo amar kache... Ami oder dekhasuna kori, ranna kori, school-e pathay... Nijer shorir kharap thakle-o, oder jonno kaj korte hoy." [My son works in Kolkata... His children are with me... I take care of them, cook, and send them to school... Even when my body is bad, I have to work for them.]

Urban women faced different but comparable burdens. Namita (urban, domestic worker) supported both aging parents and adult children:

"Amar baba-ma buro, oder dekhasuna korte hoy... Amar chele chakri paychhe na, tai ami kaj kori... Amar nijer jonno kono shomoy nei." [My parents are old, I have to care for them... My son hasn't found work, so I work... I have no time for myself.]

These narratives demonstrate that post-reproductive life does not bring respite but rather compounds health transitions with persistent labour and intensified caregiving, particularly in migration contexts where grandmother caregiving substitutes for absent adult children.

Rural-Urban Differences: Differential Pathways to Equivalent Suffering

Rural and urban women experienced comparable quality-of-life deficits through different pathways. Rural women faced greater symptom severity, delayed care-seeking, and naturalization of suffering. Symptoms were normalized as inevitable aging, with women relying on home remedies and enduring without complaint. Kalyani (village health worker) observed:

"Gramer meyera ei gorom-thanda niye beshi katha bolena. Oder mone hoy, ei to hoy, buro hocchhi, shorir kharap hobe." [Village women do not talk much about this heat and cold. They think this is what happens: I am getting old; the body will deteriorate.]

Urban women, despite greater healthcare access, encountered partial medicalization without sustained care. Devika (urban, garment worker) recounted:

"Ami doctor-er kache gelam... Doctor 2 minute-er jonno dekhlo, bollo, 'Stress. Aram koro.'... Ami to gorib manush, aram korbo kemne?" [I went to the doctor... The doctor saw me for two minutes and said, 'Stress. Rest.'... I am a poor woman; how am I supposed to rest?]

This pattern reveals that institutional visibility alone does not ensure adequate care. Urban women's symptoms are acknowledged but dismissed, while rural women's symptoms remain naturalized and unaddressed. Both pathways produce institutional invisibility through non-recognition in rural areas and inadequate recognition in urban areas.

Discussion

Triple Burden as Biosocial Phenomenon

This study demonstrates that post-reproductive women in West Bengal experience a triple burden menopausal health transitions, persistent domestic labour, and intensive caregiving shaped by life-course accumulation of nutritional deprivation, reproductive strain, and gendered labour expectations. This burden is fundamentally biosocial: women's midlife bodies are not merely aging but are the cumulative products of decades of under-nutrition, high parity, physical labour, and limited healthcare (Lock & Kaufert, 2001; Melby et al., 2005; Krieger, 2005; Mishra et al., 2011).

The concept of "local biologies" (Lock & Kaufert, 2001) is particularly salient. Rural women's bodies reflect lifelong agricultural labour, inadequate nutrition, and early/high-parity childbearing, producing earlier menopause onset and heavier symptom burdens compared to urban women with different occupational and reproductive histories. *Durbolota* the pervasive idiom of bodily depletion captures this biosocial entanglement: it describes not merely hormonal changes but the physiological sedimentation of social inequality across time.

Migration and Grandmother Caregiving

Migration patterns fundamentally reshape grandmother caregiving in rural West Bengal. When adult children migrate for urban employment, grandmothers assume primary childcare responsibilities while navigating their own menopausal transitions. This pattern aligns with global care chain literature (Gamburd, 2015; Yarris, 2011; Scott, 2012), demonstrating how reproductive labour is redistributed across generations and geographies, with health consequences concentrated among grandmothers.

Gita's case exemplifies this dynamic: caring for three grandchildren while her son works in Kolkata, she manages childcare, cooking, and school responsibilities despite joint pain and exhaustion. This intensified caregiving occurs precisely when women's own health is declining, creating a temporal mismatch between caregiving demands and bodily capacity. Scott's concept of "paying down the care deficit" (Scott, 2012) aptly describes this phenomenon: grandmothers' health deteriorates as they absorb care work displaced by adult children's migration.

Structural Violence and Institutional Invisibility

Post-reproductive women's suffering reflects structural violence (Farmer, 2004) systematic harm produced through institutional arrangements rather than individual pathology. Health systems organized around maternal-child health and elderly care render midlife women institutionally invisible (Behere et

al., 2021). Women's menopausal concerns are dismissed as "normal aging" or "stress," denying legitimacy to their suffering and foreclosing treatment possibilities.

This institutional invisibility operates differently across rural-urban contexts. In rural areas, symptoms are naturalized as inevitable aging, with women relying on home remedies and enduring without complaint. In urban areas, symptoms are partially medicalized but inadequately addressed with providers offering rushed consultations and generic advice to "rest" without addressing structural constraints (poverty, caregiving responsibilities, labour demands) that prevent rest. Both pathways produce equivalent suffering through different mechanisms: non-recognition versus inadequate recognition.

Feminist Anthropology and Gendered Aging

This study extends feminist anthropology's critique of biomedical menopause models (Martin, 1987; Freixas et al., 2012). Menopause is not merely hormonal deficiency but a culturally and politically mediated transition whose meanings are shaped by gendered institutions. Women's experiences are structured by patriarchal bargains (Lamb, 2000) trading earlier subordination for potential later-life authority contingent on sons, successful transitions to mother-in-law status, and household arrangements.

However, this study reveals that many women do not achieve the promised later-life authority. Parvati remains subordinated as daughter-in-law despite menopause; Halima faces intensified vulnerability through widowhood and poverty; Shefali, living with her daughter, describes herself as a "guest" in her son-in-law's house. The patriarchal bargain thus operates unevenly, with later-life authority available primarily to women with sons, joint family residence, and successful generational transitions conditions not universally achieved.

Policy Implications

Findings suggest three policy priorities. First, integrate menopause-sensitive care into primary health services, training providers to recognize and manage menopausal symptoms rather than dismissing them as "normal aging." Second, recognize caregiving as legitimate health-affecting labour, developing support systems for women managing dual caregiving burdens (grandchildren and elderly dependents) during their own health transitions. Third, address structural determinants poverty, nutritional deprivation, heavy physical labour that shape women's life-course trajectories and produce differential menopausal experiences.

Limitations

This study has limitations. The sample, while adequate for planned analyses, limits subgroup comparisons and complex modeling. Purposive sampling precludes statistical generalization beyond North 24 Parganas district. Caste-based analysis, while quantitatively addressed, could not be robustly elaborated qualitatively due to inconsistent narrative salience. Cross-sectional design prevents causal inference. Despite these limitations, the mixed-methods approach provides rich evidence on post-reproductive women's triple burden and its biosocial determinants.

Conclusion

Post-reproductive women in West Bengal experience a biosocial triple burden menopausal health transitions, persistent domestic labour, and intensive caregiving shaped by life-course accumulation of nutritional deprivation, reproductive strain, gendered labour expectations, and institutional invisibility. Migration patterns intensify grandmother caregiving precisely when women's own health is declining, creating temporal mismatches between caregiving demands and bodily capacity. Health systems organized around maternal-child health and elderly care render midlife women institutionally invisible, with symptoms dismissed as "normal aging" or "stress" without adequate recognition or treatment.

The sandwich generation framework, when applied to South Asian contexts, must account for local biologies, structural violence, and the feminization of intergenerational care work. Women's midlife bodies are not merely aging but are the cumulative products of decades of social inequality, experienced through culturally situated idioms like durbolota (bodily depletion), gorom-thanda (hot-cold imbalance), and chup kore thaka (suffering in silence). Understanding this triple burden is essential for developing health policies that recognize midlife women as a distinct population requiring targeted interventions beyond existing reproductive health and elderly care paradigms.

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