Hysterectomy in India: Overview of current trends and priorities

December 2023

1. Overview

Hysterectomy is the surgical removal of the uterus, sometimes accompanied by removal of the ovaries and fallopian tubes. The surgery is typically conducted for benign gynaecological conditions (such as large fibroids, endometriosis) after or close to menopause (~48 years) and cancers. When medically required, hysterectomy is a lifesaving procedure and improves quality of life. Clinical guidelines typically advise hysterectomy as appropriate only after conservative surgery and/or hormonal treatment have been attempted.

Hysterectomy conducted before age 45 (early hysterectomy) is associated with serious health risks for women, including increased risk of cardiovascular disease, metabolic disorders and mental health issues.[1-3] Risks are higher for younger women and for women whose ovaries have been removed. Even when ovaries are preserved, hysterectomy itself can decrease ovarian function and lead to earlier onset of the effects of menopause.[4,5]

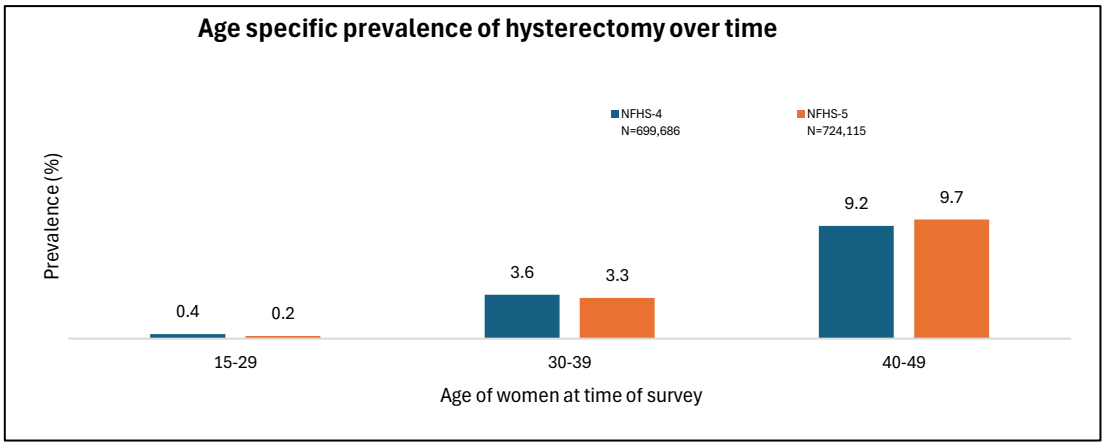
Hysterectomy was first included in India's 4th round of the National Family Health Survey in 2015-16, after reports of high utilisation amongst young women under publicly-funded insurance schemes. Community-based research also suggested use of hysterectomy as a replacement for conservative gynaecological treatment for women. [6,7] In 2023, the National Guidelines on the Prevention of Unnecessary Hysterectomy included directives to form state and district committees to monitor use of the surgery and to promote alternative treatments, particularly for women younger than 45 years. Three key issues require action:

- **Pockets of high prevalence in selected states and amongst rural, less educated women**
- **Young median age at hysterectomy across the country and associated health effects**
- **Women's limited access to gynaecological care for common conditions**

This note summarises prevalence and trends based on the NFHS rounds 4 and 5, along with insights from the Longitudinal Survey on Aging in India (LASI) and early PM-JAY data.

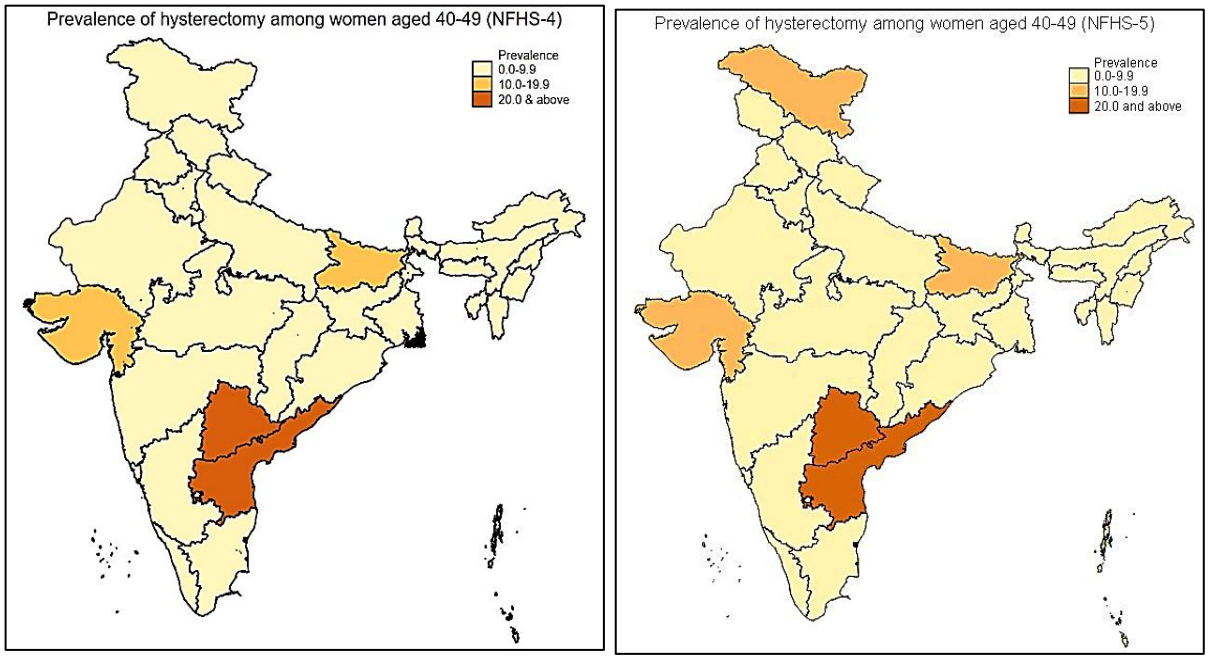
2. Prevalence and patterns

Prevalence of hysterectomy is highest amongst women currently in ages 40-49 years. At a national and state level, there has been limited change in prevalence (neither increase nor decrease) between 2015-16 (NFHS-4) and 2019-21 (NFHS-5).



Source: NFHS-4 (2015-16); NFHS-5 (2019-21)

From a public health perspective, hysterectomy prevalence is high and of concern in specific states: Andhra Pradesh, Telangana (~20% amongst women in 40-49 years), along with Bihar, Gujarat and Ladakh (See Appendix Table for all-state data). Moreover, states with low prevalence (<2%) suggests that women not have access to the surgery when required.



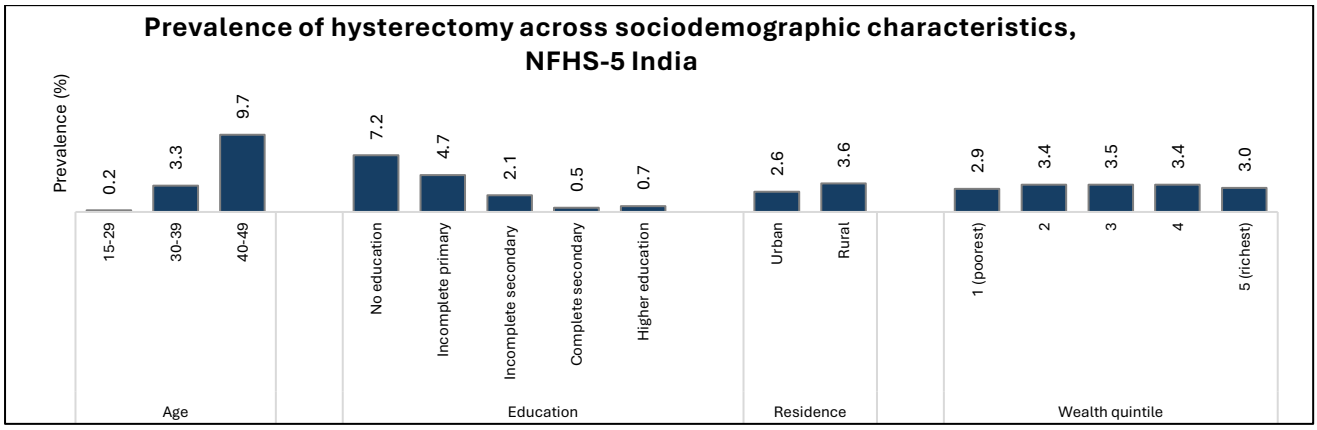
Source: NFHS-4 (2015-16); NFHS-5 (2019-21)

3. Median age

The median age of hysterectomy in India is 37 years*, which induces surgical menopause almost 10 years before the age of natural menopause. Early menopause has lifelong effects on women's health, particularly risk of chronic illness.

4. Higher hysterectomy amongst rural, less educated women

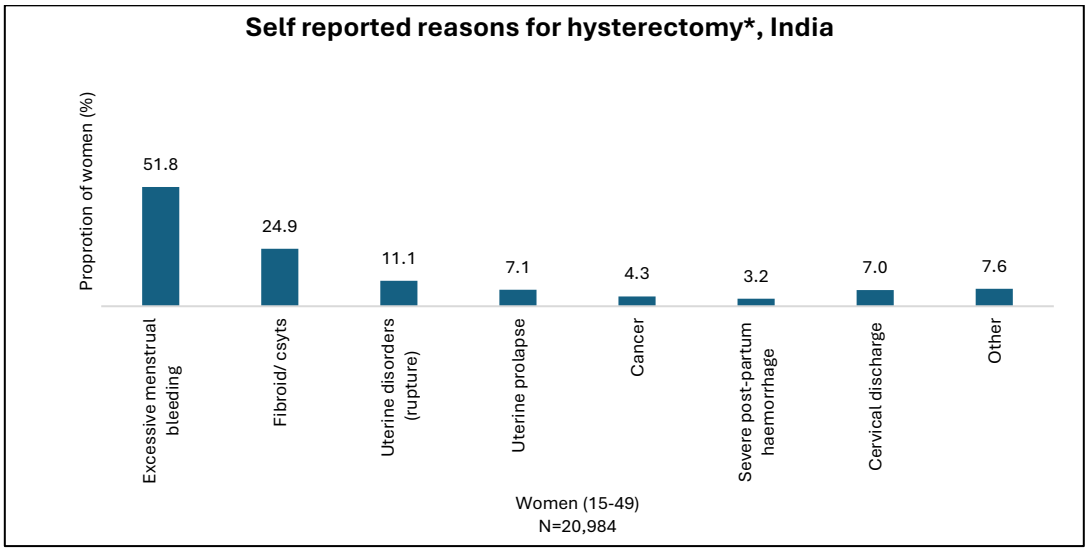
Data consistently indicate higher prevalence amongst less educated, rural women. These patterns have been demonstrated in multivariate analyses as well, indicating the importance of access to quality gynaecological care for the most vulnerable. [8,9]



*Median age at hysterectomy, amongst women currently 40-49 at the time of the NFHS surveys.

5. Reasons for hysterectomy (NFHS-5)

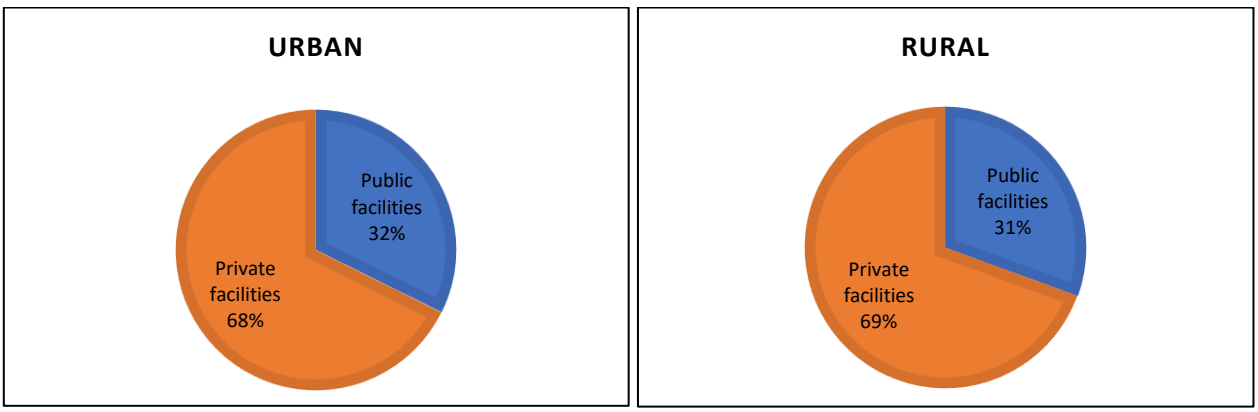
The primary, self-reported reason by women for hysterectomy is excessive menstrual bleeding, followed by fibroids/cysts. Many of these are amenable to conservative treatment, especially for younger women. These patterns, as well as insights from community-based studies and consultations with gynaecologists in six states, indicate the critical need for access to conservative treatment options for women. Options include hormonal contraceptive pills, hormonal IUD (intrauterine devices), tranexamic acid and conservative surgery.



*Multiple Response. Source: NFHS-5 (2019-21)

6. Place of hysterectomy, rural-urban NFHS-5

The majority of hysterectomies, similar to national trends in inpatient procedures, are conducted in the private sector.



Source: NFHS-5 (2019-21)

7. Use of insurance for hysterectomy

The NHFS does not include how women paid for hysterectomy; there are no population-based data on the role of insurance at the time of surgery. Earlier reports of use of publicly-funded insurance for hysterectomy led to introduction of restrictions in PM-JAY. An early analysis of PM-JAY data did not find

insurance use for hysterectomy amongst younger women.[10] However, state disparities raise concerns. Data currently do not report whether hysterectomy included ovarian removal.

8. Health effects of early hysterectomy

Hysterectomy is a major surgery, with known short-term risks of complication such as infection and issues with the urinary tract/bladder. Global evidence on the longer-term consequences of hysterectomy before menopause point to severe risks, such as higher cardiovascular disease, stroke, osteoporosis and dementia – with higher risks amongst younger women and when ovaries are removed without hormone replacement therapy. Patterns from medical audits in India suggest ovarian removal is common. Given the low median at hysterectomy, there are likely widespread public health consequences of early hysterectomy in India. Although data on longer term effects are limited, an analysis of the Longitudinal Ageing Study of India (2017) found higher odds of hypertension, diabetes and bone/joint disease amongst Indian women who had undergone hysterectomy.[11]

9. Implications

For the health system

1. Implementation of the National Guidelines on Unnecessary Hysterectomy, which is already underway, is critical to reduce unnecessary hysterectomy and to improve women's access to quality care through improved monitoring, audits and training.

2. Access to treatment for gynaecological morbidity, especially heavy/irregular menstrual bleeding, in the public sector is required to ensure that hormonal and medical treatments are affordable and accessible to rural women.

3. Women who have already undergone hysterectomy at a young age require access to treatment to address health effects linked to early menopause.

4. Widespread awareness programmes on hysterectomy, gynaecological health and treatment options amongst women, their families and communities.

National-level data required to inform public health priorities:

1. Prevalence of heavy menstrual bleeding and other gynaecological morbidities

2. Data on how women pay for hysterectomy, including use of insurance

3. Evidence on the short- and long-term effects of early hysterectomy on women's health

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Appendix: All states, NFHS-5

	Prevalence of hysterectomy **(women 40-49)** N=165,439	Median age at hysterectomy **(women 40-49)** N=14,406	Proportion of hysterectomies in private facilities **(women 15-49)** N=20,984
All India	**9.7**	**37**	**69.0**
1. Jammu & Kashmir	9.6	36	20.4
2. Himachal Pradesh	5.6	39	40.9
3. Punjab	9.7	38	57.0
4. Chandigarh	2.8	36	68.3
5. Uttarakhand	7.4	37	69.0
6. Haryana	8.0	38	67.4
7. Nct Of Delhi	6.0	39	53.6
8. Rajasthan	6.9	38	60.7
9. Uttar Pradesh	8.6	38	72.1
10. Bihar	17.2	36	87.6
11. Sikkim	2.6	39	35.0
12. Arunachal Pradesh	5.8	37	18.4
13. Nagaland	4.9	38	45.2
14. Manipur	5.5	38	40.2
15. Mizoram	4.9	38	13.8
16. Tripura	5.8	37	35.3
17. Meghalaya	2.6	34	27.2
18. Assam	3.4	35	22.7
19. West Bengal	8.7	37	43.1
20. Jharkhand	7.5	37	76.2
21. Odisha	6.6	38	45.0
22. Chhattisgarh	5.5	36	61.3
23. Madhya Pradesh	8.5	36	61.6
24. Gujarat	11.7	38	59.4
25. Dadra & Nagar Haveli & Daman & Diu	7.3	40	47.8
27. Maharashtra	8.8	37	65.1
28. Andhra Pradesh	22.5	34	83.2
29. Karnataka	8.9	36	55.2
30. Goa	5.4	42	53.4
31. Lakshadweep	4.7	38	83.9
32. Kerala	5.8	41	64.6
33. Tamil Nadu	7.2	40	70.4
34. Puducherry	5.2	38	50.6
35. Andaman & Nicobar Islands	5.4	41	71.9
36. Telangana	21.2	34	86.0
37. Ladakh	11.4	38	6.4

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