

Analysis of Hysterectomy in India : DLHS Survey

Abhishek Mahajan

Department of Chemistry
IIT Bombay

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Motivation

- Understanding the healthcare needs of women in India:
Hysterectomy is a common surgical procedure, and understanding the reasons why it is performed in India can provide insight into the healthcare needs of women in the country.
- Improving healthcare outcomes: By studying the analysis of hysterectomy in India, one may be able to identify areas for improvement in the care provided to women who have undergone the procedure, leading to better outcomes for patients.

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- Understanding the prevalence of hysterectomy in different population groups in India, and identifying disparities in access to the procedure.
- Examining the reasons for hysterectomy in India and identifying any trends or patterns in the indications for the procedure.
- Identifying the role of cultural or societal factors in the decision-making process for hysterectomy in India.
- Understanding the impact of hysterectomy on the quality of life of women in India.

What is Hysterectomy?

Hysterectomy is a surgical procedure in which the uterus is removed. This can be done for a variety of reasons, such as heavy bleeding, chronic pain, fibroids, endometriosis, or cancer.

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Depending on the specific case, the procedure may involve removing just the uterus (subtotal or supracervical hysterectomy) or the uterus and the cervix (total hysterectomy). In some cases, the ovaries and fallopian tubes may also be removed (oophorectomy and salpingectomy, respectively).

Data Source

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- The survey was carried out in 14 states and seven union territories of India. These states are: Andaman Nicobar Islands, Andhra Pradesh, Arunachal Pradesh, Chandigarh, Goa, Haryana, Himachal Pradesh, Karnataka, Kerala, Maharashtra, Manipur, Meghalaya, Mizoram, Nagaland, Puducherry, Punjab, Sikkim, Tamil Nadu, Telangana, Tripura, West Bengal.

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- Eight states – Bihar, Jharkhand, Madhya Pradesh, Chhattisgarh, Orissa, Rajasthan, Uttar Pradesh and Uttarakhand were excluded (EAG)

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- Information on household members and socio-economic conditions of the household like caste, religion, and information about household wealth was collected through household questionnaire.
- The ever-married women questionnaire covered information on different components of maternal and child health, including pregnancy, child birth, reproductive morbidities, immunization of mothers and children, and access and availability of maternal and child health care.

- **Package** : IBM SPSS 20
- **Independent variables**: Socio-economic and demographic variables like age of women, caste, religion, parity, place of residence, working status, household wealth (housing quality, household amenities, size of landholding, and consumer durables etc) household with health insurance, women sterilization and education of women .

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Hysterectomy prevalence and spatial patterns

- The average prevalence rate of hysterectomy was estimated to be 17/1000 among ever married women in the ages of 15–49 years. As many as 5567 women out of the total 3, 16, 361 reported having undergone hysterectomy.

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- ranging from 2/1000 to 63/1000 women. lowest prevalence rates of hysterectomy were reported in the states of Tamil Nadu and Haryana – nearly 6/1000 women in both states.
- Andhra Pradesh had the highest prevalence rate of hysterectomy (63/1000 women), followed by Telangana (55/1000), Karnataka (29/1000) and Punjab (23/1000) .

Socio-economic differentials and predictors of hysterectomy

Parity

- women with two or more children had only 74% higher risk of hysterectomy than those with no children.

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- The unadjusted estimates showed a five times higher risk of hysterectomy (OR 5.24; CI 4.47– 6.14) among women who had two or more children .

Socio-economic differentials and predictors of hysterectomy

Religion and Caste

- women going for hysterectomies was higher among Sikh women (25/1000), followed by Hindus (19/1000), Muslims (15/1000) and Christian (8/1000).

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- women going for hysterectomies was higher among Sikh women (25/1000), followed by Hindus (19/1000), Muslims (15/1000) and Christian (8/1000).
- Analysis by caste showed that the women belonging to upper caste groups (labelled as 'Others' in DLHS-4) and Other Backward Classes (OBCs) had significantly higher odds of going for hysterectomies than the women from scheduled castes and tribes.

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Education Status

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- The level of education was found to exert negative influence on hysterectomy: as women's years of schooling increased, there was a decline in hysterectomy rate.
- women who had education levels of matriculation and above were 53% less likely to undergo hysterectomy than women with no or primary school education.

Socio-economic differentials and predictors of hysterectomy

Household wealth and Health insurance

- The women belonging to rich households were more likely to choose for hysterectomies (OR 1.48; CI 1.36–1.60) than the women from the poor households.

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- women undergoing hysterectomy was higher among household with health insurance compared to those without(almost two times more likely).
- likelihood of women from household with insurance undergoing hysterectomies those without was highest in Andhra Pradesh (OR: 1.46, $P < 0.001$), followed by Telangana (OR: 1.31, $P < 0.01$) and Karnataka (OR: 1.22, $P < 0.01$).

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- High among women who were sterilized (tubectomy) than those not sterilized.
- The women who were sterilized were 55% more likely to choose hysterectomy than those not sterilized after adjusting for other socio-economic factors.
- tuballigation may be associated with a later risk of menstrual disorders and hysterectomy, particularly in women sterilized at a young age.

- Predictors of hysterectomy among married women 15–49 years in India : <https://pubmed.ncbi.nlm.nih.gov/29304867/>