



Socio-Demographic and Related Indicators of Underwent Hysterectomy: A Cross-Sectional Study Conducted among the Women of District Bilaspur (CG), India

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Abstract

The advancement of medical science and newer technologies has witnessed the prevalence of hysterectomy in recent times. Consequently, an attempt has been made to find out the socio-demographical and related issues of women who have undergone hysterectomies from the district of Bilaspur, Chhatisgarh, India. A sub-sample of 105 respondents from rural and urban (≤ 30 years of age) who had undergone hysterectomy, included through a cross-sectional study. Data collection was carried out using a culturally validated semi-structured schedule. Body composition, related health issues and Socio-demographic data were collected using standard tools and techniques. Statistical analysis of the data was done by using MS Excel and SPSS Software. The prevalence of hysterectomy was higher among women in urban areas (57.1%) than the rural ones (42.9%). The mean age was 39.70 ± 26.86 years. Hysterectomy at an early age was observed among the women of OBC (36.2%) followed by the General category (35.2%), SC (25.7%) and ST (2.9%). It can be concluded that women who underwent hysterectomy were from a particular socio-demographic background, reproductive history and ethnic background. Further most of the common indicators for underwent hysterectomy who had undergone hysterectomy were excessive menstrual bleeding, frequent menstruation and uterus infection.

Keywords: Hysterectomy; Health Issues; Kaplan Meier; Odds Ratio Estimate

Introduction

Hysterectomy is a clinical removal of the uterus including female reproductive part i.e. fallopian tube, ovaries and cervix, the term is derived from Greek word 'hysteros' which means 'uterus'. The numbers of hysterectomies are increasing day by day with long-term effect on body functioning during post-hysterectomy life. Advancement of medical science and newer technologies has also associated with the increasing prevalence of hysterectomy in contemporary world [1]. Simultaneously, hysterectomy is also related to privatization of health services and profit-making by health professionals [2].

The biological constitution of women's body and their reproductive organ makes their body more sensible and disquiet which need supplementary concern and proper supervision. Lack of

proper education among women makes them more susceptible to health issues related to reproductive health, which leads to deprived health status [3]. Lifestyle of women has a great impact on the reproductive health of women leading to increase in cardiovascular disease, disorder related to sleep, digestion and bad lifestyle during pre and post hysterectomy varies from different racial, ethnic groups and geographical areas among the women. Physical activity and dietary habits may also influence the overall health indication [4].

Problems become manifold with any kind of surgery. When we talk about uterus surgery the complication rises more as bowel, nerves and vessels are closely related to uterus, and they are inter-related with each other to perform many life processes [5]. Women undergoing hysterectomy face a major and sudden change in the

body relating to the physical, psychological, emotional and hormonal changes [6]. Post-hysterectomy health concerns have also been severe during the last few years, going through multiple health issues. Change in attitude among the respondents included negative thoughts and feelings of missing organs or emptiness within the body [7].

Endometriosis, fibroids and heavy menstrual bleeding, severe pelvic pain, polycystic ovaries and uterus prolapse were some of the commonly reported indications for women who underwent hysterectomy [8,9]. According to a worldwide study among 22 countries by Nurfauzia, (2023) [10] placental pathology, placental accreta spectrum, uterine atony and uterine rupture are common problems leading to hysterectomy. It was evident from a study conducted among South Korea that colorectal cancer was a reason for undergoing hysterectomy as compared to non-hysterectomy women [11]. A study carried out by Tebeu (2019) [12] in Cameroon in South Africa, reported that uterine fibroid, cervical dysplasia, endometrial hyperplasia and pelvis organ prolapsed were the main reason of hysterectomy among women. Oophorectomy among women effect their life in every way due to reduction in progesterone and estrogen hormones including hormonal changes, reduction in sensuality and decrease in intelligence [13]. In this way there are several studies around the globe mentioned reasons for Hysterectomy.

Studies have been conducted in India too, with the objectives to understand the indications and probable reasons for hysterectomy. In studies conducted in Mumbai, it was observed that women who had undergone hysterectomy were at utmost threat of having vault prolapsed; the number of pregnancies over and beyond increased the chances of vault propulsion [14,15]. Another study from South Indian state, Karnataka during the year 2014 to 2018 it was observed that 1041 women underwent postpartum hysterectomy out of 20405 deliveries [16].

According to the study conducted by Meher and Sahoo (2019) [17], based on NFHS-4 it was observed that excessive menstrual bleeding, fibroids, uterine disorder were the common indication for hysterectomy. Many other studies were conducted in Chhattisgarh associated to reproductive health. Based on the literature updated, there is no any such study especially from Bilaspur district of Chhattisgarh state, hence a micro level study was conducted to find out the reason and socio-demographic factors of hysterecto-

my among the women underwent hysterectomy from the district Bilaspur, Chhattisgarh, India.

Material and Method

Research Design

This was a cross-sectional and descriptive study based on three main stages i.e. 1. Selection of the Study Area, 2. Field work and Data Collection, 3. Data analysis and Interpretation.

Stratification of the study universe

On the basis of review of literature the district Bilaspur of the state of Chhattisgarh was selected as there was reporting of hysterectomy without the consent of the patients. In the next step rural and urban areas were selected randomly from the map to ensure the coverage of the district headquarter i.e. Bilaspur town and villages were selected from two tehsils i.e. Masturi and Bilha. A total of 20 villages, 10 from each of the tehsil were selected, similarly, 10 wards from Bilaspur Municipal Corporation of Bilaspur district were selected as per the need for the present study.

Sample selection and sample size

The respondents were recruited from a total of 800 households, a sub-sample of 105 women who had undergone hysterectomy during November 2022 to June 2023 was considered for present analysis.

Data collection

A culturally validated semi-structured interview schedule was used for data collection. The interview schedule was mainly divided into three parts the first section encompasses questions related to socio-demographic characteristics and reproductive history, the subsequent section was accounting self-reported indication for undergoing hysterectomy and the third part of the interview schedule covered variables related to post-hysterectomy indicators and experience of the respondents.

Description of the variables

The information a series of socio-demographic variables, viz. current age, age at menarche, age at marriage, age at which underwent hysterectomy, educational status, marital status, years of education, place of residence, economic status, ethnic category and occupation were collected. The reason for undergoing hysterectomy was self-reported. Information on post hysterectomy complication and experiences were also collected.

Statistical analysis

Statistical analysis of the data was done by using MS Excel and SPSS Software (version 25). Kaplan Meier curve was to understand the probability of surviving after undergoing hysterectomy based on the socio-demographic characteristics i.e. education, economic status, category and place of residence.

The variability of the selected variables was calculated using one-way ANOVA keeping age at hysterectomy as dependent variable.

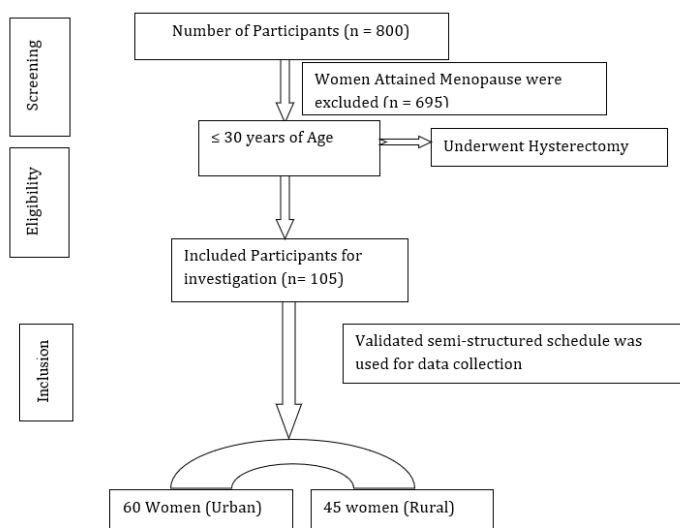
Inclusion criteria

For present study, the data was filtered and only those women were included who had undergone hysterectomy and currently ≤ 30 years of age.

Exclusion criteria

Women who did not undergo hysterectomy and attained menopause were excluded from the study.

Flow Diagram for Sampling Process



Results

Socio-demographic characteristics

Socio-demographic information of the respondents is presented in table 1. It is apparent that most of the women who had undergone hysterectomy belong to 41 to 60 years of age (68.57%), whereas 16.19% belong to below 40 years of age and 15.24% were ≥ 61 years of age. The average of current age was 50.95 ± 9.12 (Figure 1).

Among these women, 81.90% attained education for ≤ 10 years and only few (18.10%) were attained education for ≥ 11 years. It is evident that 20% were illiterate, whereas 37.14% completed their basic and primary education, followed by Middle and secondary education (25.71%), and higher secondary and above (17.14%).

A total of 62.9% of respondent have attained menarche ≤ 14 years of age and 37.15% attained late menarche after the age of ≥ 15 years further the mean age at menarche was 14.14 ± 1.34 Years (Figure 1).

Out of the total number of respondents 59% were married before 18 years of the age and 41% of women were married after the age of 18 years. It was observed that a total of 82.86% of women were married, whereas 14.29% were widow and 2.86% were unmarried. Average age at marriage was 18.03 ± 3.80 years (Figure 1).

table 1 also revealed that 57.10% of the respondents were from urban area and 42.90% were from rural area. Most of the respondents (82.86%) belongs poor socio-economic status as they live below to poverty line (BPL), and only 17.14% were above poverty line (APL). The mean age at Hysterectomy was 38.09 ± 6.59 years (Figure 1).

It is apparent from composition of the respondents that 36.19% belong to Other Backward Class (OBC), 35.24% were General castes whereas Schedule Caste and schedule tribe includes only 25.71% and 2.86% respectively. As it is common in India, 94.29% of the respondents were housewives and only 5.71% were working women.

Differential age at hysterectomy

There is variation in the age at hysterectomy hence to find out the variability between age at hysterectomy and socio-demographic variables, F value were calculated using one-way-ANOVA and the findings were displayed in Table 2. It is apparent that there were significant variation between age at hysterectomy and residence type ($F = 3.994^*$), ethnic category ($F = 3.935^{**}$), age at first pregnancy ($F = 2.270^*$), age at marriage ($F = 1.921^*$) and current age ($F = 1.804^*$) at $p \leq 0.05$, although, the variations were not very high, it was only 1% to 4%; whereas there was no significant variation between age at hysterectomy and education, total years of education and marital status.

Current Age (Years)	f	%
≤ 40	17	16.19
41-50	43	40.95
51-60	29	27.62
≥ 61	16	15.24
Age at Menarche		
≤ 14	66	62.9
≥ 15	39	37.1
Age at Marriage		
≤18	62	59
≥18	43	41
Age at Hysterectomy		
≤30	21	20.00
30-40	50	47.60
≥41	34	32.40
Education Status		
Illiterate	21	20
Basic and Primary	39	37.14
Middle and Secondary	27	25.71
Higher Secondary and above	18	17.14
Marital Status		
Married	87	82.86
Unmarried	3	2.86
Widow	15	14.29
Years of Education		
≤ 10	86	81.90
≥ 11	19	18.10
Place of Residence		
Urban	60	57.10
Rural	45	42.90
Economic Status		
APL	18	17.14
BPL	87	82.86
Ethnic Category		
General	37	35.24
OBC	38	36.19
SC	27	25.71
ST	3	2.86
Occupation Status of Women		
House Wife	99	94.29
Working Women/Job	6	5.71

Table 1: Socio- Demographic profile of the respondents.

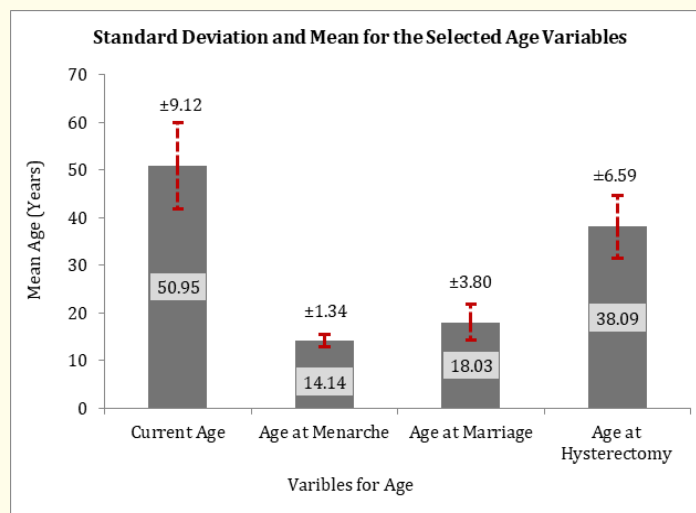


Figure 1: Standard Deviation and Mean for the Selected Age Variables.

Variable		Sum of Squares	df	Mean Square	F value	Sig.
Residence (Urban and Rural)	Between Groups	168.667	1	168.667	3.994	p≤0.05*
	Within Groups	4349.561	103	42.229		
	Total	4518.229	104			
Ethnic Group	Between Groups	472.789	3	157.596	3.935	p≤0.01**
	Within Groups	4045.439	101	40.054		
	Total	4518.229	104			
Age at First Pregnancy	Between Groups	718.697	8	89.837		
	Within Groups	3799.531	96	39.578	2.270	p≤0.05*
	Total	4518.229	104			
Education	Between Groups	276.164	3	92.055	2.192	Ns
	Within Groups	4242.064	101	42.001		
	Total	4518.229	104			
Age at Marriage	Between Groups	1233.130	17	72.537	1.921	p≤0.05*
	Within Groups	3285.098	87	37.760		
	Total	4518.229	104			
Current Age	Between Groups	1641.181	25	65.687	1.804	p≤0.05*
	Within Groups	2876.048	79	36.406		
	Total	4518.229	104			
Total Year of Education	Between Groups	981.780	15	65.452	1.647	Ns
	Within Groups	3536.448	89	39.725		
	Total	4518.229	104			
Marital Status	Between Groups	43.553	2	21.776	0.496	Ns
	Within Groups	4474.676	102	43.869		
	Total	4518.229	104			

Table 2: One-way ANOVA for age at hysterectomy and socio-demographic variables.

p ≤ 0.05, significant at the 0.05 level (*), p ≤ 0.01 significant at the 0.01 level (**), Ns: Not Significant.

Reason of hysterectomy

In the present study an attempt was made to explore the reason for underwent hysterectomy (Figure 2).

It was found that majority of the respondent (87%) had trouble of excessive menstrual bleeding as the prime reason for hyster-

ectomy. And, the second major cause was frequent menstruation (49.52%), followed by uterus infection (37.14%), ovarian tumor or cyst (17.14%), fibroid (14.29%), cancer (11.43%), uterus hemorrhage (8.57%) and other problems like ossification, ovarian stone, urethral injury and bowel injury together accounting 10.47%.

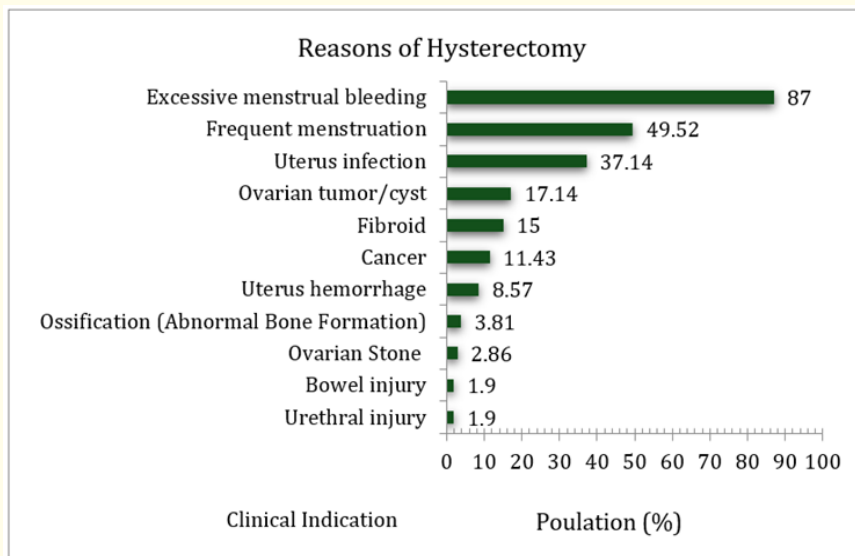


Figure 2: Reasons for undergoing hysterectomy.

Type of Hysterectomy	N	%
Total Abdominal Hysterectomy (TAH)	4	3.81
Sub-total Hysterectomy	94	89.52
3. Abdominal hysterectomy with bilateral salpingo-oophorectomy (TAH-BSO)	7	6.67
Technique for Hysterectomy		
Abdominal Hysterectomy	91	86.67
Vaginal Hysterectomy	5	4.76
Laparoscopic Hysterectomy	9	8.57

Type and technique of hysterectomy.

Table 3: Distribution of respondents as per types and procedure of Hysterectomy.

Information related to type of hysterectomy was analyzed to understand which reproductive organ (fallopian tube, ovaries and cervix) was removed from the body along with uterus of the respondents. It is evident from Table 3 that majority of the respondent (89.52%) underwent sub-total hysterectomy followed by TAH-BSO (6.67%) and very few of them underwent for the total abdominal hysterectomy (3.81%).

The most common procedure for hysterectomy was abdominal hysterectomy (86.67%) followed by laparoscopic hysterectomy (8.57%) and vaginal hysterectomy (4.76%).

Differential probability of Hysterectomy as per background characteristics.

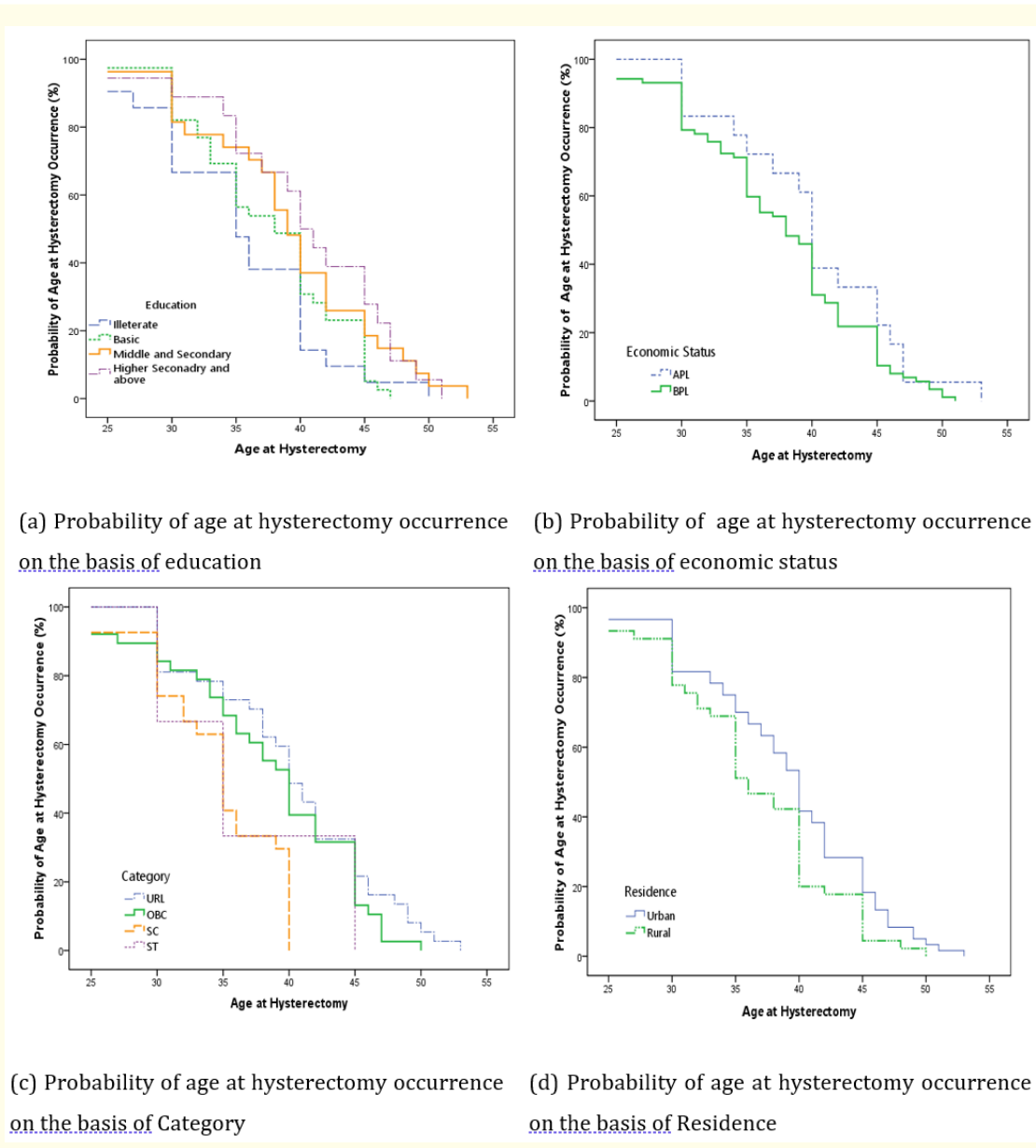


Figure 3: Kaplan Meier curve for age at hysterectomy and its probability of occurrence.

To find out the differential probability of age at hysterectomy, Kaplan Meier curve (Fig.3) was drawn for socio-demographic characteristics. Probability of early hysterectomy was observed among poor (BPL), illiterate, rural and OBC women.

It was observed that the participants from rural areas were more susceptible and prone to early hysterectomy as they are not conversant about post-surgical health consequences, besides that

they were misguided by the health professionals to undergo hysterectomy even though it was not required and the condition can be treated with appropriate medication.

It is apparent from K-M curve that Schedule Caste and Schedule Tribe had delayed hysterectomy because they primarily prefer home treatment and avoid approaching to doctors. Respondents who were well educated or completed basic education were prob-

ably found to have hysterectomy at later age due to awareness about post-surgical health consequence and avoid undergoing any surgery unless the condition is uncontrolled.

It was also noticeable that the probability of hysterectomy was delayed among richer participants and urban dwellers, as they have easy availability of medical facilities and they avail treatment,

when it can be treated; whereas the rural and poor peasant delay the treatment until the condition get worst. The urban and rich participants have practice to consult a single doctor (family doctor) for longer duration and continuous treatment; hence the problems are taken care properly and well in advance.

Determinants of hysterectomy

Estimate for Age at Hysterectomy	Odds Ratio (CI 95%)
For cohort Age at Menarche	1.72 (0.74-3.95)
≤ 14	1.23 (0.87-1.74)
≥ 15	0.71 (0.43-1.17)
For cohort Age at Marriage	1.12 (0.49-2.56)
≤ 18 years	1.05 (0.74-1.48)
≥ 19 years	0.93 (0.57-1.50)
For cohort Age at First Pregnancy	1.12 (0.49-2.54)
≤ 20	1.05 (0.73-1.51)
≥ 21	0.93 (0.59-1.47)
For cohort Total Number of Pregnancy	0.82 (0.28-2.38)
≤ 4	0.96 (0.79-1.16)
≥ 5	1.16 (0.49-2.77)

Table 4: Odds Ratio showing the Estimation of Vulnerability for Underwent Hysterectomy.

To find out the determinants of hysterectomy, odds ratio was calculated and displayed in the Table 4. It is evident that respondents who had attained early menarche (≤14 years of age) were higher odds of undergoing hysterectomy (OR = 1.23, 0.87-1.74) than respondents who had delayed menarche (≥15 years of age) (OR = 0.71, 0.43-1.17).

Moreover, the respondents who had early marriage (≤ 18 years of age) had a higher probability of hysterectomy at an early age (OR = 1.05, 0.74-1.48) whereas; for respondents who had marriage ≥ 19 years of age, the odds were less (OR = 0.93, 0.57-1.50).

Similarly early first pregnancy at the age of 20 years or earlier had higher odds of undergoing hysterectomy (OR = 1.05, 0.73-1.51) as compared to the respondents who had first pregnancy at a later age i.e. ≥ 21 years (OR = 0.93, 0.59-1.47). Further, higher number of pregnancies i.e. ≥ 5 also have a higher risk for undergoing hysterectomy (OR = 1.16, 0.49-2.77) than the respondents who had less than 4 or 4 pregnancies (OR= 0.96, 0.79-1.16).

Post-hysterectomy indicators

Women underwent hysterectomy experience numerous long term and short term health problems which is displayed through a column graph (Fig.4). It is evident that majority of the respondent feel Weakness (91.43%) after undergoing hysterectomy, whereas 77.14% of respondent were suffering from Backache. Another major problem was improper Sleep (64.76%) followed by saggingness at lower abdomen after surgery (62.86%), around half of the respondent faced abdominal distension (accumulation of gas/fluid) (53.33%) and Urinary incontinenes (52.38%). Urinary tract infection (UTI) was also reported by 41.90% of the respondents. Other problems were: osteoporosis (Weak Bones) (32.38%), problem in passing urine (18.10%), urinary retention (Unable to empty all the urine) (12.38%), wound disruption (reopen of surgery) (11.43 %). A few of the respondent face problems of bladder disturbances (urinate that may be difficult to control) (9.52%), bowel disturbances (Diarrhea/ constipation) (6.67%), bowel injury (during surgery) (5.71%), fever (4.76%), surgical site infection (4.76 %), deep vein thrombosis (blood clot forms in a deep vein) (4.76 %),

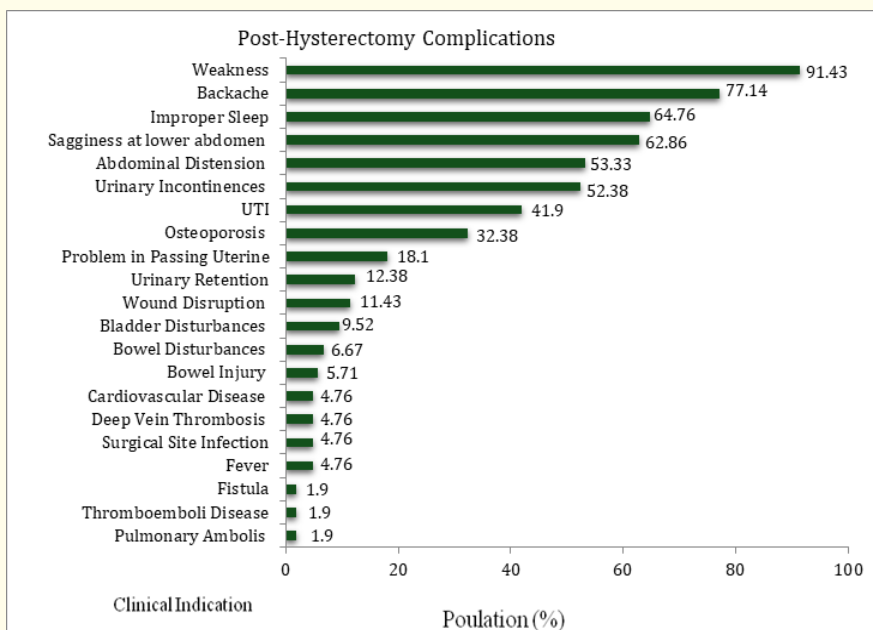


Figure 4: Post-Hysterectomy Complications and Experiences.

cardiovascular disease (4.76%), pulmonary embolism (blockage in one of the pulmonary arteries) (1.90%), thromboembolism disease (blood clot that causes an obstruction) (1.90 %) and Fistula (abnormal connection between the organs) (1.90%).

Discussion

Hysterectomy is a biological and social problem leading to disparity among race, religion, region and socio-economic status [18]. As it is apparent that illness is a social state and health professionals of the society decide which type of illness and how it can cured, they use diplomatic talking, in contrast, patients who are ill have no acquaintance to it, and the situation makes them completely dependent on the health care professionals and end up highly reliant on decisions that the health care professionals provide them [18].

Hysterectomy became a controversial issue at the beginning of the 19th century, when a prominent gynecologist of the time, Diana Scully has advertised the surgical technique. Now a day, it is common among the women of 15 to 49 years of age, while the statistical prevalence of hysterectomy has decreased with ageing [18].

Hysterectomy is common among both rural and urban women despite the fact that menstruation is unclean, stigmatized and un-

acceptable in the country like India. During menstruation a woman cannot perform any rituals, prohibited from entering the kitchen, use rags as absorbent during menstruation, which makes them feel uncomfortable and prohibit the capacity to work as the majority of the rural women engaged in agricultural work, lift heavy thing and so on. Hence, as a result undergoing hysterectomy was an easy solution and the immediate substitute to all the troubles of menstruation. Further, private hospitals and health professionals also encourage them to undergo hysterectomy [19].

According to Meilahn, [20] there was a significant difference on the basis of age at hysterectomy, ethnic affinity, residence (rural/urban), educational status and economic profile. Another study have also reported that race, education, caste, religion age and parity of the women has an association with the age at hysterectomy among the women India [21]. Similarly in the present study, the determinants of hysterectomy were investigated which are: early marriage, low level of education, early age at menarche, early age at first pregnancy, higher number of pregnancies and residence (Rural).

Study conducted by Byles., *et al.* (2000) [22] and Chen., *et al.* (2017) [23] have reported that factors like residence, low educa-

tion status, marriage and number of children were more were significantly associated with undergoing hysterectomy similar finding was also observed in the present study that early marriage (<15 year of age), low education and ≥ 5 pregnancies lead to higher chances of undergoing hysterectomy.

The probability of undergoing hysterectomy at early age was found associated with ethnic origin, education and economic status. Here, the women belonging to poor economic status, particular ethnic affinity i.e. OBCs were found to undergone hysterectomy in early age as compared to Schedule Castes (SCs) and Schedule Tribe (ST). Similar findings were also reported by Singh, *et al.* (2021) [24].

Further, it was found that the illiterate women were undergone hysterectomy in early age as compared to their well educated counterparts. Respondent who were from poor economic background (BPL) and living in rural areas with low income have higher probability to undergoing hysterectomy; similar findings were reported by Gartner, *et al.*, (2018) [25]; Kumari and Kundu, (2022) [26]. A study among the women of Germany also supported the finding of the present study that the prevalence of hysterectomy was higher for poor educational qualification [27].

In the present study almost half of the respondents have underwent hysterectomy in between 30 to 40 years of age (47.60%). Similar findings were reported by Dharmalingam and Dickson (2000) [28] and Meilahn (1989) [20] according to them the majority of the women had undergone hysterectomy between 35-50. In the present study mean age at hysterectomy was found to be 38.09 ± 6.59 years of age whereas it varies from 35.8 to 50.5 in other studies conducted by Desai, *et al.* (2011) [29], Sievert (2018) [30] and Casarin, *et al.* (2020) [31].

In the present findings, it was observed that common technique among most of the respondent was abdominal hysterectomy with increased risk for major health complications like Weakness (91.43%), improper Sleep (64.76%), abdominal distension (53.33%) and Urinary incontinences (52.38%) similar findings were also reported by Hakim (2004) [32] as they found that large number of participants undergone abdominal hysterectomy rather than vaginal and radical hysterectomy and most of them have developed numerous health complication. Additionally, a study conducted by Zhang, (2023) [33] among the Chinese women found that abdominal radical hysterectomy and robot-assisted radical

hysterectomy was the safest procedure for caring out hysterectomy with less health complications.

According to the findings of the present study subtotal hysterectomy was common type among the rural and urban respondents. The major cause of hysterectomy was excessive menstrual bleeding (87%) and frequent menstruation (49.52%). In contrary, based on the literature total hysterectomy was found in larger portion among the women in Greece and, the south eastern region of Europe. The reason behind the hysterectomy was problem in uterus including placental hemorrhage (73.3%) and uterine atony (26.6%) reported by Christopoulos, *et al.* (2011) [34].

In the present study, excessive menstrual bleeding (82.86%), frequent menstruation (49.52%), Uterus infection (37.14%), Ovarian tumor or cyst (17.14%), Fibroid (14.29%), Cancer (11.43%), Uterus hemorrhage (8.57%), Ossification (3.81%), Ovarian Stone (2.86%), Urethral injury (1.90%) and Bowel injury (1.90%) were reasons for hysterectomy. Many other studies have widely reported similar reason for undergoing hysterectomy for example, Singh and Arora (2008) [35] have reported excessive menstrual bleeding, fibroids/cysts, uterine disorders, uterine prolapsed as a major cause of hysterectomy. Additionally Learman (2007) [36] has identified the common reasons including fibromatosis, endometriosis, pelvis organ prolapsed, abdominal uterine bleeding and endometrial hyperplasia for hysterectomy. Similar results were also observed by Singh and Govil (2021) [37] that the common reason for undergoing hysterectomy was being diagnosed with excessive menstrual bleeding, fibroids/cysts, uterine disorder, uterine prolapsed. Kumari and Kundu (2022) [26] have reported excessive menstrual bleeding, fibroids/cysts, uterine disorder, cancer, uterine prolapsed, severe post-partum hemorrhage and cervical discharge. Settnes and Jorgensen (1996) [38] have reported bleeding disorder and uterine fibroids was the two major reason undergoing hysterectomy. Another consistent observation was analyzed by [39] that the common reason for underwent hysterectomy was excessive menstrual bleeding (65.7%) and uterine prolapsed (29.6%) among women from Andhra Pradesh and Panjab.

On the basis of NFHS-4 and NFHS-5 [40] has revealed that highest cases of hysterectomy was among the residence of Andhra Pradesh, Telangana and Bihar. It was also evident that respondents from urban areas had high number hysterectomy than the women from rural areas. The rationale for the hysterectomy was excessive menstrual bleeding, fibroids, uterine disorder, post-partum hem-

orrhage, cervical discharge, uterine prolapsed and cancer, these findings corroborate with the present investigation that the prevalence of hysterectomy was high among the respondents from urban residence (57.10%).

Conclusion

The escalating prevalence of hysterectomy is a trend in contemporary society. In a state like Chhattisgarh; migration from rural to urban is increasing with predominant rural culture. As per finding of present study a total of 57.10% of urban and 42.90% of rural women from the district Bilaspur had undergone Hysterectomy. The dominance of subtotal hysterectomy along with abdominal procedures was common. The study clearly reveals that hysterectomy is associated with poverty, illiteracy and ethnic affinity Major reasons for hysterectomy were excessive bleeding, frequent menstruation and uterus infection. Additionally, early puberty, early nuptials as well as first pregnancy was also found associated with hysterectomy. Further the probability of hysterectomy was also increases with the increase in the number of pregnancies. The findings shows that clinical issues, physiological symptoms and reproductive history have positive association with hysterectomy among both rural and urban women. The increasing prevalence of hysterectomy is also strongly determined due to profit making attitude of health practitioners. The mitigation strategy should be focused on poverty elimination, female education and awareness among women through healthcare initiatives.

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Conflict of Interest

There is no conflict of interest.

Ethical Approval

This study is approved by Institutional Ethical Committee (IEC) of Dr. Harisingh Gour Vishwavidyalaya (A Central University), Sagar, Madhya Pradesh, India, vide Approval Number: DHSGV/IEC/2022/12.

Notes on Contributors

The study was designed and planned by SS under the supervision of RKG. Data collection, digitization, analyse as well as preparation of first draft was carried out by SS. The manuscript is thoroughly revised by RKG. Both the author read and approved the final draft.

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