

# An Investigation on the Perspectives of Women: Post Hysterectomy Challenges

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## Abstract

Introduction Hysterectomy is the most common gynecological procedure performed worldwide with three surgical approaches; vaginal, abdominal, and laparoscopic. Many women felt changes in their bodies, self-esteem, and urinary urgency. The main objectives of this study were to review the post-hysterectomy changes of women so that awareness can be created before undergoing Hysterectomy. Material and method: A comprehensive search of academic databases like PubMed, Google Scholar, Scopus, and ResearchGate for information on how well women understand hysterectomy and its potential side effects. More than 40 papers published in the last decade were considered. Changes in mental health, bone health, fertility, bladder function, and other areas are identified as five overarching themes that emerge from women's accounts of life after hysterectomy. Conclusion: Based on the findings of this study, hysterectomy is more common among women living in rural areas who have low levels of education and awareness. Results from studies focusing on women's perspectives are conflicting. Some research has found that patients' body-image, self-esteem, sexual desire, and general pleasure significantly improve. Patients report a wide range of unfavorable consequences, including changes in their sense of body image, difficulties with dynamic adjustment, lower bone mineral density, urine incontinence, UTIs, cystoceles, ovarian cysts, and elevated blood sugar levels, according to other research.

**Keywords:** Post-Hysterectomy; psychological changes, reproductive changes, sexual changes, osteoporosis, urinary incontinence.

## 1. Introduction

Worldwide, women among the age of 60, 1 in every 3 females undergo hysterectomy, and it is considered the second most common major gynecological procedure [0] especially in India. Hysterectomy is defined as the surgical removal of the reproductive organs mainly performed due to endometriosis, dysfunctional uterine bleeding, persistent pain, pelvic organ prolapses, or because of any previous injury to uterus [0]. National Family Health Survey (NFHS-4) 2016 report suggested that age specific prevalence of hysterectomy was 0.36% among women aged 15–29, 3.59% among women aged 30–39; and 9.20% among women aged 40–49 years across the country. According to the survey, the following states have a high prevalence of hysterectomy cases among women aged 15–49: Andhra Pradesh (11.4%), Telangana (10.2%), Bihar (7.9) and Gujarat (5.6%), whereas prevalence estimates were lowest in 4 states, which were Kerala (2.1%), Uttarakhand (3.1%), Chhattisgarh (2.7%), West Bengal (2.8%) and also North-Eastern States[0]. The uterus is considered as the symbol of femininity, sexuality, fertility, and maternity, and the loss of this organ is identified as a loss of womanhood [0]. Hysterectomy can be performed via vaginal route, abdominal route as well as with the use of Laparoscope and is classified into three types, that is, total, subtotal, and radical hysterectomy [0]. In

total hysterectomy, the uterus along with the cervix is removed but the ovary remains intact, and when the cervix is spared but the uterus is removed, it is termed as subtotal hysterectomy, while in radical hysterectomy, the whole uterus along with surrounding tissue and pelvic lymph nodes are removed[0]. It has been reported from a few different regions in India, including Rajasthan, Bihar, Chhattisgarh, and Andhra Pradesh, that an extremely high number of women are opting to have their uteruses removed. Many of these women are under the age of 40[0]. According to a case study, a camp was organized by the district magistrate concerning an upsurge in the number of women undergoing hysterectomy, there it was found that, 316 women, 12% of women had had their uterus removed unnecessarily, which could be cured with conservative techniques[0]. During a survey, most of the women were found to undergo hysterectomy unnecessarily. Some private practitioners see this as an opportunity to make a fast buck exploiting the national health insurance scheme neglecting the aggravation of symptoms such as, back pain, osteoporosis, urinary incontinence, loss of sexual pleasure and psychological changes that women will face post-hysterectomy[0]. Hysterectomy rates are higher among women living in Rural areas who do not had formal schooling, those with early marriage and high parity and those who do not have sufficient knowledge regarding its post-operative

complications[0],[Error! Reference source not found.]. Health care providers as well as women think post-reproductive uterus as the dispensable and superfluous organ; providers , to get rid of the gynecological ailments ( menstrual problems, cysts, fibroids) think hysterectomy as the all one-time solution for rural and low-income family because they do not have enough resources and awareness to try medicines, which the women living in urban areas have; on the same page, women's attitude towards uterus and menstrual taboos further increased some women's desire to undergo hysterectomy[0]. Therefore, this study was conducted to review the effect of hysterectomy on postoperative women's functioning.

## Methodology

Over 40 studies and reviews published in the past 10 years were included. ResearchGate, Pubmed, were searched for studies and reviews. In that, 3075 articles were displayed based on keywords, while 3035 articles were excluded based on opinions, editorials, abstracts only, and narrative reviews. 40 articles are included in the study, and the final selection was made based on the title and the full text [Figure 1].

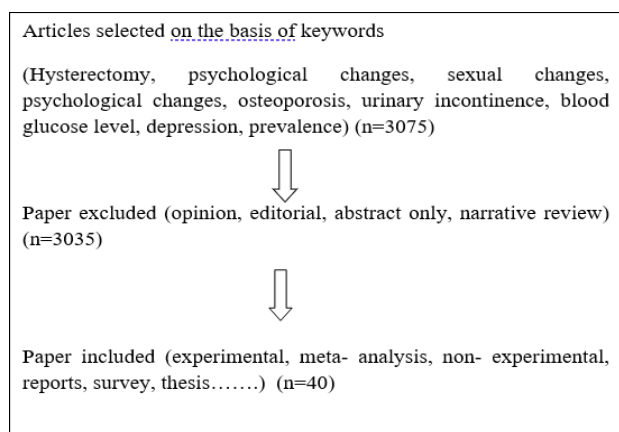


Figure 1: Articles selected on the basis of keywords.

Based on the review of selected studies post-operative symptoms are – behavioral changes such as depression[0], decreased bone mass density[0], urinary incontinence[0], changes in sexual functioning[0], increased blood glucose levels[0], and many more , experiences of women are categorized into four themes, which are :- Psychosexual changes, skeletal changes, reproductive changes , changes in urinary system and other changes [1].

Psychosexual changes: Hysterectomy brings about reduction in the stress regarding development of any further infection or cervical cancer and happiness among women because they will no longer face menstrual period[0] .and, therefore, mostly respondents evaluated their quality of life as “good” and “very good”, post-hysterectomy(0). Women undergoing hysterectomy, with the disease condition as uterine fibroids, showed significant improvement in body image and find their sexual life better than before, as it relieves pain, menstrual

bleeding and improves the QOL (0)(0) .More similar results are reviewed among hysterectomy cases for gynecological disease via laparoscopic method, which also showed improvement in terms of body image, and sexual functioning[0].Significant decrease in dyspareunia and increase in the orgasm after hysterectomy were also observed along with the results that showed no statistically difference between sexual functioning, sexuality(0),(0), psychological well-being, marital adjustment and quality of life , pre and post hysterectomy(0). In women, uterus is considered as an important factor where a special status is given to women who make menstrual blood and who are multiparous (0). Uterus is an organ which symbolizes femininity, childbearing, sexuality, attractiveness and regulation of body process(0). Thus, removal of uterus is also associated with psychological changes such as depression, anxiety , de-socialization and aggression, among all, depression is the most common complication seen[0]. The fear of being rejected, womanliness and fear of their appearance without a feminine organ creates psychological and physical problems in the life of a couple(0). Women undergoing hysterectomy, with the disease condition as gynecologic cancer were found in worse conditions in terms of body image, self-esteem and dynamic adjustment when compared to healthy women[0].Some women gets easily angry and irritated when loss of childbearing ability evoke their mind, felt upset, does not feel like a perfect woman and more concerned about other's opinion. Psychological dysfunction was more commonly found in women with BSO,(0) depression is mainly seen in nulliparous women(0) and among those women who had hysterectomy along with other co-morbidities, and who were on post-surgery hormone replacement therapy(0). In a comparative study, it was analyzed that marital adjustment and marital satisfaction was lower in women who had hysterectomy when compared to non-hysterectomized women[0]. Women with hysterectomy are at increased risk of bipolar disorder [0] and hormonal fluctuations may trigger the onset of it. Endometriosis and hormonal therapy following hysterectomy may contribute to the risk of developing bipolar disorder [0]. Women undergoing hysterectomy without bilateral oophorectomy are at increased risk for earlier ovarian failure because removal of uterus leads to diminished supply of blood to ovaries which in turn leads to reduction in the production of hormones leading to ovarian failure (0)

Skeletal changes: Osteoporosis is a skeletal system disease that results when the bone mass density declines and it may lead to fragility fractures and cause physical limitations which affect the quality of life by decreasing social or interpersonal relationships and post-operative women are found to have 2.26 fold higher risk of developing osteoporosis and 4.92 fold higher risk of vertebral fracture[0]. Premature menopause and early

menopause are the causes of osteoporosis and hysterectomy is one of the leading factor contributing to early menopause[0], prevalence of osteoporosis varied with age and it was highest among postmenopausal women who has undergone hysterectomy at the age interval of 36-45 year[0]. Surgical menopause affects the quality of life of a women as well as leading to decreased ovarian reserve and subsequently reduced long - term estrogen secretion giving rise to more production of osteoclast cells ( these cells help in bone resorption) causing reduction of bone mineral density and increased risk of osteoporosis and osteopenia(0),(0). A study in which 60 women with surgical menopause were selected , where half of the participants had their ovaries remain conserved and the remaining half undergone hysterectomy with oophorectomy designated that BMD ( bone mass density ) was declined in women with surgical menopause and osteoporosis and osteopenia were found to be significantly higher in women who had undergone hysterectomy along with oophorectomy, it also stated that, bone loss increases with increasing years of postmenopausal women with 1-2.3% in first 5years and 7-10% after 5 years, thus increasing the chances of osteoporotic fractures[0]. Furthermore, osteoporosis is significantly associated with increased BMI and higher parity.

Alterations in Urinary system: Higher grades of stress urinary incontinence have a higher likelihood of a low Valsalva leak point pressure (VLPP). Many women with grade 2 or 3 stress urinary incontinence have a VLPP of 90 cm. Women who had hysterectomy at least a year ago, were assessed using VLPP and among those women, 59% of participants were in 49-60 year old range and 24% were more than 60 year old. The mean of VLPP was 70.17 cm H<sup>2</sup>O and 94.55 cm H<sup>2</sup>O in women with hysterectomy and non-hysterectomy respectively and was significantly lower in the group of patients who had positive hysterectomy history, it was concluded that hysterectomy is a significant factor causing stress urinary incontinence and older patients were vulnerable for severe stress urinary incontinence[0],[0]. Women who had hysterectomy with higher age(0) and higher BMI(0) are considered as the more associated factor for urinary incontinence rather than hysterectomy alone.

Other changes: India is considered as the diabetic capital of the world [0] and women undergoing hysterectomy are one the contributing factor to the upsurge in diabetic patients. A NFHS -4 ( National Family Health Survey 2016 ) , an household survey, was conducted and random blood glucose level were assessed using a finger-stick blood specimen with a free style using a optimum glucometer and found that in post-hysterectomy women , blood glucose levels remain high[0], and the reason behind that is the deficiency of ovarian hormone , estrogen , which regulate the insulin secretion by acting on pancreatic islet- beta cells and deficiency of estrogen hormone leads to alteration in glucose

transportation and metabolic dysfunction , that results in development in Type-2 Diabetes Mellitus and obesity[0],[0]. In one of the study it was concluded that cystocele, urinary tract infections, urinary incontinence, vault prolapse, burning micturition, white discharge p/v, rectocele, vesicovaginal fistula were seen as the complications of hysterectomy[0]. Among all, cystocele and vault prolapsed, UTI(5) cases were found to be highest in women who had gone for vaginal hysterectomy. [0]. Chronic post-hysterectomy pain that leads to functional impairment was also found but it gets resolve with time.(0)

## 2. Discussion

Hysterectomy is a major surgery performed worldwide among women with fibroids, dysfunctional uterine bleeding, pelvic pain. According to the studies reviewed in this study, prevalence of hysterectomy is higher among women who do not have knowledge regarding the indications and post-operative complications and those who lives in rural areas. Post-hysterectomy experiences of women vary person to person. Women are more likely to report decreased bone mass density and increased risk of osteoporosis and fractures. Few studies indicated significant improvement in overall sexual functioning, while another study showed that major changes are not observed in sexual functioning. Body image and self-esteem are impaired and depression, anxiety and de-socialization is seen as a post-complication especially in women who have not completed their family yet, women felt sad and anguish when they think that they can no longer give birth to a child, while some studies showed happiness and were less stressed after the removal of their sick organ and improvement in terms of body image and self-esteem. Blood glucose levels of women remains high post-hysterectomy due to the deficiency in estrogen hormone. Stress-urinary incontinence was observed and more common in women with higher BMI and parity especially with vaginal hysterectomy while women who had had total hysterectomy showed no increase in their incontinency, therefore, post-hysterectomy changes also depend upon the type of hysterectomy chosen.

## 3. Conclusion

Post-hysterectomy research has shown both favorable and negative consequences. The reasons for the treatment, the type of hysterectomy chosen, and how it is performed all have an impact on the procedure's aftereffects. As a result, further research is required to determine which people may benefit and which patients may worsen other issues. More research has to be done to measure women's knowledge about hysterectomy and its complications. Awareness campaigns, particularly in rural communities, should be created to improve the awareness of women and their partners about the

surgery, potential problems, and post-operative physical, sexual, and psychological aspects.

Conflict of interest none

Funding: None

Ethical review

Not required

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