

Practitioner's Perception on Surge, Determinants and Ramifications of Hysterectomy in Jamnagar, Gujarat

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Abstract

Hysterectomy refers to the surgical removal of uterus often performed with prophylactic oophorectomy for various gynecological ailments. An increase in rates of hysterectomy in India particularly Gujarat as one of the hotspot is a matter of concern.

1. To establish the clinical, psychosocial, environmental determinants of gynaecological ailments leading to hysterectomy. 2. To acquire Practitioners' approach and patients' dilemma. 3. To highlight the aftermath of the procedure.

This study utilized qualitative research by phenomenological interviewing practitioners and reviewing of the status in hysterectomy practice. We have interviewed eight prominent gynaecologists practicing at Jamnagar in January 2023.

The findings indicate a significant surge in hysterectomy. Practitioners pointed on multiple factors influencing these rates from patient's attitude of neglecting the initial symptoms of any ailment and seeking aid when hysterectomy is unavoidable to poor knowledge about the need of reproductive organs beyond childbirth to neglecting follow ups leading to removal of uterus as the only practical approach to permanently terminate recurrent ailments. The incidence of morbidities followed by hysterectomy is spiking in premenopausal women. The consequences of this procedure are severe chronic disorders like hypertension, hypercholesterolemia, diabetes, osteoporosis, cardiovascular disorders, sexual dysfunction, mental health issues increasing the risks of mortality.

Hysterectomy is increasing in an alarming rate across the

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country. Insufficient knowledge, lack of awareness and disastrous lifestyle are modifiable factors contributing to surge. Imparting information about importance of reproductive system beyond childbirth and the consequences of the procedure in women can lead to better decision making.

Key words : Women's Health, Gynecological ailments, Hysterectomy.

Key Message: Prevention is better than cure hence it is crucial to seek medical aid upon any symptomatic manifestations to prevent major complications further. Moreover, it is vital for patients to be conscious of reproductive functioning beyond parturition and know the severity of consequences to make informed choices.

Hysterectomy, one of the most frequently performed non-obstetric surgery worldwide is the surgical removal of uterus which can be divided into partial, total and radical hysterectomies. An oophorectomy is performed along with hysterectomy to prevent cancers widely^{4,14,22}.

Medical Indications are mostly benign gynecological morbidities like dysfunctional uterine bleeding, recurrent fibroids, menorrhagia, endometriosis, ovarian cysts, endometrial hyperplasia, adenomyosis, prolapse of uterus, pelvic inflammatory disorders and cancers^{3,6,18}.

Although hysterectomy relieves patients from the recurrent benign gynecological ailments and liberates from chances of having cancers but it significantly leads to menopause, declining levels of oestrogen, urinary incontinence, sexual dysfunction, increased risk of osteopathies, coronary heart diseases and mental health problems. Thus, the mortality risk rises^{3,6}. A significant increase in the proportion of women undergoing hysterectomy has been reported over the years which intensifies the concern

as it immensely affects the physical, psycho-social and reproductive health of women^{5,23}. This study aims to present the practitioner's perspective on the following objectives:

Aim & Objectives :

1. To decipher the causative determinants responsible for the surge such as clinical, psycho-social, environmental factors (economy, lifestyle).
2. To determine the Practitioner's approach.
3. To analyse patients' approach and setbacks/limitations.
4. To highlight the post procedural ramifications.

This study utilized qualitative research by in-depth reviewing of the status in hysterectomy practice amongst developing countries particularly India and interviewing practitioners who widely perform this surgery in Jamnagar city. To understand the surge in prevalence of hysterectomy, the complexity of clinical, social, and behavioural factors that influenced women to undergo hysterectomy, alongside the side-effects, we used a method of phenomenological Interviewing^{1,3}.

Eight most prominent gynecologist were interviewed in the month of January 2023. Interviews were conducted and transcribed in English/Hindi/Gujarati. Findings were arranged and interpreted as per the questionnaire. The analysis of the data was conducted and described in results. In-depth review related to each objective is discussed.

The findings presented here are interpretations of the views of the medical practitioners in the field of gynecology and obstetrics to the questionnaire provided to them and interaction during the interview.

1. Surge of hysterectomy :

Almost all the practitioners agreed to have a substantial rise in the rate of hysterectomies in their health care centers or clinics in the span of last 5 to 10 years. They had variable perceptions on whether it is beneficial for the women on larger scale or risking their quality of life in physical, economic and psychosocial manner.

2. Medical indications of hysterectomy:

The practitioners mentioned a diverse spectrum of disorders for which the surgery is performed vastly. For cervical, uterine and ovarian cancers, dysfunctional uterine bleeding, polyps, cysts, recurrent and painful fibroids, endometriosis, adenomyosis, menorrhagia, prolapse of uterus. Dysfunctional uterine bleeding, menorrhagia followed by recurrent fibroids and ovarian cysts are the most common morbidities for which hysterectomies are widely performed.

Approach and availability of alternative

treatment/clinical management options :

Only 25% of doctors strongly opposed the removal of uterus alongside ovaries and considered it as the last resort after exploring all the available treatment options ranging from hormonal medications to implementation of reforms in lifestyle from changes in diet, introducing physical activities to lose weight as obesity plays a significant role in hormonal imbalance as a result of ovarian dysfunction.

Rest of them considered hysterectomy as a reasonable approach because of numerous factors.

“Hysterectomy is the best resort for the woman who have already had children and suffering from recurrent issues. It not only prevents them from constant pain and discomfort but also neutralizes the risk of cervical cancers which is the most common one.” says Doctor 1.

“Most women do not come back for follow ups when prescribed drugs and do not even complete the course once they temporarily start feeling better which turns up against them in course of time.” says Doctor 2.

“Women who have achieved their desired family size insist on having the uterus removed for common ailments like menorrhagia which can be managed with a non-surgical approach because of the prolonged treatment and chances of recurrence.” says Doctor 2.

“Menstruation is a taboo and restricts women because of the beliefs affecting the quality of their life which makes hysterectomy

more favourable option for any ailments as it ends up the problem for once and for all.” says Doctor 3.

“Now economic regression has been waved off by the “ayushman card” making it more accessible for patients bound by monetary limitations.” says Doctor 1.

Impact of lifestyle :

Upon asking about the factors that can prevent women from succumbing to such ailments all the practitioners directed towards the ill lifestyle practices. Insufficient health literacy leading to neglecting of intake of a complete meal or balanced diet is one of the most prominent factors. Intake of Fibres, Protein, Calcium, Magnesium, Vitamin D, and Vitamin B12 in diet are vital for a good menstrual health and overall well-being.

“Eating fried food and spicy items in daily life and living a sedentary life having the no physical activities in day to day life, addictions like smoking, drugs and alcohol have been constantly increasing amongst youth. Moreover there’s no proper sleep schedule which impacts the hormonal regulations highly hindering cortisol and androgen levels.” says Doctor 4.

People who are overweight or obese are more prone to have menstrual problems, hormonal imbalances (thyroid and oestrogen are most common), constant sleep deprivation, stressful life impacts the melatonin and cortisol levels.

Quality of life post hysterectomy :

Hysterectomy leads to permanent

cessation of menstruation irrespective of the age of the patient one loses the calibre to conceive.

A total hysterectomy (with oophorectomy) inhibits the oestrogen release which is a concerning factor as women in premenopausal age are massively undergoing this procedure which concerned one of the practitioners who rigidly believed in the concept of save uterus and explore all the alternative options.

This increases the susceptibility to cardiovascular diseases like ischemic stroke, hypertension, makes them more prone to osteoporotic hip fractures, knee problems, osteomalacia, hypercholesterolemia, oestrogen deficit results into loss of sexual function and immensely impacts the mental health as it may lead to anxiety and depression.

Some practitioners believed that the medical indications for the surgery were more concerning and these side effects are mostly inevitable after menopause up to a certain extent.

Discussion:

In India, a study depicts the surge in the rates of hysterectomy over the years from 6.4% before 1997 to 9.7% during 1997-2001 to 16.2% during 2002-2006 to 32.3% during 2007-2011 and 35.4% during 2012-2016 with Andhra Pradesh, Telangana, Tamil Nadu, Bihar and Gujarat as the hotspot of hysterectomy¹⁶. In a study of Gujarat an estimated prevalence of 20.7 per 1000 women-years was reported which is 4 times higher than the highest global rates of prevalence including the United States (5.1 per 1000), Germany (3.6 per 1000) and Australia (3.1 per

1000) [rates woman-years]^{12,28,30}. The present study emphasizes on the increasing prevalence, factors responsible and its consequences amongst women in Jamnagar district in the state of Gujarat, India.

According to the practitioners most women have been undergoing this procedure for various benign gynaecological morbidities out of which menorrhagia, abnormal and dysfunctional uterine bleeding, and fibroids are the most common. Other indications are adenomyosis, endometriosis, prolapse of uterus, cysts, ovarian uterine or cervical cancer. Similar indications are reported in numerous studies^{3,6,20}. Various literature have reported sterilization in the form of tubal ligation, high parity amplifying the risk of menstrual disorders leading to hysterectomy^{17,19}. To lower the risks of ovarian cancer a bilateral salpingo-oophorectomy with total hysterectomy is performed which has countless ramifications affecting the quality of life of women in premenopausal age^{21,22}. Going through the trail to determine the factors leading to the surge in hysterectomy is vast, diverse and complex by all means. There are numerous determinants like medical history, education background, affordability, awareness, age, lifestyle and psychosocial factors as well^{6,22}.

Practitioners have observed that the women who are educated are more self-aware and try to make wise choices than uneducated women^{6,22}. Many women are unaware about the functions and vitality of the uterus and ovaries beyond reproduction. Once they have achieved their desired family size, they tend to get rid of it at any inconvenience when offered owing to the prolonged pain and

discomfort and restrictive approach during menstruation affecting their daily life. In various parts of India, Menstruation is still a taboo and comes with household and societal restrictions for women. The idea of removal of uterus liberates them from going through this oppressive chain monthly^{6,22}. A study shows odds of having higher rates of hysterectomy in rural women than urban women in India by 22%¹³. Another study also indicates likelihood of hysterectomy 1.9 times higher among women belonging to households having health insurance making it more accessible financially²⁵.

The approach of practitioners also varies for every medical indication and state of the patient. Most of the practitioners find it difficult to provide a sustainable solution because of patient's negligence on following prolonged prescriptions of hormonal medications and financial insufficiency for incessant follow ups. This approach plays a vital role in the surge of hysterectomy. Moreover they also complain about patient's negligence to seek medical aid during the origination of clinical manifestations. The practitioners are approached when the pain is unbearable and the symptoms are unavoidable and so is the hysterectomy^{22,25}.

This is a matter of concern and requires research in depth nationwide. Literature show the developed nations like USA and Canada to be the pioneers of hysterectomy in previous years. Today, developing nations like India are at par having equivalent or higher no of hysterectomies every year^{7,30}. Furthermore the developed countries' rates of hysterectomy are declining and rates

of undergoing minimally invasive surgeries for benign gynecological morbidities like endometrial ablation and uterine embolization are rising^{7,30}. These alternative approaches even did not make it to the discussion by the most prominent practitioners as alternatives during our interviews which prominently indicates the extent to which the patients neglect their clinical manifestations leaving hysterectomy as the sole option when they come forward. Additionally, a significant increase in rate of hysterectomies amongst premenopausal women along with menopausal women is been noticed in the city. A study in India estimates the rise in hysterectomy in the age of 15-49 years to be 17 per 1000 married women across different states with 1/3rd of women who have undergone this procedure below 40 years²². Another major study in India shows the median age of Hysterectomy to be 34 years and lower indicating half of the hysterectomies in India are done before women hit their mid-30s²⁵.

Hence, Age is a significant factor and prominent predictor of hysterectomy as Hysterectomy (accompanied by oophorectomy) is not only the fate of countless menopausal and post-menopausal women but also premenopausal women today. In the era of increasing hysterectomy amongst younger women it is crucial to recognize the consequences and acknowledge the function of ovaries (besides release of egg/ reproductive function) generating oestrogen which is essential for healthy bones and optimum cardiovascular activity. Removal of ovaries accelerates the risk of onset of multiple non communicable diseases. Hysterectomy accompanied by oophorectomy has been found to be associated

with diabetes, obesity, hypertension, hypercholesterolemia, osteoporosis, osteoarthritis and osteomalacia amongst Indian women is reported in various studies^{10,11}. Moreover, it also accelerates the risk of cognitive impairment and loss of sexual desire among women. Removal of uterus at a reproductive age induces pre mature menopause (before 40s) which increases the risk of excess mortality, neurological, cardiovascular, psychiatric and osteoporosis^{10,11,21}. Post hysterectomy common after effects are found to be urinary incontinence, UTIs, loss of sexual desire, backache, fatigue and leucorrhoea (vaginal discharge)^{7,26,27}.

The physiological mechanisms for the association between these chronic conditions and hysterectomy derive a straight link to the reduction of oestrogen levels as a result of loss of ovarian function. A study emphasizes at the need for Ovarian Conservation while undergoing hysterectomy for benign diseases as 90% of the 6, 00,000 hysterectomies performed yearly are for non-malignant causes²¹. It also shows the vitality of ovarian conservation and oestrogen therapy at the time of hysterectomy showing significant difference in ramifications, quality of life and cause of death from those who have undergone oophorectomy and do not seek oestrogen therapy. The ramifications included osteoporotic hip fractures, ischemic stroke, coronary heart diseases, and ovarian cancer eventually leading to death. While, oophorectomy is performed to neutralize the threat of ovarian cancer, it was found to be the least significant cause of death²¹. Premenopausal oophorectomy accounts to sudden onset of hot flashes and disturbances in overall mood in the lack of oestrogen uptake²¹. Thus oestrogen therapy is essential

and it prevents risks up to an extent as shown in one of the studies²¹. Various studies showed women to be more prone to have hypertension and blood glucose post hysterectomy in reproductive age as well as post menopause in India^{11,18,27}. Thus, the post-operative consequences of this procedure and the low median age of undergoing this procedure jeopardizes women's health and longevity making it an alarming issue nationwide.

The aftermath of hysterectomy and oophorectomy and its accelerating prevalence is massively related to the lifestyle of women. Cardiovascular Diseases, Hypertension, hypercholesterolemia, diabetes, obesity (higher BMI), osteoporosis of knee and spine are all multi-factorial disorders thus accounted as modifiable consequences as it can be regulated by conducting a healthy lifestyle consisting of a healthy diet, cutting off alcohol and smoking, engaging in physical exercise and activities^{2,8,13}. Impact of physical exercise is immense in women prevents the incessant weight gain and obesity with declining oestrogen and prevents hormonal imbalance thus having a healthy menstrual system functioning with benefits in all facets^{9,15,29}. Countless studies show positive impacts of physical activity and regulation of diet via calorie deficit approach to maintain an ideal BMI, enhance and regulate the bone health, cardiovascular functioning and mental well-being by building endurance, regulation of muscle mass, improving blood circulation, and preventing age related metabolic degradation^{9,24,29}.

Hysterectomy is significantly prevalent in India with Gujarat being one of its hotspot. This study has analysed the causative factors

and assimilated the ramifications as well from the practitioner's viewpoint.

Most of the gynecological ailments for which hysterectomies are immensely performed are benign and can be considered treating with non-invasive first line treatments like consistent oral medications, hormonal injections followed by minimally invasive second line treatments like uterine artery embolization (UAE), cervical ablation, myomectomy leaving highly invasive interventions like hysterectomy and prophylactic oophorectomy as the last resort.

Poor knowledge about the utilities of female reproductive system beyond childbirth, negligence to consult and get treated when symptoms are minimal (and alternative approaches are potential to terminate the ailments), regressive socio cultural factors regarding menstruation, lack of awareness about the post-operative complications and its association with prevalence of various chronic disorders play a vital role in uplifting the rates of Hysterectomy. It is important to create awareness amongst women to have a holistic approach towards lifestyle to prevent chances of succumbing to this procedure. Awareness regarding the endocrine, cardiovascular, psychiatric, osteological, cardiomyascular factors associated with the ovaries is necessary. Moreover, the derogatory consequences of occurrence of menopause in the reproductive years should be made well understood to the patients. Availability of alternative treatment options in all the medical facilities is necessary. Such an approach promotes awareness via education, prevention, top grade treatment choices for patients by providers and secures the accelerating trajectory of chronic consequences impacting quality of life of women in coming

years.

Recommendation :

Along with awareness regarding menstruation, menstrual hygiene etc. it is important to associate the importance of uterus beyond reproduction in rural areas and across health care centers' information boards for all. We need more research on consequences of these procedures widely. Screening and detection for widely prevalent gynecological ailments should be initiated and made accessible to women of all backgrounds for detection of morbidities in time. Availability and accessibility of alternative treatments across the health care institutions nationwide is crucial. In depth counselling of patients before undergoing hysterectomy regarding side effects, educating the importance of oestrogen therapy is important for leading a smooth life.

Limitation of the study :

This study is based on our understanding of the interpretations of practitioners in the field of Gynecology and Obstetrics. No patients were intervened in the study for determinants considered. Hence, it may be biased as it is solely based on the practitioner's views on factors and concerns. This study doesn't put greater emphasis on the impotencies of health care systems regarding availability of options, financial approaches like funding and charity, insurances, malpractices or misuse of procedure in the health care systems.

We dedicate this study to Late Mrs. Krishna Banerjee who was the driving force to indulge into this subject of concern. We are thankful to all the practitioners for allowing us

to interview them and share their valuable insights on the subject of concern in detail.

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