

# Assessment of Prevalance, Risk Factors And Treatment Of Uterine Fibroids In Tertiary Care Hospital

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## Abstract

This observational study was conducted to assess the risk factors, treatment of uterine fibroids. The data was collected from the hospitals for 3 months. The data collected was studied and results were interpreted. The collected information suggests that among all the risk factors, Age is the major risk factor in which 60-70% of 45-55 age group people are majorly affected. Also comorbidities like heavy menstrual bleeding and Anaemia are majorly observed in the subjects. Some of the complications like Pelvic pressure, growth of stomach and frequent periods are observed in many of the subjects. In women who present with acute uterine bleeding associated with uterine fibroids, conservative management with estrogens, selective progesterone receptor modulators, but hysterectomy may become necessary in some cases. We came to know that the cause of uterine fibroids are unknown, but there is evidence that multiple factors may increase the risk of developing uterine fibroids

**Key words:** uterine fibroids; gynaecological tumors; leiomyomas

## Introduction:

Uterine fibroids are the common gynaecological tumors arising from the uterine smooth muscle.

Uterine fibroids are also called as leiomyomas or myomas. These are common neoplasms of the uterus. It has been found that 70 to 80 % of women in their reproductive age are affected by the fibroids. Fibroids are commonly found after puberty and diminishing after menarche. Majority of the fibroids are asymptomatic and some are symptomatic. Uterine fibroids are noncancerous growths of the uterus that often appear during childbearing years. They can vary in size and symptoms, with some women experiencing pelvic pain, heavy menstrual bleeding, or reproductive issues. Treatment options include medication, procedures, or surgery, depending on the severity and symptoms. Consult with a healthcare professional for personalized advice.

Uterine fibroids, also known as leiomyomas or myomas, are benign

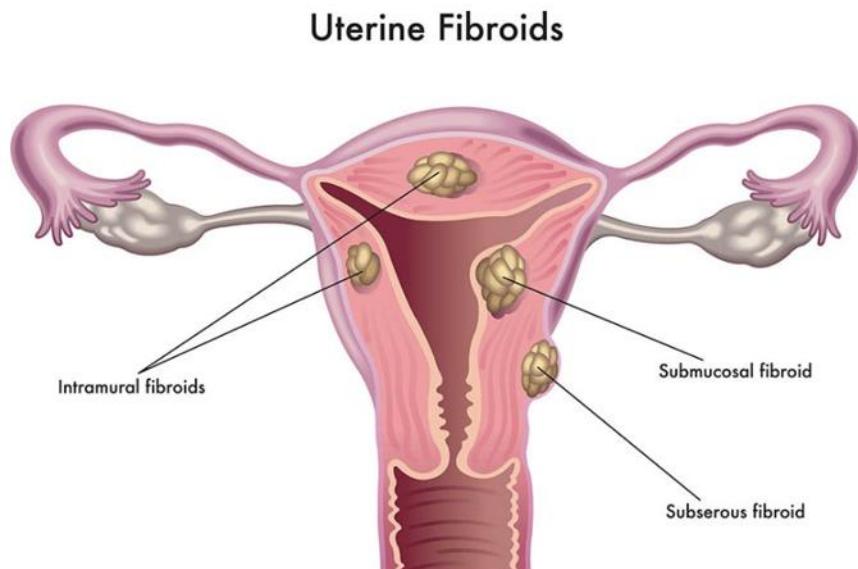
(noncancerous) tumours that develop in the muscular wall of the uterus. These growths are composed of smooth muscle cells and fibrous connective tissue. While the exact cause of uterine fibroids is unclear, factors such as genetics, hormonal fluctuations, and Estrogen levels play a role in their development.

Common during reproductive years, fibroids vary in size, ranging from small, undetectable nodules to large masses that can distort the shape of the uterus. Although many women with fibroids may remain asymptomatic, others may experience symptoms such as heavy menstrual bleeding, pelvic pain or pressure, frequent urination, and backache.

The diagnosis of uterine fibroids often involves imaging studies, such as ultrasound or MRI, and treatment options depend on factors like the size and location of the fibroids, as well as the severity of symptoms.

## Fibroids may arise from different areas of uterus

- Intramural
- Endometrial
- Submucosal
- Subserosal
- Fundus subserosal

**Location of Fibroids:****Figure 1: Location of fibroids****Prevalence :**

Uterine fibroids prevalence is -in rural India 37.65% And in urban India 24%. Uterine fibroids are common, especially among women of reproductive age. Studies suggest that around 70-80% of women may develop fibroids by the age of 50, although not all cause symptoms.

Factors such as age, ethnicity, and family history can influence prevalence.

**Risk Factors:**

Several factors may increase the risk of developing uterine fibroids, including:

- 1.Age and Ethnicity: Women of reproductive age, particularly those in their 30s and 40s, are more likely to develop fibroids. Additionally, African American women are at a higher risk than women of other ethnic backgrounds.
2. Family History: If a woman has a family history of fibroids, her risk may be higher. Genetic factors seem to play a role.
3. Hormones: Estrogen and progesterone, hormones that regulate the menstrual cycle, appear to influence fibroid growth. Pregnancy and hormonal changes associated with birth control or hormone replacement therapy may affect fibroid development.
4. Obesity: Being overweight or obese increases the risk of fibroids.
5. Diet: Some studies suggest that diets high in red meat and low in green vegetables may be associated with a higher risk of fibroids.
6. Early Menstruation: Starting menstruation at an early age may be a risk factor.
7. No Childbirth: Women who have not given birth may be at a higher risk.

It's important to note that many women with risk factors do not develop fibroids, and the exact cause remains unclear.

**Symptoms:**

The most common symptoms of uterine fibroids include:

- Heavy menstrual bleeding or painful periods.
- Longer or more frequent periods.
- Pelvic pressure or pain.
- Frequent urination or trouble urinating.
- Growing stomach area.
- Constipation.
- Pain in the stomach area or lower back, or pain during sex.

**Diagnosis:**

- Patient with comorbid conditions like thyroid, Hypothyroidism, Anemia, Other UTI Magnetic resonance imaging (MRI). This test can show in more detail the size and location of fibroids. It also can identify different types of tumors and help determine treatment options. Most often, an MRI is used in people with a larger uterus or in those who are nearing menopause, also called perimenopause.
- Hysterosonography: Hysterosonography uses sterile salt water called saline to expand the space inside the uterus, called the uterine cavity. This makes it easier to get images of submucosal fibroids and the lining of the uterus if you're trying to get pregnant or if you have heavy menstrual bleeding. Another name for hysterosonography is a saline infusion sonogram.
- Hysterosalpingography: Hysterosalpingography uses a dye to highlight the uterine cavity and fallopian tubes on X-ray images. Your doctor may recommend it if infertility is a concern. This test can help
- find out if your fallopian tubes are open or are blocked, and it can show some submucosal fibroids.
- Hysteroscopy. For this exam, your doctor inserts a small, lighted telescope called a hysteroscope through your cervix into your uterus. Then saline is injected into your uterus. This expands the uterine cavity and lets your doctor

check the walls of your uterus and the openings of your

fallopian tubes.

### Treatment:

#### Surgical treatment:

- Myomectomy
- Laparoscopic myomectomy
- Hysterectomy
- Robotic myomectomy

#### Minimal invasive procedures:

- Uterine artery embolization /uterine fibroid embolization
- Thermal ablation
- High intensity focus ultrasound (HIFU)

### Aims And Objectives

AIM: The main aim of this study is to assess the Prevalence, Risk factors and Treatment of uterine fibroids in tertiary care hospital.

#### Objective:

- To evaluate the prevalence rate of uterine fibroids.
- To evaluate the risk factors which affect the uterine fibroids.
- To evaluate the treatment given to the patients of uterine fibroids.

#### Materials and methods:

Study design: It is a prospective observational study

#### Results:

#### Risk Factors-

AGE- Age distribution for the population was done and categorised accordingly. In 100% of overall distribution age group between 46-50 are mostly effected.

AGE	POPULATION
20-25	3
26-30	3
31-35	7
36-40	6
41-45	7
46-50	8
51-55	6

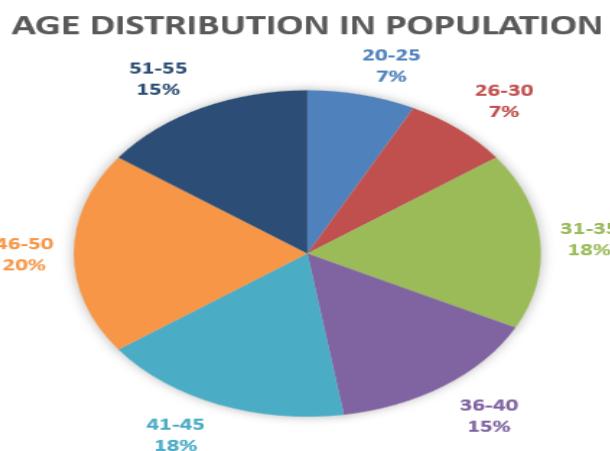


Figure 1 : Age Distribution

### Discussion:

A Prospective observational study was done on patients suffering with uterine fibroids [including multiple fibroids]. The patients admitted with Uterine fibroids have undergone various treatments and given various medications in accordance with their condition. Medical therapies used for uterine fibroids include tranexamic acid, NSAIDs, contraceptive steroids, progesterone coil, GnRH analogues, aromatase inhibitors, SERMs and progesterone receptor modulators.

There are many risk factors that may show effect on uterus. Major risk factor was found to be Age. As previously reviewed Age is the major risk factor, around 40-50 age group females are affected but in this study we came to know that females around age group of 20-25 are also effected by fibroids.

This may be due to their life style management and other factors like Early menstruation, obese conditions, Family history, Diet etc.

This may affect their quality of life.

The treatment methods followed in Fibroid condition is majorly Hysterectomy.

At present conditions minimally invasive procedures can be followed.

Endometriosis and Uterine Fibroids are the two most common gynaecological diseases affecting women's quality of life and uterine function

Results suggests that many women are likely undiagnosed, underscoring the need for improved awareness and education.

We also studied the comorbidities such as Hypertension, Anaemia, Thyroid [Hypothyroidism], Hyperlipidemia, Other UTIs.

We also studied about the complications Heavy menstrual bleeding or painful periods, Longer or more frequent periods, Pelvic pressure or pain, Frequent urination or trouble urinating, Growing stomach area, Constipation Pain in the stomach area or lower back, Obesity.

Uterine fibroid is a common concern in women at fertile age causing multiple bleeding and pain symptoms which can have a negative impact on different aspects in women's life. The problem with this is, the majority of women with uterine fibroids are asymptomatic, consequently get less clinical attention and fibroid tumors often remain undiagnosed.

### Conclusion:

This wealth of data has allowed the identification of various trends, specifically relating to the prevalence, symptoms and management of uterine fibroids.

The study results are consistent with available data and underline that uterine fibroids are a common concern for women in fertile age, especially in the age group of the over 40s.

Uterine fibroids can cause multiple bleeding and pain symptoms which might have a negative impact on women's life, influencing their sexual, social and work life.

Despite these consequences uterine fibroid data, especially on Risk factors , treatment and their impact on women's health are still limited and further research is required.

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