

# A Study to Identify the Recent Diagnostic Modalities for Fibroid Uterus among Women at SMVMCH, Puducherry

A. Arulraj<sup>1</sup>, V. Santhiya<sup>2</sup>

<sup>1</sup>Nursing Officer in Obstetrics, Sri Manakula Vinayagar Medical College and Hospital, Puducherry, India

<sup>2</sup>Assistance Professor, Department of Mental Health Nursing, Sri Manakula Vinayagar Nursing College, Puducherry - 605107, India

**Abstract:** *Uterine fibroids are the most common gynecologic tumor present in up to eighty percent of all women by the age of 50. While most uterine fibroids do not cause symptoms, some women can experience severe symptoms that significantly impact their quality of life. Fibroid symptoms include heavy and irregular menstrual bleeding with accompanying anemia, pelvic pain, dysmenorrhea, dyspareunia, increased urinary frequency, infertility, early pregnancy loss, among others. The effects of fibroids on fertility were formerly believed to be exclusively as a result of their size however, this perspective has changed as our understanding of fibroid pathogenesis at the molecular level has broadened. Fibroids influence endometrial gene expression through paracrine interactions. Majority of the women 26 (86.7%) had adequate level of knowledge, and 4 (13.3%) had moderate level of knowledge. The mean and standard deviation of level of knowledge regarding identify the recent diagnostic modalities for fibroid uterus among women is (19.67+2.657) respectively.*

**Keywords:** identify, recent diagnostic modalities, fibroid uterus, women,

## 1. Introduction

Uterine fibroids are the most common gynecologic tumor, present in up to eighty percent of all women by the age of 50. While most uterine fibroids do not cause symptoms, some women can experience severe symptoms that significantly impact their quality of life. Fibroid symptoms include heavy and irregular menstrual bleeding with accompanying anemia, pelvic pain, dysmenorrhea, dyspareunia, increased urinary frequency, infertility, early pregnancy loss, among others.

The effects of fibroids on fertility were formerly believed to be exclusively as a result of their size; however, this perspective has changed as our understanding of fibroid pathogenesis at the molecular level has broadened. Fibroids influence endometrial gene expression through paracrine interactions.

Additionally, the effect of fibroids on the endometrium is global and not localized to the endometrium overlying the fibroid itself. We conducted a review of the literature to evaluate and discuss what is currently known about how uterine fibroids interact with the endometrium and how these interactions lead to clinical symptoms, specifically infertility, miscarriage, and heavy menstrual bleeding in national institute of health, Bethesda, USA.

Uterine fibroids are benign uterine smooth muscle tumors that are present in up to 8 out of 10 women by the age of 50. Many of these women experience symptoms such as heavy and irregular menstrual bleeding, early pregnancy loss, and infertility. Traditionally believed to be inert masses, fibroids are now known to influence endometrial function at the molecular level.

We present a comprehensive review of published studies on the effect of uterine fibroids on endometrial function. Our goal was to explore the current knowledge about how uterine fibroids interact with the endometrium and how these interactions influence clinical symptoms. Our review shows that submucosal fibroids produce a blunted decidualization response with decreased release of cytokines critical for implantation such as leukocyte inhibitory factor and cell adhesion molecules.

### Aim of the study:

The aim of the study was to assess recent diagnostic modalities for fibroid uterus among women.

### Objective:

- To assess level of knowledge on recent Diagnostic modalities for fibroid uterus among women.
- To associate the level of knowledge on recent Diagnostic modalities on fibroid uterus among women with selected demographic variables.

## 2. Methodology

Research methodology is a way to systematically solve the research problem by typically adopting various steps. It is one of the important phase in research work in which the investigator makes a number of decisions about the methods used to study the research problem through data collection. This phase of study includes research approach, research design, variables, setting, population, sample and sample size, sampling techniques, criteria for sample selection, development and description of tool, scoring procedure, pilot study, data collection procedure and plan of statistical analysis of the data. The present study is carried out to assess to identify the recent diagnostic modalities for fibroid uterus among women at SMVMCH, puducherry.

**Research Design:**

A descriptive Research Design was adapted for this study.

**Research Setting:**

The study will be conducted at the study was conducted at gynaecological OPD, SMVMCH. Sri Manakula Vinayagar Medical College and Hospital, It consist of 1050 - bedded hospital in Puducherry. The population of the study have attending gynaecological problems of SMVMCH patients. Sample size is the number of subjects involved in the study. Sample size consists of 30 women with gynaecological problems. Sampling refers to the process of selecting a portion of the population to represent the entire population. Sampling technique chosen was purposive sampling.

**Description of Tool:**

The tool used for this study consists of 2 sections namely,

**Section A:**

Demographic variables such as age, religion, residence, education, occupation, monthly income, marital status.

**Section B:**

It consists of totally 25 questions. Each question carries one mark.

**Data Collection Procedure**

The data collection done with the permission to conduct the study was obtained from authorities of the concerned person Sri Manakula Vinayagar Medical College and Hospital, Puducherry. 30 women's were selected by using convenience sampling techniques and according to the inclusion and exclusion criteria and after introducing and explain the purpose of the study. The tool consists of demographic variables and knowledge questions were administered to respondents and data was collected.

**3. Results**

The major findings of the study were;

Shows frequency and percentage distribution of subjects by age in years. the analysis of age show that 23 (76.70%) of them belong to 25 - 35 years and 7 (23.30%) of them belongs to 36 - 46 years of age.

Shows frequency and percentage distribution of subjects by occupational status. the analysis of occupation show that 17

(56.70%) of them belong to self employer and 13 (43.30%) of them belongs to private employer of occupation.

Shows frequency and percentage distribution of subjects by types of family. the analysis of family show that 15 (50%) of them belong to Nuclear family and 15 (50%) of them belongs to join family of family.

Shows frequency and percentage distribution of subjects by Diagnosis. the analysis of Diagnosis show that 30 (100%) of them belong to fibroid uterus of Diagnosis.

Shows frequency and percentage wise distribution of level of knowledge regarding identify the recent diagnostic modalities for fibroid uterus among women. Majority of the women 26 (86.7%) had adequate level of knowledge, and 4 (13.3%) had moderate level of knowledge. The mean and standard deviation of level of knowledge regarding identify the recent diagnostic modalities for fibroid uterus among women is (19.67+2.657) respectively.

Shows frequency and percentage distribution of subjects by level of knowledge. the analysis of knowledge show that 26 (86.70%) of them belong to adequate knowledge and 4 (13.3%) of them belongs to moderate knowledge.

**Assessment of level of knowledge regarding identify the recent diagnostic modalities for fibroid uterus among women.**

**Table 1:** Frequency and percentage wise distribution of level of knowledge regarding identify the recent diagnostic modalities for fibroid uterus among women, (N= 30)

Level of Knowledge	Frequency (n)	Percentage (%)
Inadequate	0	0
Moderate	4	13.3
Adequate	26	86.7
Total	30	100
Mean + Standard Deviation	19.67 + 2.657	

**Table 1** shows frequency and percentage wise distribution of level of knowledge regarding identify the recent diagnostic modalities for fibroid uterus among women. Majority of the women 26 (86.7%) had adequate level of knowledge, and 4 (13.3%) had moderate level of knowledge. The mean and standard deviation of level of knowledge regarding identify the recent diagnostic modalities for fibroid uterus among women is (19.67+2.657) respectively.

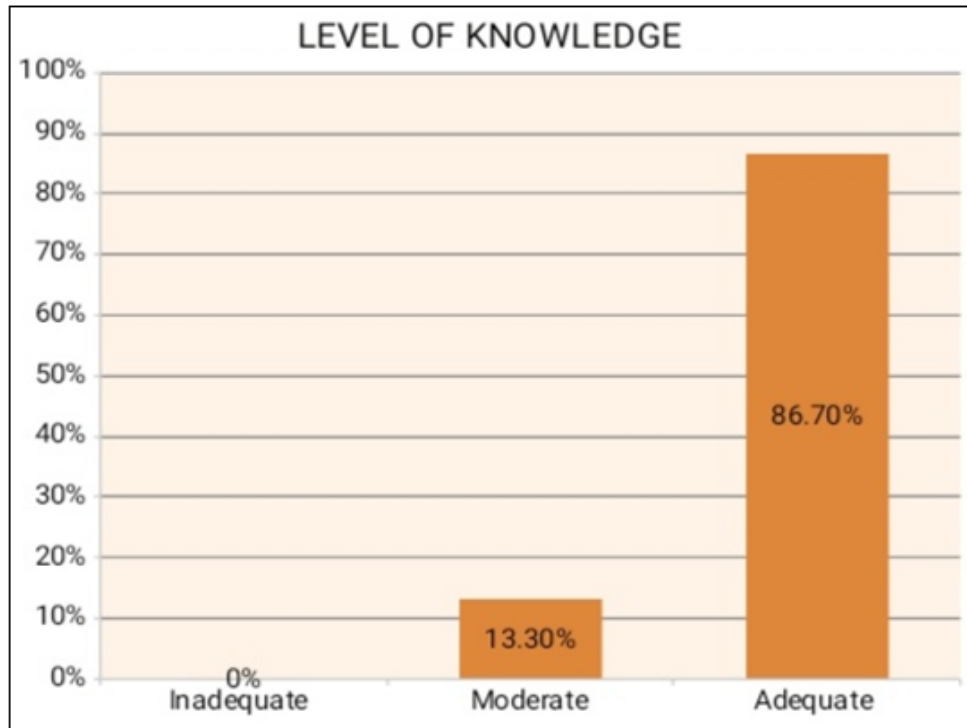


Figure 1: Frequency and percentage distribution of subjects by level of knowledge

#### 4. Conclusion

This study was preliminary effort that focused to identify the recent diagnostic modalities for fibroid uterus among women a descriptive research design was used in this study. The data was collected from 30 samples. The conclusion drawn in this study from descriptive data subjects were as follows. The study revealed that to identify the recent diagnostic modalities for fibroid uterus among women.

#### References

- [1] Bruce. Debra F. "Fibroids. " In *The Unofficial Guide to Alternative Medicine*. New York, NY: McMillan General Reference, 1998. pp.278 - 281.
- [2] Cesen - Cummings. K; Houston, KD; Copland, JA; Moorman, VJ; Walker, CL; Davis, BJ (2003). "Uterine leiomyomas express myometrial contractile - associated proteins involved in pregnancy - related hormone signaling". *Journal of the Society for Gynecologic Investigation* 10 (1): 11 - 20. doi: 10.1016/S1071 - 5576 (02) 00191 - 0. PMID 12517588.
- [3] Fibroids, *Clinical Knowledge Summaries* (December 2009)
- [4] Gupta JK, Sinha AS, Lumsden MA, et al; Uterine artery embolization for symptomatic uterine fibroids. *Cochrane Database Syst Rev*.2006 Jan 25; (1): CD005073. [abstract]
- [5] Hirst A, Dutton S. Wu O, et al; "A multi - centre retrospective cohort study comparing the efficacy, safety and cost - effectiveness of hysterectomy and uterine artery embolisation for the treatment of symptomatic uterine fibroids. " *The Hopeful study*. *Health Technol Assess*.2008 Mar; 12 (5): 1 - 248, iii. [abstract]
- [6] Laparoscopic laser myomectomy. *NICE Technology Appraisal* (2003)
- [7] Levy BS; Modern management of uterine fibroids. *ActaObstetGynecol Scand*.2008; 87 (8): 812 - 23. [abstract]
- [8] Lumsden, M. A. "Embolization versus Myomectomy versus Hysterectomy: Which Is Best, When?" *Human Reproduction* 17 (February 2002): 253 - 259.
- [9] Magnetic resonance image - guided percutaneous laser ablation of uterine fibroids, *NICE Technology Appraisal* (2003)
- [10] Magnetic resonance image - guided transcuteaneous focused ultrasound for uterine fibroids, *NICE Interventional Procedure Guideline* (2007)
- [11] Maruo. T.; Ohara, N.; Wang, J.; Matsuo, H. (2004). "Sex steroidal regulation of uterine leiomyoma growth and apoptosis". *Human reproduction update* 10 (3): 207 - 220. doi: 10.1093/humupd/dmh019. PMID 15140868.
- [12] Mehl - Madrona, L. "Complementary Medicine Treatment of Uterine Fibroids: A Pilot Study. " *Alternative Therapies in Health and Medicine* 8 (March - April 2002): 34 - 6, 38 - 40, 42, 44 - 6.
- [13] NaikShubash. Nathan L. T. "Indian prevalence rate, Fibroid uterus. *National Institute of Health Science*, 2006, pp.275 - 278.
- [14] New non - surgical treatment for uterine fibroids can improve quality of life and maintain fertility. *Press release from European Society of Human Reproduction and Embryology*. June 2010
- [15] Okolo, S. (2008). "Incidence, aetiology and epidemiology of uterine fibroids". *Best practice & research. Clinical obstetrics & gynaecology* 22 (4): 571 - 588. doi: 10.1016/j. bpobgyn.2008.04.002. PMID 18534913.