

A CROSS SECTIONAL STUDY ON KNOWLEDGE, ATTITUDE AND PERCEPTION OF UTERINE FIBROIDS AMONG WOMEN WITH FIBROIDS ATTENDING A TERTIARY HEALTH CARE CENTRE IN CHENNAI

ABSTRACT:

Introduction:

Fibroids are the most common benign neoplasms of the reproductive age group. Both hormonal and genetic factors contribute to the etiology. Only 20%-50% of women affected with fibroids, exhibit symptoms. The management strategies are usually individualized based on patient desires and presenting complaints. The aim of this study is to assess the knowledge, attitude and perception of uterine fibroids among women with fibroids.

Methodology:

This is a descriptive cross-sectional study conducted among the patients of Saveetha Medical College and Hospital. 164 patients were chosen through convenient sampling. The Data was compiled and analyzed in MS Excel.

Results:

95.73% of the respondents show poor knowledge concerning uterine fibroids though their attitude towards management is astounding. However, perception of 92.68% of women on fibroids is dissatisfactory.

Conclusion:

Various counselling programs have to be imparted to create awareness among women on fibroids.

Keywords: *Uterine Fibroids, Knowledge, Attitude, Perception*

INTRODUCTION:

Fibroids (leiomyomas, fibromas, fibromyomas) are the commonest benign neoplasm of the uterus^[1]. Fibromyomas are benign tumours arising from smooth muscle cells ~~tests~~ either from uterine musculature or vessel walls^[1]. About 1 in every 20 women, round the globe suffer from fibroids^[2]. The incidence ranges from 20% - 40% amongst women of reproductive age group^[3,4]. Leiomyomas are hardly found before menarche and they often get atrophied after menopause, depicting the role of oestrogen and progesterone ~~in~~ the growth of fibroids^[1]. Genetic factors also have been known to play a synergistic role ~~in~~ the development of fibroids^[5].

Fibromyomas are clinically apparent in only 20% - 50% of those affected^[6]. The clinical symptomatology may vary with the number, size and the location of the fibroid^[1]. Though menstrual disturbances and pain are the most common manifestations, women also encounter complications like pregnancy losses, postpartum haemorrhage, uterine inversion, etc.,^[1]

Furthermore, there are innumerable treatment options available for the management of fibroids. The managing modalities are usually individualized based upon the clinical presentation and patient desires. Former times, ~~h~~ysterectomy and myomectomy were the only treatment options available, but now they have been surpassed by various minimally invasive procedures like Uterine artery embolization, Magnetic resonance - guided focussed ultrasound surgery (MRFS) and ablative procedures (VizAblate, Acessa), etc.,^[7]

Although Fibromyomas are benign, they are irrefutably entangled with significant morbidity and mortality due to ~~oblivion~~. Hence this study aims to assess the knowledge, attitude and perception of women with fibroids on uterine fibroids.

Comment [N1]: Better to use 'lack of awareness' instead of oblivion

METHODOLOGY:

Study design and population:

This -descriptive cross-sectional -study was carried out among the patients of Saveetha Medical College and Hospital, a private university, located in the outskirts of Chennai, India. Women diagnosed with uterine fibroids were recruited for the study. Patients diagnosed with fibroids, other than uterine and also those who were not willing to participate in the study were exempted from the study.

Study period:

The study was carried over for a period of six months, from January 2021 to March 2021.

Comment [N2]: Please check the duration of the study. Is it 6 months or 3 months??

Sample size and sampling technique:

The sample size of the study was estimated to be 164. The participants were chosen through convenient sampling.

Comment [N3]: Please provide the method used for sample size determination

Data collection:

-The Data was collected using a pre-tested questionnaire on clinical symptomatology, knowledge, attitude and perception with respect to myomas.

Comment [N4]: It will be good to provide details on how this questionnaire was formulated and tested.

Data analysis:

The data was compiled and analyzed in MS Excel.

Ethical approval and informed consent:

Ethical approval was obtained from the Institutional Review Board. Informed Consent was obtained from each and every participant of the study after explaining the study objectives.

RESULTS:

**TABLE 1: SOCIO-DEMOGRAPHIC DETAILS OF THE STUDY PARTICIPANTS
[N=164]**

VARIABLE	FREQUENCY	PERCENTAGE
AGE (in years)		
<=20	0	0.00
21-30	4	2.44
31-40	94	57.32
41-50	66	40.24
>50	0	0.00
EDUCATIONAL STATUS		
Profession or Honours	0	0.00

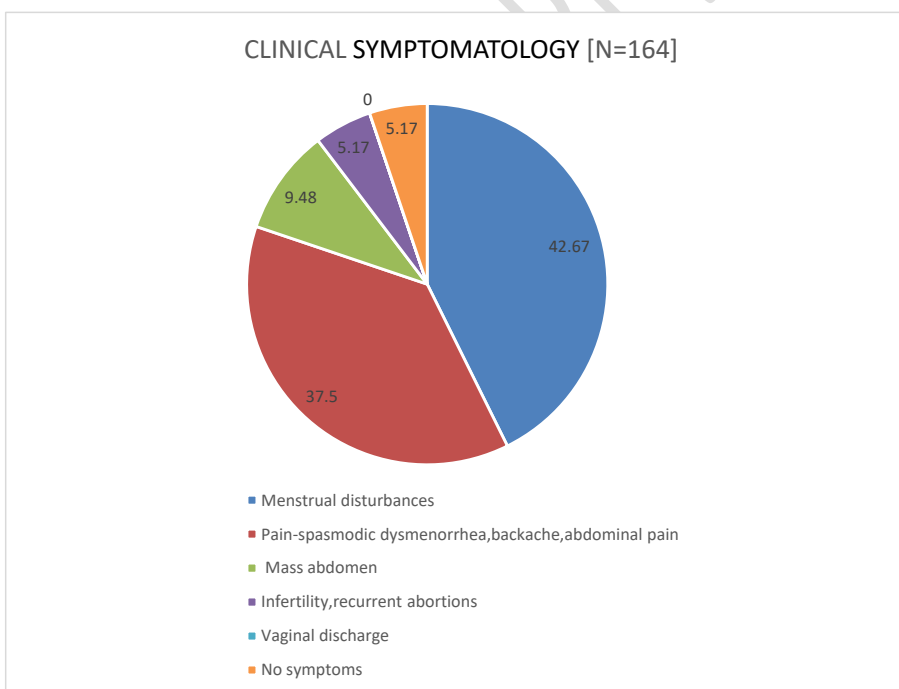
Graduate or Postgraduate	93	56.71
Middle School Certificate	33	20.12
Intermediate / Post High School Diploma	23	14.02
High School Certificate	15	9.15
OCCUPATIONAL STATUS		
Profession	0	0.00
Semi-profession	24	14.63
Clerical,Shop-owner,Farmer	4	2.44
Skilled worker	12	7.32
Semi-skilled worker	19	11.58
Unskilled worker	6	3.66
Unemployed	90	54.88
MARITAL STATUS		
Unmarried	20	12.20
Married	133	81.10
Divorced	0	0.00
Widowed	11	6.71

Comment [N5]: The total count does not add to 164. Please check the counts and revise the percentages as applicable

PARITY		
0	36	21.95
1	55	33.54
2	57	34.76
3	16	9.76
>3	0	0.00

Each and every participant of the study apperceived uterine fibroid as a benign smooth muscle tumour, without dubitation. Table 1 shows that among women who presented with uterine fibroids, most of them belonged to the age group of 31-40 (57.32%) which is then followed by 41-50 (40.24%). Majority of the participants were married (81.1%) and nearly 6.71% were widowed. Women with a parity index of ≤ 2 are significantly associated with the prevalence of fibroids.

FIGURE 1: CLINICAL SYMPTOMATOLOGY



Menstrual disturbances (42.67%) is the most common presenting complaint of women with fibroids superseded by pain (37.5%) in the form of spasmodic dysmenorrhea, backache or abdominal pain. Nearly 5.17% of women had no symptoms and were diagnosed with uterine fibroids fortuitously. [Figure 1].

TABLE 2: KNOWLEDGE -OF UTERINE FIBROIDS

KNOWLEDGE OF UTERINE FIBROIDS	FREQUENCY		PERCENTAGE	
	YES	NO	YES	NO
Nulliparity or low parity is a risk factor for fibroids	4	160	2.44	97.56
Early menarche is a risk factor for fibroids	3	161	1.83	98.17
Hormones play a significant role in the growth of fibroids	7	157	4.27	95.73
Fibroids increase in size during pregnancy	19	145	11.59	88.14
Fibroid may be a cause of infertility	30	134	18.29	81.71
Fibroid may be a cause of menorrhagia	130	34	79.27	20.73
Fibroid may be a cause of pain and dysmenorrhea	108	56	65.85	34.15
Fibroids may lead to abortions	19	145	11.59	88.41
Fibroids may lead to preterm labour	8	156	4.88	95.12
Fibroids may lead to postpartum haemorrhage	7	157	4.27	95.73
Fibroids may lead to	15	14	9.15	8.54

Comment [N6]: Please check the counts and percentages

puerperal sepsis				
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TABLE 3: SCORING SYSTEM WITH RESPECT TO KNOWLEDGE OF UTERINE FIBROIDS

KNOWLEDGE OF UTERINE FIBROIDS SCORE=11		
Nulliparity or low parity is a risk factor for fibroids	YES	1
Early menarche is a risk factor for fibroids	YES	1
Hormones play a significant role in the growth of fibroids	YES	1
Fibroids increase in size during pregnancy	YES	1
Fibroid may be a cause of infertility	YES	1
Fibroid may be a cause of menorrhagia	YES	1
Fibroid may be a cause of pain and dysmenorrhea	YES	1
Fibroids may lead to abortions	YES	1

Fibroids may lead to preterm labour	YES	1
Fibroids may lead to postpartum haemorrhage	YES	1
Fibroids may lead to puerperal sepsis	YES	1

TABLE 4: KNOWLEDGE SCORE OF UTERINE FIBROIDS

KNOWLEDGE SCORE OF UTERINE FIBROIDS		
>5	7	4.27%
<=5	157	95.73%

Knowledge pertaining to uterine fibroids appears to be very poor among the respondents of the study. Table 4 shows that almost 95.73% of women are nescient concerning the risk factors and clinical symptomatology of fibroids, though it is a common tumour among the reproductive age group.

TABLE 5: ATTITUDE WITH RESPECT TO UTERINE FIBROIDS

ATTITUDE WITH RESPECT TO UTERINE FIBROIDS	FREQUENCY		PERCENTAGE	
	YES	NO	YES	NO
Regular follow-up	161	3	98.17	1.83
Desire for medical treatment if indicated	164	0	100.00	0.00
Attempt to administer the advised medications regularly	164	0	100.00	0.00
Opt for surgical treatment if indicated (that if medical treatment fails)	132	32	80.49	19.51
Attempt change of contraceptive if under OCPs	160	4	97.56	2.44

TABLE 6: SCORING SYSTEM WITH RESPECT TO ATTITUDE OF UTERINE FIBROIDS

ATTITUDE SCORE WITH RESPECT TO UTERINE FIBROIDS PERCENTAGE		
SCORE=6		
Regular follow-up	YES	1
Desire for medical treatment if indicated	YES	1
Attempt to administer the advised medications regularly	YES	1
Opt for surgical treatment if indicated (that if medical treatment fails)	YES	1
Attempt change of contraceptive if under OCPs	YES	1

Comment [N7]: There are only 5 questions in the table below and also in Table 5. Should this score be 5??

TABLE 7: ATTITUDE -SCORE WITH RESPECT TO UTERINE FIBROIDS

ATTITUDE SCORE OF UTERINE FIBROIDS		
<=3	0	0.00
>3	164	100.00%

Most of the women (100.00%) assented to medical treatment if indicated. Nearly 80.49 % of them opted for surgical treatment if recommended, considering the complications of both surgery and succeeding life after.

TABLE 8: PERCEPTION WITH RESPECT TO UTERINE FIBROIDS

PERCEPTION WITH RESPECT TO UTERINE FIBROIDS	FREQUENCY		PERCENTAGE	
	YES	NO	YES	NO
Surgery is more ominous than the fibroid itself	54	110	32.93	67.07
Surgery (hysterectomy) affects your femininity	99	65	60.37	39.63
Surgery affects your fertility	70	94	42.68	57.32
Medical treatment is more ominous than the fibroid itself	0	164	0.00	100.00
Treatment is a waste of time and money and no treatment is required for fibroids	4	160	2.44	97.56
Fibroids will get atrophied after menopause	64	100	39.02	60.98

TABLE 9: SCORING SYSTEM WITH RESPECT TO PERCEPTION OF UTERINE FIBROIDS

PERCEPTION SCORE WITH RESPECT TO UTERINE FIBROIDS PERCENTAGE		
SCORE=7		
Surgery is more ominous than the fibroid itself	YES	1
Surgery (hysterectomy) affects your femininity	YES	1
Surgery affects your fertility	YES	1
Medical treatment is more ominous than the fibroid itself	YES	1
Treatment is a waste of time and money and no treatment is required for fibroids	YES	1
Fibroids will get atrophied after menopause	YES	1
Fibroids will shrink by herbal treatment alone	YES	1

Comment [N8]: Response to this question are not presented in Table 8

TABLE 10: PERCEPTION SCORE OF UTERINE FIBROIDS

PERCEPTION SCORE OF UTERINE FIBROIDS		
<4	152	92.68
>=4	12	7.32

Almost all (97.56%) the participants accredited the fact that treatment of uterine fibroids is under no circumstance a waste of time or money. The whole lot (100.00%), without exception accepted that medical modality of treatment causes no harm as the fibroid itself. However, 32.93% believed that surgery alone poses more threat relative to fibroids, with 39.63% with had the conviction that surgery (hysterectomy) affects their femininity and 57.32% felt that it affects their fertility.

DISCUSSION:

Leiomyomas are the most common benign neoplasms of the reproductive age group. Approximately 80% of women are wracked by uterine fibroids, among which only 25% exhibit symptoms that cause significant morbidity^[8,9]. The costs due to myomas has been estimated to a total of 34.4 billion annually, which is higher than breast cancer, colon cancer, or ovarian cancer^[10]. Besides, uterine fibroids significantly affect daily living, disrupting emotional and psychological well-being^[11,12,13]. This study assesses the knowledge, attitude and perception of women on fibroids, considering its endemicity.

Most women (95.73%) show poor knowledge concerning fibroids, which is quite the reverse of the study conducted by Omilabu et al that showed high level of awareness among 98.6% of its respondents^[5]. Though the notion of higher incidence rate among Black women (3 - 4 times relatively higher in comparison to their counterparts) explains the cause, the need for assiduity to create awareness among the general population is undeniable^[14-17].

Majority of women lack knowledge on risk factors and clinical symptomatology on fibroids despite been discerned of the fact that fibroid is a benign smooth muscle tumour. Though not all women present with symptoms-, symptoms help in early detection of fibroids before it causes any significant morbidity and mortality.

Nevertheless, the attitude of women with fibroids towards treatment is startling. Most of them show positive attitude towards medical and surgical treatment, provided the modality -is recommended. On the contrary, no effect in the change of attitude was observed among the respondents -of the study conducted by Senthilkumar et al, even after counselling^[2].

Comment [N9]: Better to use afflicted

Conversely, the perception of uterine fibroids among the respondents is very poor in comparison with results of the study conducted by Senthilkumar et al^[2], where the perception score of the respondents improved from 2.24 to 3.51 after counselling. Most women (60.37%) fear that surgery (hysterectomy) may cause loss of femininity due to the amenorrhea that follows. Furthermore, complications of hysterectomy like body pains, joint pains, low back ache, night sweats, hot flushes, cardiovascular disorders, etc., create panic among women than the condition itself^[18].

Comment [N10]: Here, comparison could be between the score in this study and baseline score of the cited study. Only percentages of individuals scoring <4 and ≥4 is provided in the current study. Also, the parameters of perception questionnaire used in both studies are not same, it will be incorrect to compare.

CONCLUSION:

The study shows poor knowledge and perception among women ~~on~~ with fibromyomas, although their attitude towards management is good. The results of the study have shown the urge to impart various counselling programs to create awareness among the general public. Women should be encouraged to report early to prevent surgical risks that accompany huge fibroids thereby causing significant morbidity and mortality^[2].

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UNDER PEER REVIEW

