

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 imparted to create awareness among women on fibroids.

Keywords: Uterine Fibroids, Knowledge, Attitude, Perception

Comment [SS1]: A word count of 150-200 in abstract is considered good.

Comment [SS2]: A sentence can't start with numeral

Comment [SS3]: Expand , put in some more results.

Comment [SS4]: Please state in past tense

Comment [SS5]: Please put a scientific term such as positive/negative

Comment [SS6]: One line about what you conclude from study, such as poor knowledge and perception

INTRODUCTION:

Fibroids (leiomyomas, fibromas, fibromyomas) are the commonest benign neoplasm of the uterus^[1]. Fibromyomas are benign tumours arising from smooth muscle cell rests, either from uterine musculature or vessel walls^[1]. About 1 in every 20 women, around 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, Hysterectomy 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.

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.

Comment [SS7]: Before arriving at objectives of study, state the current status of KAP about fibromyomas, and if there is no data, say so.

Comment [SS8]: Expand Methodology, you can put certain diagnostic criteria, definition, scoring systems used to assess KAP in methods

Comment [SS9]: excluded

Study period:

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

Sample size and sampling technique:

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

Data collection:

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

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

Comment [SS10]: Give and write details Was the questionnaire validated or pilot tested if it was a self-made perform? How was it introduced (in native language/ English)? Was it filled by interviewer or self filled?

Comment [SS11]: Analysed using percentages and proportions to assess KAP

Comment [SS12]: And confidentiality of data was maintained

Comment [SS13]: Start like this Out of 164 participants.....

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

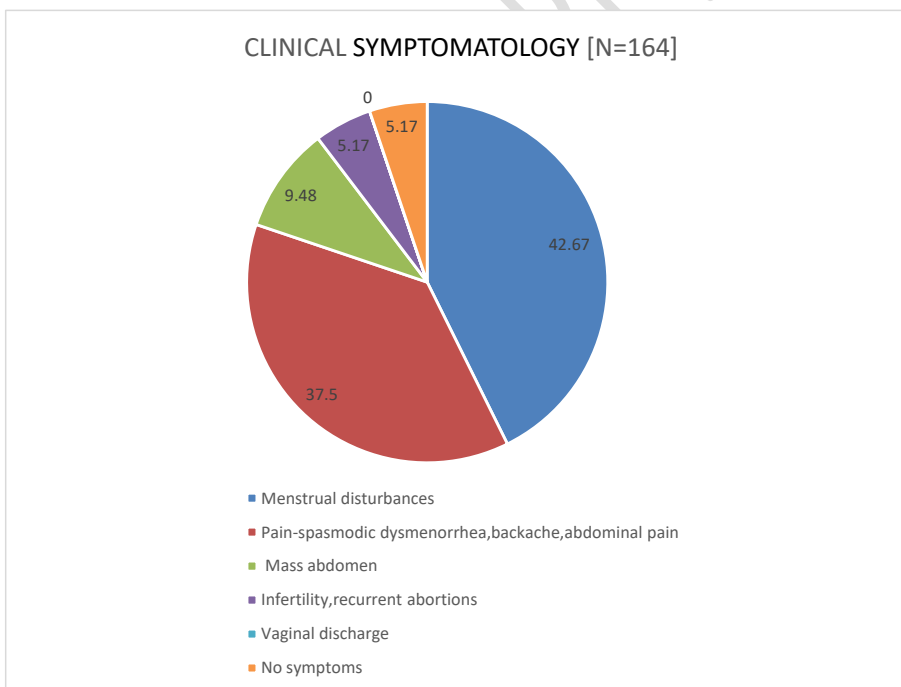
PARITY		
0	36	21.95
1	55	33.54
2	57	34.76
3	16	9.76
>3	0	0.00

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.

Comment [SS14]: Line is unclear

Comment [SS15]: As in this study test of significance was not applied,

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].

Comment [SS16]: Were (past tense)

Comment [SS17]: Wrong choice of word
Followed by or
Both causes can be stated together
Menstrual disturbances and spasmodic pain were the common causes.....

Comment [SS18]: We need Table 2 description and mention in text describing its purpose and salient pointers apart from total knowledge and score

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

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

Comment [SS19]: This needs to be in methods section preferably not in table form but as a descriptive statement such as
To assess knowledge of the participants correct response to each question was scored as 1, making it a total score of 11 for 11 questions.
So table 3 is not required

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.

Comment [SS20]: Describe in relation to table 2 and 4

Comment [SS21]: unaware

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

Comment [SS22]: Similarly, this also needs to be in methods section

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

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.

Comment [SS23]: Table numbers do not find mention in text. As shown in table 5,7. Describe a little bit about some questions and responses in table 5,7

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

Comment [SS24]: Should be in methods section as said earlier

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

TABLE 10: PERCEPTION SCORE OF UTERINE FIBROIDS

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

Comment [SS25]: As participants stating no in answers are presumptively having positive perception to the questions, so is it that lower the score, higher is the positive perception as in table 10...?
Please describe your table 10
Does scoring in perception even have a meaning?
Overall average of positive perception (no responses) in table 8 comes out to be nearly 70% which makes sense.

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 the conviction that surgery (hysterectomy) affects their femininity and 57.32% that it affects their fertility.

Comment [SS26]: As shown in table 8.....

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.

Comment [SS27]: Consider including more points age, parity, symptomatology etc. You can put some words about factors responsible for poor perception in the end
Lack of health education at schools, colleges etc

How can we bring the change?

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].

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].

CONCLUSION:

The study shows poor knowledge and perception among women on fibromyomas, although their attitude towards management is good. The results of the study has 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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Comment [SS28]: Limitations: A good study always states its limitations. It is a small single center studyetc

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UNDER PEER REVIEW

