

Awareness and attitude of Gynecologists/obstetricians regarding the role of Physiotherapy in the management of uterine prolapse

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ABSTRACT:

Objectives: To determine the Awareness and attitude of gynecologists/obstetricians regarding the role of Physiotherapy in the management of uterine prolapse.

Methodology: A cross-sectional study was done among gynae and obs selected from public and private hospitals of Karachi through non-probability convenient sampling. The awareness and attitude of doctors regarding the role of physiotherapy in the management of uterine prolapse were determined based on a questionnaire. The awareness and attitude of the doctors were studied separately according to their academic qualifications (postgraduate vs graduates) and according to their place of work (Government vs private hospitals)

Results: Overall 236 doctors (88.6%) were found to be aware of the role of physiotherapy in the management of uterine prolapse. Old age and multiple vaginal births were considered by doctors as the most common cause of uterine prolapse, 38%, and 36% respectively. When awareness and attitude regarding the role of physiotherapy were compared between government and private hospitals doctors' results were 80% vs 20 % respectively; were advised medical treatment. When awareness and attitude regarding the role of physiotherapy were compared between post graduate vs graduate doctors, the post graduated advised many more patients for surgical treatment (79% vs 21%) and for physiotherapy 72% vs 28% for the management of uterine prolapse

Conclusion: The level of awareness among doctors about the role of physiotherapy in the management of uterine prolapse is sufficient and most of the doctors referred their patients for physiotherapy.

Keywords: cervix uteri, physiotherapy, puerperium, cesarean section, pregnancy.

INTRODUCTION:

The uterus forms a significant part of the female reproductive system¹. Uterine prolapse is found commonest among women who gave more vaginal birth to large babies, lack of rest during the puerperium, poor nutrition, aging, pelvic tumors, obesity, and constipation².

Uterine prolapse, genital prolapse or the pelvic organ prolapse, occurs when weakened pelvic muscles get unable to support the adequate alignment of the pelvic organs, specifically the position of vagina and uterus³. In worsen stages of prolapse, the uterus protruded away from the vaginal canal or the entire uterus may come out of the vagina⁴. This pelvic organ prolapses lead to severe degrees of physical disability, including an inability to work, difficulties in walking or standing or urinating or defecating, and painful intercourse⁵.

Female having uterine prolapse faces social challenges and are a lot time they considered themselves an impure, which often lead to social ostracization⁶. Considering it as an unseen calamity for women⁷. Among various reproductive health problems prevalence of uterine prolapse is 53.69%⁸. Globally, in women's reproductive age 2% to 20% have a uterine prolapse and in post-reproductive age of women it is typically common⁹. According to Oxford Family Planning Association UK, the frequency of hospital admission for uterine prolapse is 20.4% and surgery for prolapse is 16.2%¹⁰. Incidence of uterine prolapse in Iran is 53.6% &, in Italy is 5.5% and in Egypt is 56%.¹¹ A descriptive study conducted in Pakistan to estimate the prevalence of gynecological morbidities in 717 women, revealed that the prevalence of uterine prolapse was 19%¹².

There is a range of treatment options available for uterine prolapse. These options are conservative treatment (hormonal replacement therapy)', perassary (U-shaped device to support uterus in the vagina),¹³ physical therapy management (Kegel's exercise),'" postural education, bio feedback,"² and electrical stimulation. Surgery is one of the treatment options depending on the uterine prolapse stage. Behavior modification and education for preventive measures weight loss (if overweight), and improving bowel and bladder habits were also advised to the patients. Many of the scientists suggested that the conservative management, especially in young women, as it offers the possibility of postponing surgery. Whereas, few emphasized the importance of pre and postnatal exercise in the prevention of birth complications¹⁴.

It is known that uterine prolapse is due to weak pelvic floor muscles and ligaments¹⁵. Physiotherapy exercises like Kegel exercises and electrical stimulation can be of great help in strengthening these structures and reducing the risk of uterine prolapse¹⁶ and is an important form of treatment in the developed world. However, it is not known how much awareness the local

gynecologists have about the role of physiotherapy treatment in the management of uterine prolapse. Therefore, we decided to look at this issue with our local gynecologists/obstetricians working in tertiary care settings.

METHODOLOGY:

Using a cross-sectional design, responses regarding the role of physiotherapy for the management of uterine prolapse were obtained from male and female gynecologists obstetricians working in tertiary care setups in Karachi, during the period January 2022 to May 2023, through a questionnaire. The questionnaires were obtained from doctors working in 12 governments and 14 private hospitals which were selected on the basis of the bulk of patients attending the gynecology and obstetricians out-patient's clinic.

The responses obtained about the role of physiotherapy for the management of uterine prolapse were recorded, overall responses from all participants, a comparison of responses from post-graduate vs. graduate doctors. Comparison of responses obtained from gynecologists/ obstetricians working in government hospitals vs. doctors working in private hospitals.

The questionnaire comprised nine questions and nineteen variables. The questionnaire contained some information regarding the participants, questions pertaining to the knowledge about causes of uterine prolapse, and the management practices of the doctors regarding uterine prolapse. Data were collected through a self-administered, structured, and pretested questionnaire

A 412 subjects sample size was calculated by an online calculator with a 95% confidence level, keeping a 0.05 margin of error. We assumed a prevalence of good knowledge was 50%, awareness, and attitudes, a 5% bound error, and inflated the sample by ION to account for non-respondents and incomplete questionnaires.

Data were collected through self-administered. structured, and pretested questionnaire. The purpose of the study was explained to participants and informed consent was taken before data collection. The confidentiality of each participant was ensured. The study was conducted in compliance with 'Ethical Principles for Medical Research Involving Human Sciences'. The study was approved by the Ethical Review Committee at the Department of Community Health Sciences at Ziauddin Medical University.

Data were double-entered and analyzed in the statistical package on SPSS version 25.0. For the overall analysis, of responses from all gynecologists/ obstetricians who participated in the study, the results were recorded as frequencies.

For the analyses where the responses of gynecologists/obstetricians from government vs. private hospitals were compared, cross-tabulations were performed and chi-square tests were used to determine whether the two groups differed in their responses or not. P-value < 0.05 was considered as significant

RESULTS:

The responses about the awareness and attitude of doctors regarding the management of uterine prolapse - overall analysis (Table 1 & 2)

The total sample of gynecologists/obstetricians who participated in the study was 412, among which 282(68.4%) were post-graduates and 120 (29%) were graduates from government and private hospitals. Overall, 236 doctors (88.6%) were found to be aware of the role of physiotherapy in the management of uterine prolapse. Old age and multiple vaginal births were considered by doctors as the most common cause of uterine prolapse, 38%, and 36%, respectively.

Comparison of responses of doctors working in government hospitals vs. those working in private hospitals (Table 3 & 4)

A much higher percentage of doctors working in government hospitals were seeing more than 15 patients a day compared to the doctors in private clinics (80% vs. 20%). The doctors working in the private clinics compared to the government clinics had an increased awareness regarding the role of physiotherapy in the management of uterine prolapse (57% vs. 43%, p-value=0.001). Again, a much bigger number of doctors working in private clinics were advising physiotherapy treatment for the management of uterine prolapse (64% vs. 36%, p-value=0.0001). Surgical treatment for uterine prolapse was being advised in a much bigger number in the private compared to government clinics (7296 vs. 28%, p-value=0.0001), while in the government clinics, more patients were receiving medical treatment for the management of uterine prolapse compared to private clinics (80.7% vs. 20%, p-valued. 0001).

Variable		Frequency N (%)
<i>Gender</i>	Male	94 (22.8%)
	female	318(77.7%)
<i>Academic qualification</i>	Graduate	120 (29.1%)
	postgraduate	282 (68.4%)
<i>Hospital settings</i>	Govt.	200 (49%)
	Private	210 (51%)
<i>OPD patient per month</i>	0-5 patients	29 (7%)
	& 10 patients	80(19.4%)
	11-15 patients	166(40.3%)
	> 50 years	137 (33.3%)
<i>Uterine prolapse</i>	Bladder infection	6 (1.5%)
	Old age	158 (38%)
	Birth to large baby	75 (18.3%)

	Multiple vaginal birth	148 (36%)
	Post-surgical	25(6%)

Table 1. Baseline Characteristics of Study Participants (N = 412)

Table. 2 Awareness regarding Uterine Prolapse among study participants

Awareness about role of physiotherapy	N(%)
Management of uterine prolapse	365 (88.6%)
Advised medical management of uterine prolapse	104 (25.2%)
Advised physiotherapy management of uterine prolapse	206(50%)
Advised surgical management of uterine prolapse	265(64.3%)
Advised exercise without referral to physiotherapy department	201 (48.8%)
Usually	78(18.9%)
Random	118(28.6%)
Often	152(36.9%)
never	64(15.5%)
Availability of leaflets regarding uterine prolapse	218 (52.9%)
Recovery of patients through physiotherapy treatment	
Complete	133 (32.3%)
partial	265 (64.3%)

DISCUSSION:

The awareness and attitudes of Gynecologists/ Obstetricians regarding the role of physiotherapy in the management of uterine prolapse were determined using a self-administered questionnaire. Overall, awareness about physiotherapy management was found in 236 (88.6%) doctors. Old age and multiple vaginal births were considered by doctors as the most common cause of uterine prolapse 38% and 36.9%, respectively. When the attitude and management practices for uterine prolapse were compared between government and private hospital doctors, 20% vs. 80%, respectively were advised surgical treatment, while 80% vs. 20%, respectively were advised medical treatment. When the attitude and management practices for uterine prolapse were compared between post-graduate vs. graduate doctors, the post-graduates advised many more patients for surgical treatment (79% vs. 21%), and for the physiotherapy management of uterine prolapse (72% vs. 28%).

Our study showed some significant differences in results regarding the awareness and attitude of doctors working in private and government hospitals toward the management of patients with uterine prolapse. We observed that in private clinics surgical treatment was advised by 80% of doctors compared to 20% in government clinics, which can be due to the fact that patients going to private hospitals belong to high-income status and hence are in a position to bear the expenses

of surgery. Another reason is that there is less likelihood of a long waiting list for surgery in a private clinic. The private clinics are usually commercial and hence are more inclined to procedures where they can make more money, hence prefer surgery compared to medications and physiotherapy. On the other hand, we have reported that in government hospitals more patients were advised of medical treatment for the management of uterine prolapse, this is because patients in government hospitals have to wait for long time periods, and doctors in government hospitals have no commercial incentives.

Private hospitals are usually not as busy as government hospitals. The patients attending the private clinics are usually paying higher fees and hence receive more time and attention by attending doctors. Attention may be in the form of more education and counseling and receiving literature about their illness. In our study, 89% of patients received leaflets regarding information and exercises about uterine prolapse, whereas among patients of uterine prolapse attending the government hospitals only 11% of doctors received leaflets.

There is a significant difference in the awareness and altitude of post-graduate compared to graduate doctors about the role of physiotherapy in the treatment of uterine prolapse. This difference reflects the difference in the level of knowledge between the two groups of doctors. Obviously, post-graduate doctors had more in-depth knowledge about the causes and management of uterine prolapse, compared to graduate doctors.

Literature review showed that the attitude and practices of gynecologists/obstetricians regarding the role of physiotherapy in the management of uterine prolapse¹⁷. They observed that 98.5% of doctors were aware of and favored physiotherapy for the management of uterine prolapse. Our study has reported that 88.6% of our doctors were aware of the role of physiotherapy in the management of uterine prolapse.

In our study old age and multiple vaginal births were considered the most common causes of uterine prolapse by doctors overall, 38% and 36% respectively. These results of most common causes are quite similar to the study performed by Lawson S et.al they have reported 40% of subjects to have some degree of prolapse. The risk factors in their study included increased age, parity, and vaginal deliveries¹⁸. Literature review reveals the common causes reported in this study were age, number of vaginal deliveries, and trauma to the pelvic floor¹⁹.

When it came to the preferable choice of management for uterine prolapse, our study showed 64.3% of doctors chose surgery while physiotherapy was selected by 50% of doctors. Contrary to our study results, researcher reported that previously corrective surgery which was a first step for uterine prolapse but has now rehabilitation has become the first line of treatment. When surgery is indicated, it is a management tool for second, third, and fourth-degree uterine prolapse²⁰. Current-based evidence by investigator stated pelvic organ prolapse surgery has a success rate of 65% to 90% and has a repeated rate of operation at 30%.²⁰ In a study by Brown. CA et.al in found that the risk for prolapse recurrence after vaginal repair after one-year surgery was 58%, in patients aged above 60 years, and preoperative pelvic organ prolapse stage III or IV had a greater likelihood of recurrent prolapse.²¹

We found in our study 87% of the doctors reported that their patients recover partially using physiotherapy as an intervention for uterine prolapse. Many studies have been done on the

effectiveness of physiotherapy for the management of uterine prolapse in stages I and II. A study by Batra et al. showed that physiotherapy reverses stage I prolapse completely.²² A similar research was conducted by another researcher to evaluate the efficacy of pelvic muscle training for the prevention of genital prolapse in elderly women⁸. Conclusion can be made that 24 months of training of the pelvic floor muscles was an effective way to avoid worsening of genital prolapse in women who had severe genital prolapse. Another study was conducted to observe a comparison between two groups of patients, one who had pelvic floor muscle training, while the other was a control group without intervention. This study revealed a chances of improvement in the prolapsed stage compared to the control group, showing pelvic floor muscle training may improve the prolapse stage, muscle function, and urinary symptoms.²³

CONCLUSION:

Our study results showed that the gynecologists/obstetricians were much aware of the purpose of physiotherapy in managing the uterine prolapse. The most common causes of uterine prolapse noted by gynecologists were old age and multiple vaginal births. Surgery and physiotherapy were considered the most usually used management strategies for uterine prolapse. A significant difference in the referral of patients for physiotherapy was found between private and public hospital doctors, and post-graduates vs. graduates. It is recommended that the doctors should refer the patients for physiotherapy management (pelvic floor muscle training & Electrical Stimulation, posture correction, and Pre-Natal, Natal & Post Natal Physiotherapy sessions) as early as possible so that their pelvic floor muscles gain strength during pregnancy and after delivery. Measures should be taken to increase the knowledge of women on uterine prolapse through education and counseling. These recommendations should be added to National planning on all levels as uterine prolapse is the commonest and most complex of all reproductive diseases. It is believed that if a woman will be healthy the community will be healthy.

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