

Awareness of Obstetricians/ Gynecologists Regarding the Role of Physiotherapy Services in Managing Obstetric Patients

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ABSTRACT:

Background: During the whole period of pregnancy women's body undergoes various physical and physiological changes. Due to the change during and after pregnancy common problems faced by the women's are low back pain, stress urinary incontinence, pelvic pain. Physiotherapy can help in this through postural reeducation, strengthening of pelvic floor muscles and through some modalities.

Objective: To assess the awareness of obstetricians/ gynecologist regarding the role of physiotherapy in managing obstetric patients.

Methods: A cross-sectional study was done among gynecologists and obstetricians selected from tertiary care hospitals of Karachi through non-probability convenient sampling, total sample size of the study was 300. Data was entered and analyzed by using SPSS version 17. Chi square test was used to find association for qualitative variables and p value <0.05 was considered as significant.

Results: From the sample size (n=300) including gynecologists/obstetricians 123(41%) were from government hospitals and 177(59%) from private settings, 156(52%) had 3 to 5 years of experience while 144(48%) had more than 5 years of experience. Regarding referral during antenatal and postnatal period, it was found that 41(13.7%) participants advised most of the time, 203(67.7%) occasionally and 56(18.7%) never advised their patients.

Out of total, 194(64.7%) had an awareness about pre-natal physiotherapy exercises sessions but only 56(18.7%) refer their patients for the antenatal classes (p-value 0.001). From total 204(68.0%) answered yes regarding the role of postnatal exercise sessions but out of them only 60(20.0%) refer for the post-natal physiotherapy sessions regularly and 74(24.7%) occasionally (p-value=0.218).

Conclusion: Obstetrician/ Gynecologists had awareness about the role of physiotherapy in management of their obstetric patients but only a small portion of them concern and refer their patients for physiotherapy.

KEY WORDS: Awareness, Obstetricians/Gynecologists, physiotherapy, Obstetric patients.

INTRODUCTION

Pregnancy is the time when a woman undergoes various physiological changes. These changes are normal adaptations happened during pregnancy to accommodate the growing fetus. Among various physiological modifications the body posture also changes as the pregnancy progresses. Postural changes that occur during pregnancy are mainly because of weight gain that is distributed primarily in the breasts and abdomen. Laxity in ligamentous and connective tissue is usually caused by pregnancy related hormonal changes.¹

These unchecked postural changes may lead to acute or chronic low back pain (LBP) syndrome.² Evaluation and postural reeducation are necessary to prevent such sequelae.³ LBP during pregnancy is the common problem worldwide⁴ and it is estimated that 80% of the population will develop LBP at some point in their lives.⁵ In a Swedish survey it was reported that 66% of women experienced LBP between 38 to 64 years⁶ and in majority of cases it was associated with pregnancy.⁷ Study conducted in Iran reported prevalence of pregnancy related LBP as 57.3%.⁸

Physiotherapy plays an important role in obstetrics both with the ante-partum and post-partum woman. Manual techniques and education regarding posture, back care, and modification of daily activities all help to ensure optimal postural alignment, which minimizes joint stress in pregnant women.⁹ Physical therapists provide many services in obstetric cases by providing postural reeducation, easing musculoskeletal discomforts and teaching stress management. Physical therapists can

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also help pregnant females by prescribing exercises for pelvic floor muscles and for the relief of back pain.

The practice of pelvic floor exercises during first pregnancy has been shown to reduce the incidence of stress incontinence of urine both during pregnancy as well as in the post-partum period.^{10,11} Also the Physiotherapy has a significant role to play in the management of fecal incontinence and is vital as a treatment option, depending on the cause and the severity.¹² There are researches available which shows that certain electrotherapy modalities that are used in physiotherapy, have a role in relief of pain during delivery. A study was done to see the effect of transcutaneous electrical nerve stimulation (TENS) as an adjuvant for pain relief during labor and delivery. This study reveals that "TENS is a pain relieving modality which is effective for use in labor and delivery. It is a non-pharmacological, non-invasive adjuvant. Its application reduced the duration of the first stage of labor and the amount of analgesic administered with no adverse effects seen on mothers or newborns."¹³

Research proved the importance of physiotherapy in management of obstetric patients however after thorough literature search no such study was found in our setup where doctor's awareness was assessed. Therefore, the aim of this study is to assess the awareness of obstetricians/ gynecologist regarding the role of physiotherapy in managing obstetric patients.

METHODOLOGY

This cross-sectional survey was conducted among gynecologist and obstetricians. Study was completed in one year time period from 2011 to 2012. Sample was taken from tertiary care hospitals of Karachi.

Sample size was calculated by WHO sample size estimation calculator. Taking 57% prevalence of LBP during pregnancy at 95% confidence level and keeping 0.06 margin of error the minimum number of participants required for inclusion in the sample was calculated as 263. To avoid missing data total 300 obstetricians and gynecologist were included in the study. Margin of error was taken as 0.06 due to time and monetary restrictions.

Non-probability convenient sampling technique was used to enroll participants in the study. Those obstetricians and gynecologist who were working in tertiary care hospitals with at least three years experience in respective field were included in the sample. Purpose of the study was explained to participants and informed consent was taken before data collection.

Data was entered and analyzed by using SPSS version 17. Frequencies and percentages were calculated for qualitative variables while mean and standard deviation

for quantitative variables. Chi square test was used to find association for qualitative variables and p value <0.05 was considered as significant.

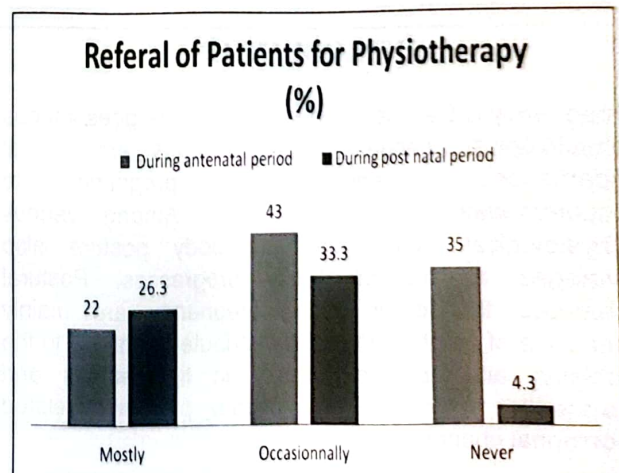
RESULTS

Total sample size of this study was n=300 including gynecologists/ obstetricians. Out of them 123(41%) were from government hospitals and 177(59%) from private settings. Regarding experience 156(52%) had 3 to 5 years of experience while 144(48%) had more than 5 years of experience. In the total sample 192(64%) did MBBS, 57(19%) did FCPS and 51(17%) did MCPS.

In our sample out of 300 respondent, 259(86.3%) had knowledge about the physiotherapy management of obstetric patients and 271(90.3%) agreed with the role of physiotherapist in gynecological conditions. Of total 241(80.3%) considered the physiotherapist as a part of gynecologists/obstetricians rehabilitation team and in the opinion of 59(19.6%) it is not required.

In the opinion of 199(66.3%) obstetricians every women need physiotherapy during antenatal period. Regarding the benefits of physiotherapy, 258(86%) was agreed that physiotherapy exercises are helpful for strengthening pelvic floor muscles and 243(81%) said yes that physiotherapy is helpful for coping urinary incontinence during antenatal period. Participants were inquired about how often they advised physiotherapy classes to their patients during antenatal and postnatal period and it was found that from the sample, 41(13.7%) participants advised most of the time, 203(67.7%) occasionally and 56(18.7%) never advised their patients. (fig 1)

Figure 1: Referral of Obstetric Patients for Physiotherapy



From the sample, 194(64.7%) had an awareness about pre-natal physiotherapy exercises sessions but only 56(18.7%) refer their patients for the antenatal classes (p-value 0.001). Of total 204(68.0%) answered yes regarding the role of postnatal exercise sessions but out of them only 60(20.0%) refer for the post-natal

physiotherapy sessions regularly and 74(24.7%) occasionally (p-value=0.218).

Referral during antenatal period among government hospitals is 16(5.3%) which is comparatively less than the referral among private hospitals 50(16.7%)(p-value=0.00). Referral during postnatal period is also less in government hospitals 17(5.7%) as compare to the private hospitals 62(20.7%) (P-value = 0.000). Among the respondents who have experience more than 5 years refer more their patients in antenatal period 47(15.7%) then those who have 3 to 5 years experience 19(6.3%). The respondents who have more than 5 years of experience refer more in post-natal period 54(18%) than those who have 3 to 5 years experience 25(8.3%). Gynecologists/obstetricians who have MBBS educational level refer more their patients for antenatal sessions 30(10%) among who have FCPS degree 26(8.3%) and MCPS degree 10(3.3%). MBBS doctors also refer more for postnatal physiotherapy sessions

43(14.3%) as compare to FCPS 22(7.3%) and MCPS respondents 14 (4.7%) (Table 1)

When the question was asked about the role of physiotherapy in different obstetric conditions most of them had an opinion that it is helpful in back pain during and after pregnancy 285(95%) but referral for this is by 90(30%) participants, 267 (89%) agreed for its role in musculoskeletal dysfunction but 31(10.3%) refer their patients for this condition. Regarding role in pelvic pain 261(87%) agreed and referral was by 13(4.3%) doctors. Consideration regarding role in stress urinary incontinence was by 255(85%) individuals but referral for this was by 35(11.7%) doctors. Role of physiotherapy in pelvic floor dysfunction was agreed by 251(83.7%) doctors and 21 (7%) doctors refer for this. Regarding the role of physiotherapy in postural awareness was agreed by 259(86.3%) doctors but there was no answer for referral. (Table 2)

Table 1: Referral of Patients during Antenatal and Postnatal Periods

		Referral in Antenatal			Referral in Postnatal		
		n	%	P-value	n	%	P-value
Working Hospital	Government	16	5.3	0.00	17	5.7	0.00
	Private	50	16.7		62	20.7	
Experience	3 – 5 years	19	6.3	0.00	25	8.3	0.00
	>5years	47	15.7		54	18	
Education	MBBS	30	100	0.00	43	14.3	0.003
	MCPS	10	3.3		14	4.7	
	FCPS	26	8.3		22	7.3	

Table 2: Role of Physiotherapy in various Obstetric conditions and Referral for them

	Role of Physiotherapy in Obstetric Patients		Referral		P-value
	F	(%)	F	(%)	
Musculoskeletal Dysfunction	267	89	31	10.3	0.373
Pelvic Pain	261	87	13	4.3	0.695
Stress Urinary Incontinence	255	85	35	11.7	0.011
Postural Awareness	259	86.3	-	-	-
Back Pain During And After Pregnancy	285	95	90	30	0.04
Pelvic Floor Dysfunction	251	83.7	21	7	0.241

DISCUSSION

There is a wide range of postural and physiological adaptations experienced by women during their pregnancy period. Postural adaptation that occurred during pregnancy are caused by an anterior pelvic tilt with compensatory increase in lumbar lordosis.^{14, 15} Back pain and pelvic pain are more recognized problems, affecting many women during their pregnancy¹⁴. Over two thirds of pregnant women experience back pain and one fifth experience pelvic pain in their first pregnancy.¹⁶ Increased ligament laxities has been recognized as a cause for back pain and pelvic pain.¹⁷

Physiotherapy practice has evolved and grown from a general form of physical therapy to specialized services. Physiotherapy plays an important role in obstetric patients both in antenatal and postnatal period¹⁶ through postural education, back care, core stability exercise, and strengthening of pelvic floor muscles. Postpartum pelvic floor muscle pain, dyspareunia, urinary incontinence, abdominal diastasis and symptoms of

pelvic joint dysfunction are conditions that can be managed by specific physiotherapy interventions. A primary contributing factor to urinary incontinence is related to the weakness of pelvic floor muscles following child birth.^{9, 18} Hay Smith J, supported the use of pelvic floor muscle training to reduce urinary incontinence in pregnant and postpartum women.¹⁹

Evidences by various studies supported the training programs delivered by physiotherapists during pregnancy to ease or prevent these conditions. But due to the limited awareness or some other reasons referral rate by doctors for these conditions is not satisfying. Therefore it was one of our objectives and our result showed that most of the respondent had awareness regarding physiotherapy but overall referral rate was low. In our study referral for physiotherapy was comparatively more in private than government hospitals. The reason could be that private hospitals have more established physiotherapy department and their physiotherapists also visited the gynecology/obstetric wards regularly. In private hospitals physiotherapist also provide group sessions to pregnant females during ante-natal period. A survey done in Nepal among clinical doctors showed that they have even better awareness as 98.3% were aware about the role of physiotherapy. It was also noticed in the same study that doctors working in private hospitals were more aware than government hospitals. The reason for that was it may be due to lack of contribution made from the government sectors in the field of physiotherapy, especially lack of development of services and education provided by government.²⁰ These observations were same as we observed in our study.

Results of our study showed that gynecologists/obstetricians mostly refer their patients for complain of low back pain during and after pregnancy, the same was noticed in other studies that LBP was the most common problem during pregnancy.⁴ Although, LBP is the most common problem during pregnancy but there were so many other conditions like pelvic pain, stress urinary incontinence that the physiotherapy can treat or help to prevent it through various techniques and exercises. Various research studies supported the role of physiotherapy services in above mentioned conditions by using exercises, acupuncture, and pelvic supports.²¹

Our study results were similar with the study by Acharya RS et al in which they considered that most of the General Practitioners (GP's) referred their patients to physiotherapist for musculoskeletal problems.²⁰ Other research which was done by Childs J et-al also reported that GP's considered physiotherapy to have a major role in the management of musculoskeletal conditions.^{22,23}

The idea of physiotherapists working as a first point of contact practitioners encouraged by majority of physiotherapists as well as GPs.²⁴ so, here in our setup

where referral for physiotherapy is very low, patient referral can be appreciated. It is therefore recommended to establish a proper referral system and also develop policies that will improve the health care services and reduce economic burden of country.

CONCLUSION

This research showed the satisfying results regarding the awareness about physiotherapy among gynecologists/obstetricians. Most of the respondents agreed that physiotherapists have a role in gynecological conditions and considered them as a part of gynecologists/obstetricians rehabilitation team. Most common problem for which they refer patient for physiotherapy was LBP. In spite of having a good awareness, there was lack of referral for physiotherapy. Situation was even better in private hospitals than government hospitals with proper referral system.

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