Awareness about the Role of Physical Therapy in Post-Partum Females among Gynecologists

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Abstract

**Background:** The role of physiotherapy in obstetrics and gynecology that includes gestation period, childbirth, and antenatal and postnatal care is important. It is essential to create awareness about physiotherapy in hospital setups among gynecologists to provide better healthcare services to females. **Objective:** To assess awareness among gynecologists regarding the role of physical therapy in post-partum females. **Methods:** A cross-sectional study was conducted six months after the approval of the synopsis from September 2020 to January 2021. Data were collected from 75 gynecologists of Lahore and Sahiwal using non-probability convenient sampling. A self-administered questionnaire was used to take data from gynecologists after taking written consent from the participants. Using SPSS version 21, descriptive statistics like frequency and percentage were calculated for categorical variables. For quantitative data, means and standard deviations were estimated. **Results:** It was shown that postpartum physical therapy services were known to 57 (76%) of gynecologists. Among them, 11 (14.7%) gynecologists do refer patients, 14 (18.7%) do not refer at all, 28 (37.3%) refer when required, and 22 (29.3%) refer clients very rarely to the physiotherapy department. **Conclusion:** It was concluded that the majority of the gynecologists were aware of postpartum physical therapy for women. But there is a lack of referral systems in our settings because they do not have any proper gynecological physiotherapy settings affiliated with them. Only a few gynecologists refer patients for physiotherapy services.

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Introduction

The body of a female undergoes many transformations and physical changes during the nine months of pregnancy due to hormonal fluctuations and the need to accommodate a growing fetus. Many problems are faced by women due to these changes.
The physiotherapist’s role in obstetrics and gynecology includes gestation period, childbirth, and antenatal and postnatal period care.\textsuperscript{2} Physical therapy services are used for obstetrics and gynecologic patients with complaints of low back pain, abdominal or pelvic floor muscles weakness causing stress urinary incontinence or mild prolapse, pelvic pain, the discomfort of pregnancy and reduced mobility.\textsuperscript{1}

With the help of manipulative therapy, postural re-education and strengthening of back muscles, physiotherapy can affect everyday life activities and provide the finest alignment of posture and decreased joint stress in females. Proper muscle activation,\textsuperscript{3} strengthening, and usage of the important supporting structures are effective treatments that can decrease pregnancy-adapted postural faults.\textsuperscript{4}

Lumbo-pelvic pain can lead to chronic back pain and can cause significant discomfort and limitation of movement in the postpartum period.\textsuperscript{5} Specific pelvic girdle stabilizing exercises are useful in postpartum patients with PGP.\textsuperscript{6} Another condition is diastasis recti of abdominal muscles (DRAM) that can occur in postpartum. It can be defined as a separation of rectus abdominis muscle as a result of splitting at the linea alba.

In postpartum women, its occurrence is 60%.\textsuperscript{7} In other studies, DRAM has been defined as a distance of >2 cm in between rectus muscles at one or more assessment points (4.5 cm above or below the umbilicus or at the level of the umbilicus).\textsuperscript{8} DRAM occurs between 1 day and 8 weeks after delivery.\textsuperscript{8,9} The rectus abdominal muscles do not always return to normal after childbirth.\textsuperscript{10} The abdominal muscles persist remarkably weakened and their functioning is diminished\textsuperscript{8,11} which can lead to an inappropriate posture of the body and chronic low back pain.\textsuperscript{10}

Exercise decreases stress on the linea alba and helps to maintain strength, tone and control of abdominal muscles accordingly.\textsuperscript{8} In the light of the International Continence Society, uncontrolled leakage of urine is called Urinary Incontinence.\textsuperscript{12} The prevalence of urinary incontinence was 72.1 %, slightly greater among multiparous (75.4 %) and those with vaginal delivery (72.8 %).\textsuperscript{13}

In another study, it has been found postpartum complications occur in about 90% of women like pelvic floor muscle weakness (70%) and urinary incontinence (40%) due to changes in pregnancy like the Centre of mass change, increased pressure on organs, increased body weight.\textsuperscript{14} For stress urinary incontinence, pregnancy and normal childbirth have been observed as the two main contributing factors.\textsuperscript{15,16} Stress incontinence has been registered in young female athletes\textsuperscript{17,18} and postpartum and postmenopausal women.\textsuperscript{4}

During pregnancy and postpartum, females usually develop stress urinary incontinence and after childbirth, it can become a risk factor for developing pelvic floor muscles weakness.\textsuperscript{19,20} Therapy comprises graded muscle training, either alone or in conjunction with biofeedback, electrical stimulation, vaginal cones and is intended to rehabilitate and strengthen the pelvic floor muscles.\textsuperscript{19}

The biological and structural changes that occur throughout pregnancy last for 4-6 weeks postnatal.\textsuperscript{21} Physiotherapy (PT) for postpartum female clients includes training for an optimum accomplishment of activities related to caring for a newborn, lifting, and carrying; modifications are also recommended as needed to increase her comfort with these activities. The physical therapist will demonstrate proper positioning for mother and baby when standing at a changing table or changing the baby on the floor. In the postpartum period, women require strong
motivation, follow-up exercises to be extremely effective. Studies have shown that physical therapy plays a vital and notable role in gynecological conditions but its awareness among people is rare. These problems are getting common among females day by day. They mostly included musculoskeletal disorders and posture-related problems among pregnant females during and after pregnancy. Physiotherapists can help such ladies in reducing complications that can develop in pregnancy.

The main objective of this research was to assess how many gynecologists know about the importance of PT in pregnancy and the postpartum period. If they have better awareness about physiotherapy, they will recommend it to their female clients. It is important to increase awareness about PT among gynecologists in hospital setups to provide better health care options to females. For this reason, there is a need for better communication and interaction among gynecologists and physical therapists through conducting seminars, clinical meetings and workshops regarding the importance of PT in the gynecological field. The purpose of the study was to assess awareness among gynecologists in recommending postpartum physical therapy to their patients.

Methods

A cross-sectional study was conducted six months after the approval of the synopsis from February 2020 to July 2020. Data were collected from 75 gynecologists of Lahore and Sahiwal using non-probability convenient sampling. The formula used to calculate sample size: 

\[ n = \frac{z^2 \cdot \alpha^2}{d^2} \cdot \frac{P(1-P)}{ \left( \frac{1}{N} + \frac{1}{n} \right)} \]

where n is total number of participants, 73 1-\( \alpha = 95 \), P is population proportion =0.86 and d = absolute precision required =0.05. Doctors with a minimum of 2 years’ experience in gynecology, consultant gynecologists, post-graduate residents (PGR) or women medical officers (WMO) specialized in gynecology, senior registrars or assistant professors (AP) were included in the study. A self-administered questionnaire was used to take data from gynecologists after taking written consent from the participants. Performa was filled and results were analyzed through IBM SPSS V21 to determine the awareness among gynecologists regarding the role of physical therapy in postpartum females. Frequency and percentage were calculated for categorical variables. Mean and standard deviation was calculated for quantitative variables. Data was entered and analyzed by using IMB SPSS V21.0

Results

In this study, the mean age of the doctors was found to be 35.20±8.46 years. The total number of gynecologists was 75 out of which 55(73.3%) were from Lahore city and the rest 20(26.7%) were from Sahiwal city. Out of all gynecologists, 22(29.3%) did MBBS only and others did FCPS also. The mean of job experience was 9.37±7.55 years. Among the participants, 22(29.3) were PGR, 19(25.3) were WMO, 18(24%) was Senior Registrar, 12(16%) were AP and 4(5.3%) were consultant gynecologists.

The results showed that the role of postpartum physical therapy services was known to 57(76%) of gynecologists and 18(24%) were unaware (Table-I). Some gynecologists 4(5.3%) strongly believed that physiotherapy is expensive to afford. It was shown that 11(14.7%) doctors referred, 14(18.7%) did not refer at all, 28(37.3%) referred when required, and 22(29.3%) referred clients very occasionally to the physiotherapy department (Table-II).
Table-I: Postpartum Physical Therapy Services

| Are postpartum physical therapy treatments known to Gynecologists? | Frequency | Percent |
|------------------------------------------------------------------|-----------|---------|
| Yes                                                              | 57        | 76.0    |
| No                                                               | 18        | 24.0    |
| Total                                                            | 75        | 100.0   |

Table-II: Referral to Physiotherapy department

| Referral of postpartum females to the physiotherapy department | Frequency | Percent |
|----------------------------------------------------------------|-----------|---------|
| Do they refer?                                                  | 11        | 14.7    |
| Do not refer?                                                   | 14        | 18.7    |
| Rarely refer                                                   | 28        | 37.3    |
| Refer occasionally                                            | 22        | 29.3    |
| Total                                                        | 75        | 100.0   |

Discussion

The current study was focused on awareness among gynecologists regarding the role of physical therapy in postpartum females. It was concluded that the majority of gynecologists were aware of postpartum PT but due to lack of proper gynecological physiotherapy setups, they did not able to send their female clients for physical therapy after delivery. The results showed that most of the gynecologists thought that physiotherapists are required in the labor ward. Postpartum pelvic floor muscle weakness is a complex situation if left untreated and can lead to urinary incontinence that may persist for years. More than 90% of gynecologists were agreed that pelvic floor muscle strengthening exercises should be performed to prevent urinary incontinence after delivery. There was a study in which Aqsa Tahir et al. conducted a comparative cross-sectional study in private and government hospitals of Lahore from September 2020 to January 2021. They concluded that the obstetricians and gynecologists working in private and government hospitals were equally aware of the role of PT in managing gynecological and obstetric patients but there was a need to enhance their awareness level. It was a comparative study that evaluate the awareness among gynecologists regarding the role of PT in postpartum female clients and results showed that the gynecologists have much awareness regarding the role of physical therapy.

Another study was conducted by Odunaiya NA et al. in 2013 south-western Nigeria. They found that gynecologists and obstetricians have limited knowledge regarding physiotherapy services in obstetrics and gynecology but demonstrated a positive attitude towards physiotherapists’ involvement in the management of obstetric and gynecologic patients. Our current study showed that gynecologists have much awareness regarding the role of PT in postpartum females but there is a lack of a referral system. But due to lack of appropriate gynecological physiotherapy settings they did not refer their female clients for postpartum PT.

Despite awareness about postpartum physiotherapy services, there was a lack of referral systems because they did not have any proper gynecological PT settings affiliated with them. There is a need for proper gynecological PT settings and interaction between gynecologists and physiotherapists through seminars, workshops, meetings so that they may work together to prevent complications and to improve the quality of life for women after delivery.
Conclusion

It was concluded that the majority of doctors practicing gynecology were aware of the dynamic role of postpartum physical therapy for females that may help in reducing or preventing backache, postural faults, musculoskeletal imbalances and other complications. Only a few gynecologists refer patients for Physiotherapy services.

Declarations

Consent to participate: Written consent had been taken from patients. All methods were performed following the relevant guidelines and regulations.

Availability of data and materials: Data will be available on request. The corresponding author will submit all dataset files.

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