

ORIGINAL ARTICLE

Knowledge, Attitude and Practice among Women Regarding Postnatal Exercises; A Cross-Sectional Study Across Lahore in Private Sector

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ABSTRACT

Objective: This study is aimed to assess knowledge, attitude and practice among women regarding post-natal exercises.

Methodology: A cross sectional study was conducted across private sector in the gynecological and obstetrical department of Punjab Social Security Hospital, Ittefaq Hospital, Hameed Latif Hospital and Khair-un-Nisa Hospital. Through non-probability convenient sampling, 120 postpartum mothers were chosen. A structured questionnaire was used to collect socio-demographic and gynecological data, as well as to assess knowledge, attitude, and practice regarding PNE. Married females of ages 18-40 were included and females with postpartum hemorrhage and active infection/sepsis were excluded from the study. An informed consent was taken from the study participants. SPSS 25 was used for data analysis.

Results: 53.3% had lower segment caesarian section. Breathing exercises were the most common type of exercise among participants (51.7%). 74.2% believed that uterine prolapse can be prevented through PNE. 99.2% of the study population agreed that PNE is necessary while 81.7% felt guilty on omitting PNE. For 50% of participants, Household work was the most common barrier in performing PNE.

Conclusion: There was significant correlation between knowledge, attitude and practice. More than half of the participants had knowledge (mean score=4.116) about PNE but they were not fully aware of its potential benefits and lack adherence. It is important to create awareness and educate people about the postnatal exercises so that postpartum dysfunctions can be prevented and women health can be improved.

Keywords: Puerperal period, pelvic floor muscles, pelvic floor dysfunction, postnatal exercises.

INTRODUCTION

First six weeks after delivery refers to the puerperal period, which is a significantly stressful period for women around the world. During this period many emotional, physical and biological changes occur. In the postnatal period, reversal of physiological changes, which occurred during pregnancy, takes place. Pelvic contents tend to return to pre pregnant state. Initial Acute phase, which consists of eight to nineteen hours, Sub acute period that can last from two to six weeks and delayed period, which can last from six to eight months.

In the context of postnatal physiotherapy, intrauterine massage is done in acute phase. In sub-acute phase the focus is on isotonic and isometrics while in delayed phase, Kegel exercises and pelvic floor muscle exercises are performed. (1) Kegel exercises are defined as a programme of repeated voluntary pelvic floor muscle contractions and relaxations taught and supervised by a health care professional. They were first presented by Dr. Arnold Kegel in 1940, who developed the contract and hold vaginal exercises called as Kegel's that were particularly intended to target core stability contractions and relaxations. Kegel exercise is recommended to strengthen the pelvic floor muscles, which are essential for maintaining continence and the integrity of the pelvic floor in pregnancy, labor and delivery. It appears to contribute to significantly change long-term pelvic floor role in later life in terms of pregnancy hormones. (2)

Physiotherapy is underutilized in the treatment of postnatal dysfunctions. Most females and even the gynecologists are unaware of the advantages of PNE. The lack of knowledge results in the late or no referral for the postnatal physiotherapy. This delay results in prolonging and worsening the symptoms of the disease and lowers the chances of improvement of the dysfunctions related to postnatal complications. Complications after pregnancy includes urinary and fecal incontinence, Inflammatory bowel disease, Cohn's disease, pelvic congestion disease, dyspareunia, pre-and postnatal musculoskeletal dysfunctions, puerperal depression, neurological disorders, and many postoperative complications. (3, 4)

Urinary, fecal and gas incontinence, dyspareunia, pelvic organ prolapses and pelvic inflammatory diseases results due to pelvic floor damage, which occurs in pregnancy, during labor or post-partum. During the acute post-partum period some of the symptoms go undetected, which may affect a woman's life later on. Women usually do not consider sharing their general health unless asked for. The physical therapists who are familiar with the anatomy of the musculoskeletal system and have the ability to find out differences can help in the diagnosis and management of post-partum pelvic floor disorders. Postnatal physiotherapy and monitoring can be useful in managing and treating pelvic floor dysfunction. (5)

In women, dysfunction of pelvic muscles is a common disorder after pregnancy. Pelvic floor muscle exercises (PFME) are suggested to prevent pelvic floor muscle disorder among women during pregnancy and postnatally. (6)

Pelvic floor muscle injury or denervation which leads to pelvic floor dysfunction is a debilitating condition. Pregnancy and puerperal period are the potential risk factors for pelvic floor disorders. Training the pelvic floor muscles is considered significant in the treatment as well as prevention of pelvic symptoms. During antenatal and postnatal period, urinary incontinence is prevented by training of the pelvic muscles. To make sure that women exercise regularly, supervised training is highly effective. Pelvic floor exercises are done by only a few women daily. The performance of pelvic floor exercises in acute postnatal period is significantly high which drops of subsequently. Although pregnant women agreed on the importance of performing pelvic floor exercises daily. Only a few women practiced it. (7, 8)

Diastasis Recti can be caused due to pregnancy and lack of exercise in postnatal period. (9, 10)

In Pakistan, there is lack of research and awareness in postnatal exercises because postnatal exercises are neglected in our society because of lack of interests, lack of income and superstitions are one of the reasons in our country especially in rural areas. This study will highlight the lack of awareness regarding postnatal exercises. It will help us in assessment of

knowledge, attitude and practice of postnatal exercises among women. Through this study, we will also find out the barriers in postnatal exercises and the role of physiotherapy in postnatal care.

METHODOLOGY

This cross sectional, observational study was conducted at private sector in the gynecological and obstetrical department of Punjab Social Security Hospital, Ittefaq Hospital, Hameed Latif Hospital and Khair-un-Nisa Hospital to assess knowledge, attitude and practice among women regarding post-natal exercises. Approval was obtained from the institutional review board. The sample size of 120 females was calculated using non-probability convenient sampling technique with Epitool at 95% confidence interval.

For data collection, a structured KAP questionnaire was used which consisted of demographical data and questions related to the knowledge, attitude and practices towards postnatal exercises. Written consent was taken from the participants before filling the questionnaires. Married women who recently gave birth and were willing to participate in the research, ages 18-40 years were included in the study and married women who were not willing to participate in the research, females with postpartum hemorrhage and females with active infection/sepsis were excluded from the study. Data was entered and analyzed using IBM SPSS 25. Frequencies with percentages were calculated for categorical variables. Scoring of the KAP questionnaire was done by giving 1 mark and each of the category had 5, 7 and 4 questions. Association between knowledge attitude and practice was found by Pearson correlations. Correlation was considered significant at the 0.05 level (2-tailed).

RESULTS

120 females of ages 18-40 took part in the study. All of them were housewives. 84.2% of the participants had their delivery 1 day to 1 week ago, 4.2% had it 1 week to 1 month ago, 8.3% had it 1 to 3 months ago while 3.3% had their delivery 3 to 6 months before.

For knowledge about PNE, 44.2 % of the 120 participants believed that PNE exercises should start immediately after childbirth. 52.5% think that PNE should start after 2 weeks of childbirth. 2.5% believe that PNE should start after 1 months while only 0.8% think that PNE should start after 6 months. 65% believe that PNE are needed once a day. 17.5 % think that PNE are needed once a week while 17.5% think that PNE are needed 4-5 days a week. 74.2% of the participants think that postnatal exercises are beneficial for preventing uterine prolapse. 13.3% believed that urinary incontinence can be prevented through PNE.9.2% of the study population believe that PNE can prevent diastasis recti. 3.3% think that PNE is beneficial for preventing bowel incontinence. 80.8% believed that weight gain was one of the most prevalent disadvantages of omitting PNE. 15% think that back pain can be caused by not performing PNE while 4.2% of the participants believed that postpartum depression is the disadvantage of not performing postnatal exercises.

For attitude about PNE, 99.2% of the study population agreed that PNE is necessary while 0.8% disagreed. 80% participants do not adhere to PNE regularly while 20% are adherent to PNE in their routine. 80.8% admitted that they are facing some problem that prevents them from performing PNE while 19.2% said that they were not facing any problem. 50% out of 120 participants admitted that household work prevents them from doing PNE. Fatigue was the barrier for 18.3%, lack of information for 12.5%, baby care for 10.8%, pain for 5% and fear of injury for 3.3% were believed to be the causes that prevent them from doing PNE. 71.7% believe that adherence to postnatal exercises can be improved by spreading awareness during antenatal visits. 26.7% think that motivation can improve adherence while 1.7% of the study population believed that training and education can improve adherence.

For practice, 46.7% of the participants were doing PNE daily. 38.3% did PNE once a week while 15% performed PNE

occasionally. 62.5% of the participants experienced benefits of PNE while 37.5 % didn't experienced any benefits of PNE. Out of 120, 65% of the study population agreed that antenatal visits have positive influence on PNE while 35% disagreed with this.

Table 2 shows the scoring of the KAP questionnaire, mean score for total knowledge is 4.1, mean score for total attitude is 5.7 while mean score for total practice is 2.7. Correlation analysis to find out the association between knowledge, attitude and practice shows that there is significant correlation between knowledge and practice (0.478), attitude and practice (0.220) and between attitude and knowledge (0.083).

Table 1: What are the types of Postnatal exercises do you know?

Options	Frequency	Percent
Breathing exercises	62	51.7
Kegel's exercise	7	5.8
Pelvic floor exercise	33	27.5
Abdominal exercises	18	15.0
Total	120	100.0

Table 2: Scoring of the KAP questionnaire: Statistics

		Total knowledge	Total attitude	Total practice
N	Valid	120	120	120
	Missing	1	1	1
Mean		4.1167	5.7333	2.7417

Table 3: association between knowledge attitude and practice. Correlations

		Total knowledge	Total attitude	Total practice
Total knowledge	Pearson Correlation	1	.083	.478**
	Sig. (2-tailed)		.366	.000
	N	120	120	120
Total attitude	Pearson Correlation	.083	1	.220*
	Sig. (2-tailed)	.366		.016
	N	120	120	120
Total practice	Pearson Correlation	.478**	.220*	1
	Sig. (2-tailed)	.000	.016	
	N	120	120	120

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

DISCUSSION

Discussing the demographic variables firstly, mode of delivery of majority (53.3%) was lower segment caesarian section, 21.7% had C-section and 25% SVD. This group of study was in discord with Alharbi et al study population whose majority mode of delivery was vaginal delivery (61.3%) and (34%) had caesarian(1)

Most of this study participants only had only 1 delivery 33.3%, 30.8% had two deliveries, 15% had three, 10% had four and 5.8% had five deliveries. This data was discordant with Alharbi et al study in which majority of participants had two to three children or deliveries 55%, 29.3% had only one child, and very few had four children 18.8%.(11)

On further analyzing the results regarding postnatal exercise knowledge when participants were asked of the fact that when should PNEs be started majority of them responded with after two weeks 52.5% and 44.2% responded with immediately. These findings were in concordance with Alharbi et al study in which majority answered to after two weeks 28% and 10% PNEs can be initiated immediately moreover 24% said they are not sure when to start PNE.

To figure out the facts about the source of information regarding postnatal exercises, participants were questioned about if health care professionals are source of information regarding PNEs, 91.1% reacted to agreed and only 8.3% said disagree. These findings are in discord with Raja Sundarmurthy findings in which the main source of information regarding PNEs was TV and social media 23.7%.(12)

In this study 74.2% of participants knew that PFMs can prevent uterine prolapse. 13.3% knew that urinary incontinence can be prevented by PFMs, only3.3% said that bowel incontinence

can be prevented by it. These findings were in discord with Hill et al findings as majority 76% of participants responded to PFMs prevents urinary incontinence, 27% said that it prevents fecal incontinence and 41% said that it's not a serious issue of urine to be leaked during pregnancy.(13)

The commonest source for information and adherence of postnatal exercises with majority 71.1% was antenatal visits followed by motivation 26.7%, while training and education contributes to 1.7%. These findings are in concordance with Sundaramurthy and Kathiresan in which to improve adherence antenatal visits 66.2% are more beneficial followed by motivation 25%.(13)

When asked about what causes hindrance in performing PNEs 50.0% responded to household works, 18.3% responded to fatigue and 12.5% responded to lack of information. These findings are in concordance with Sundaramurthy and Kathiresan in which majority of participants 62.5% responded with household work hindrance.(13)

On finding the association between attitude, knowledge and practice, analysis showed that there was significant correlation between knowledge and practice, attitude and practice, attitude and knowledge while Temtanakitpaisan et al found out association between knowledge and education, which was not significantly associated.(7)

CONCLUSION

More than half of the participants had knowledge about postnatal exercises but they were not fully aware of the potential benefits of postnatal exercises and most of them did not practice postnatal exercises in their postpartum period regularly. It is important to create awareness and educate people about the postnatal exercises so that postpartum dysfunctions can be prevented and women health can be improved.

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