

A survey on awareness of postnatal exercises among recently delivered mothers

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Abstract

Background: Postnatal period brings about series of mental and physiological changes in women during the first six months. The postnatal exercises, diet and proper care are needed on regular basis to deal with postnatal problems like back pain, weight gain, fatigue, depression, urinary incontinence, diastasis recti.

Objective: This study was carried out with the objective of exploring the level of postnatal exercise awareness, factors influencing the awareness and the barriers that the mothers face in attending to postnatal exercises programme.

Research Methodology: A cross sectional study that was conducted in the paediatrics OPD of CMC And Hospital, Ludhiana on recently delivered mothers who visited the hospital for the vaccination of their babies. The convenient sampling method was used to select the sample size of 50. The participants were selected on the basis of inclusion criteria that includes mothers who delivered recently (within 6 weeks of duration from the time of delivery) and who were willing to participate in the study and the individuals who were unco-operative were excluded. The self structured questionnaire comprising of 20 questions was distributed among the participants after obtaining the consent from them.

Results: 18% of women were aware of postnatal exercises. Only 4% had attended to postnatal exercise programme after delivery. 82% did not attend as they were not aware of postnatal exercises. There was significant relationship between unawareness of postnatal exercise and attending to postnatal exercises programme.

Conclusion: The key finding of the study was that the most women lacked awareness about postnatal exercises. The physiotherapists should create awareness among mothers, caregivers, family members and the other health care professionals about importance of the postnatal exercises during postnatal period.

Keywords: Awareness, postnatal exercises, mothers, maternal health, knowledge attitude, practice.

INTRODUCTION

Women suffer from various physical and psychological changes during and after pregnancy. The postpartum period has been divided into three phases. The first phase is acute, that lasts for about 6-12 hours and is associated with rapid changes and risks. This includes postpartum haemorrhage, uterine inversion, amniotic fluid embolism, and eclampsia. The second phase that is sub acute, continues for 2-6 weeks after child birth and includes less rapid changes in haemodynamics, genitourinary recovery, metabolism and emotional status. The third phase is delayed period that is gradual and lasts upto 6 months and the time period during which muscle tone and connective tissue is restored (Lowen et al. 2020). The major concerns after pregnancy are fatigue, body composition, urinary incontinence, diastasis rectus abdominis, low back pain, upper back pain, pubic pain coccyx pain, pelvic girdle pain and tiredness. The postnatal exercises have an important role to play in improving maternal health. The benefits of postnatal exercises include increased energy, improved sense of well-being, decreased depression, reduced body weight, increased lactation, and enhanced ability and capacity to do physical activity regularly. The aerobic exercises have been shown to decrease fatigue levels and improve quality of sleep. Aerobic and resistance training improve body composition and lean body mass and decreases risk of cardiovascular disease. Pelvic floor exercises are used to strengthening of the muscles in conditions such as urinary incontinence. The strengthening of transeverse abdominis should be started since first trimester and should be continued after pregnancy to treat diastasis rectus abdominis. There are several guidelines such as ACOG (American College of Obstetrics and Gynecology) and NICE (National Institute for Health and Care Excellence) for back pain and pelvic pain (Sekar et al. 2020). The extensive research is needed for the collection of data about the practice, attitude knowledge among women regarding postnatal exercises. The objective of the study was to find out the level of awareness among mothers, the factors that are preventing mothers from attending to postnatal exercise program. The study of factors such as distance from the hospital, education level of the mothers, the economic status, family problems, cultural barriers in relation to the awareness and attending to the postnatal exercise programme. The education, employment, economic status and empowerment were positively associated with utilization of 3-4 antenatal care visits, skilled birth attendance and postnatal care (Yadav et al. 2020). The government should make policies for female education, employment, empowerment. Maternal health awareness programs for mothers, caregivers, family members, and healthcare professionals. More research data is needed to explore the current status of maternal health and problems faced by mothers in utilization of postnatal care services in different parts of the country.

RESEARCH METHODOLOGY

A cross-sectional study was conducted in the pediatrics OPD of Christian Medical College and Hospital, Ludhiana, Punjab with the objective of exploring the level of awareness of postnatal exercises, factors affecting the level of awareness, the barriers to utilization of postnatal exercise program among recently delivered mothers. The sampling method was convenient sampling with the sample size of 50. The participants were selected based on inclusion criteria of recently delivered (within duration of 6 weeks from the time of delivery) and who were willing to participate and those who were uncooperative were excluded. A consent was taken from the subjects who participated in the study. The self structured questionnaire consisting of 20 questions based on the socio-economic status, level of awareness, and the barriers in attending to the postnatal exercises program. The results were analyzed using descriptive and inferential statistics.

Results: The responses of the participants are expressed in frequency and percentages using descriptive statistics (refer table no. 1 and table no. 2). The 18% of mothers were aware of postnatal exercises (see graph1). The 8% were the doctors, 2% were the physiotherapists, 8% were the TV/ Internet were the sources of information (see graph 2). The 4% attended to postnatal exercise program. The 82% did not attend as they were not aware, 2% were attending to family matters and 6% thought it was not necessary, 6% did not stay in the area (see graph 3). On using chi square test, the relationship between the level of awareness and reasons for attending to the postnatal exercises programme is significant as the p value is less than 0.05. (see graph 6).

Table:1 Socio-Economic Status

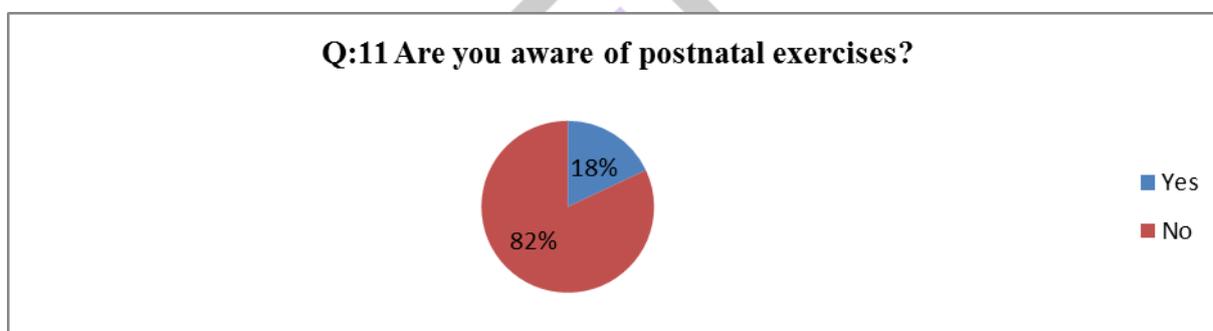
Variable	Category	Frequency	Percentage
Distance from the hospital	Less than 5 Km	38	76%
	More than 5 Km	12	24%
Age	18 - 24 years	16	32%
	25 – 31 years	22	44%
	32 – 38 years	12	24%
Religion	Christian	2	4%
	Sikh	16	32%
	Hindu	32	64%
	Muslim	-	-
Husband's occupation	None	-	-
	Self employed	44	88%
	Central government employee	-	-
	Local government employee	-	-
	Others	6	12%
Delivery method	Normal	33	66%
	Cesarean Section	17	34%
	Assisted vaginal delivery	-	-
Education	None	1	2%
	Primary	8	16%
	Secondary	16	32%
	Tertiary/ University	25	50%
Mother's occupation	House wife	45	90%
	Self employed	4	8%

	Central government employee	-	-
	Local government employee	-	-
	Others	1	2%
Means of transport	Walk	1	2%
	Public transport	10	20%
	Bicycle	1	2%
	Private vehicle	38	76%
	Others	-	-

Table:2 Knowledge And Attitudes regarding Postnatal Exercises

Variables	Category	Frequency	Percentage
Postnatal exercise awareness	Yes	9	18%
	No	41	82%
Source of information	Doctor/Gynecologist	4	8%
	Physiotherapist	1	2%
	Nurse	-	-
	TV/ Internet	4	8%
Attended postnatal exercise program	Yes	2	4%
	No	48	96%
Reason for attending postnatal exercise program	Did not go	48	96%
	Had back pain	-	-
	Had put on weight	1	2%
	Want to get back to normal	1	2%
Reason for not attending exercises	Attending to other family matters	1	2%
	Not aware	41	82%
	Expensive service	-	-
	Thought it was not necessary	3	6%
	Do not stay in the area	3	6%
Any Problems that you are facing that prevents you from attending postnatal exercises	Yes	-	-
	No	9	18%
Physiotherapy experience	Very good	1	2%

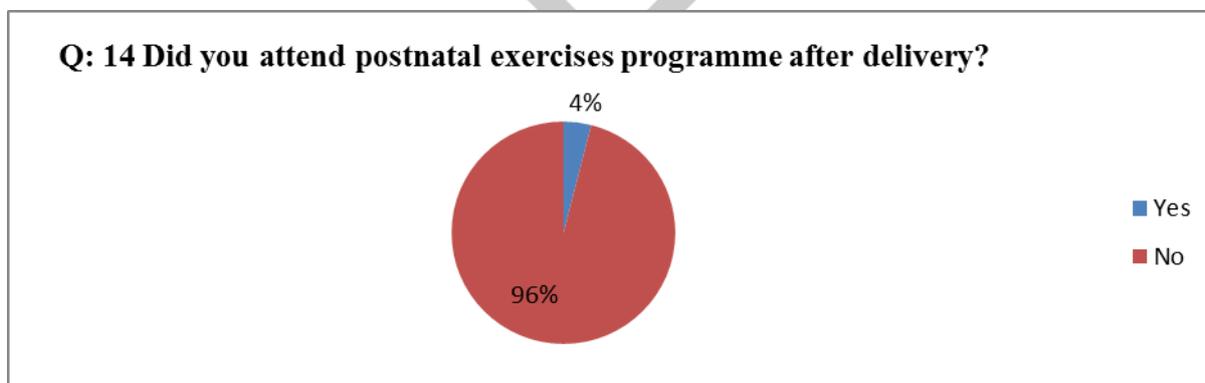
	Good	1	2%
Problems that prevent you from continuing postnatal exercises	Shouted at me	-	-
	They did not teach me well	-	-
	Examined me roughly	-	-
	Did not come when call	-	-
	Others	1	2%
Any cultural factors that prevent you from attending postnatal exercises	Yes	-	-
	No	9	18%



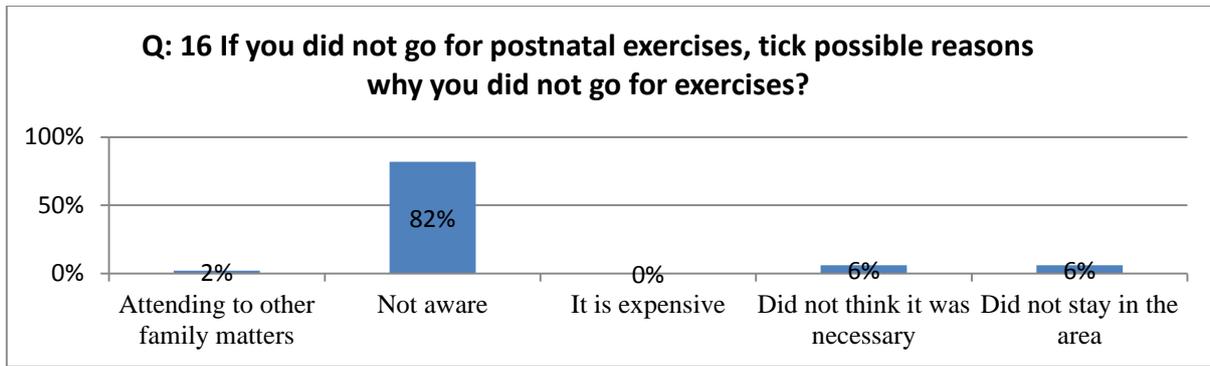
Graph:1 This graph shows the percentage of mothers who were aware and unaware of postnatal exercises.



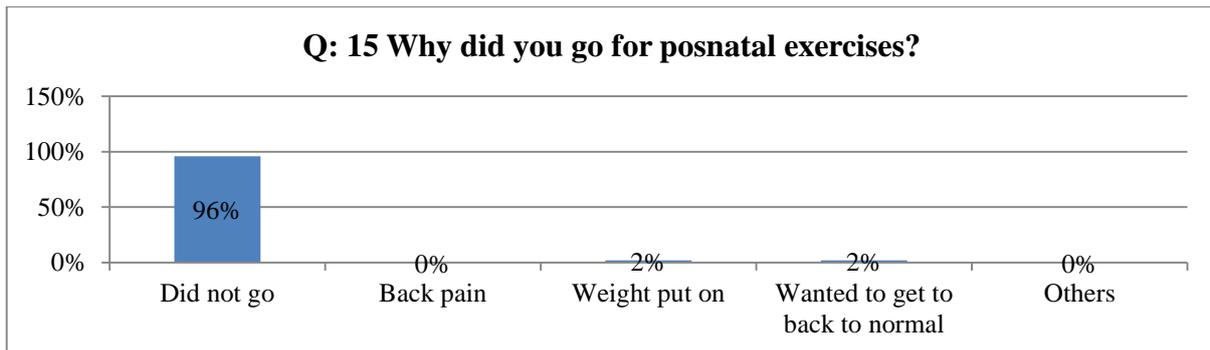
Graph:2 This graph shows the percentages of the sources of the information.



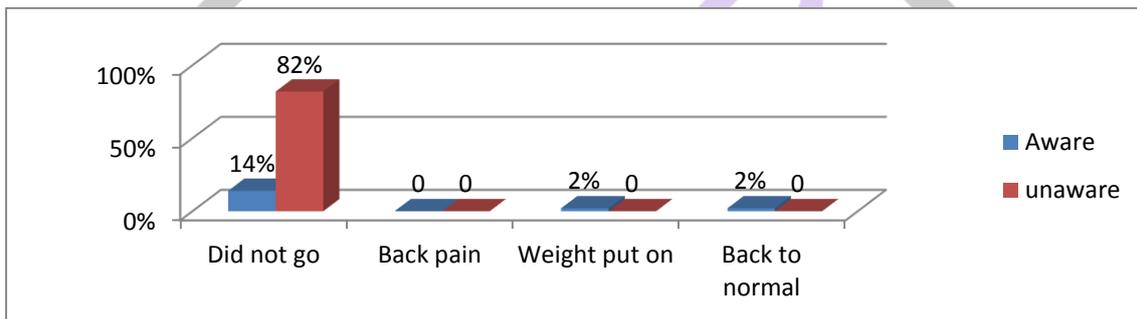
Graph:3 This graph shows the percentage of mothers who attended postnatal exercises programme



Graph: 4 This graph shows percentages of the the reasons for not attending the postnatal exercise programme.



Graph: 5 This graph shows the percentages of the reasons for attending postnatal exercises.



Graph:6 This graph shows the relationship between the level of awareness and the reason for not attending postnatal exerices.

DISCUSSION

Mothers need to understand the changes occurring in their bodies and how to prevent and manage postnatal complications such as back pain, muscle imbalance and instability of spine, pelvic pain, postnatal depression, and urinary incontinence. Postnatal physiotherapy helps the mother to adjust emotionally to her new role and to prevent after birth complications. The results of the study was interpreted as only 18% of women were aware of postnatal exercises and 82% were unaware of postnatal exercises. 76% of participants were residing within the 5 km of distance and 24% were residing outside 5 km of distance from the hospital. There was no significant relationship between distance from the hospital and the level of awareness. 50% of mothers had attained tertiary level of education, 32% had attained secondary level of education and 16% had primary level of education. There was no significant relationship between mother’s education and level of awareness among mothers. 88% participant’s husbands were self- employed, and 12% engaged in others occupation. There was no significant relationship between husband’s occupation and attendance to postnatal exercise program. 4 % attended to the postnatal exercise program. 96% did not go for postnatal exercises, 2% of participants wanted to get to back to normal, 2% went because had put on weight, 82% of mothers were not are of postnatal exercises, 6% of mothers did not think it was necessary, 6% were not staying in the area, and 2% were attending to family matters. There existed a relationship between the level of awareness and attendance to the postnatal exercises. The mothers did not attend to the exercises program as they were not aware.

The literature is available so that emphasizes on the important role of the postnatal exercises, and physical activity in improving health of the mothers. The women who did exercises vigorously and continued to stick to their usual activity levels, showed improved physical and psychological fitness (Sampsel et al 1999). The pram walking has the potential to be an attractive physical activity option for mothers of young children (Janet Currie, Elizabeth Develin 2002). Exercise has minimal risks and confirmed benefits for most women (R Artal, M O’Toole 2003). The government should create the awareness about the importance of postnatal care, the availability of the postnatal services, and the important role of women in making decisions about their health (Nankwanga

Annet 2004). Knowledge of postpartum learning needs article provides nurses with general information about the learning priorities of new mothers (Katherine g. Bowman et al. 2004). The immigrated pregnant and the low-income Latinas healthy lifestyle would be promoted with the implementation of community based and family oriented interventions. The low-income, recently immigrated pregnant and postpartum (Thornton et al. 2006). The educational policies, reforming postnatal care policies, and the collection of data on postpartum maternal morbidity were suggested (Yu Cheng et al. 2006). Postpartum exercise intervention enable the women take away the unhealthy traditional postpartum practices and decrease the prevalence of postpartum health problems (Liu et al. 2009). Beliefs about exercise during pregnancy were positive, not all were aware of or followed current ACOG recommendations by the healthcare professionals according to one study (Bauer et al. 2010). In Bangladesh, there is a need of awareness raising program focusing on the importance and availability of postpartum care (Rahman et al. 2011). Most of the women had moderate knowledge about physical activities and did not have a good performance (Abedzadeh et al. 2011). In another study, inadequate knowledge among mothers and concludes that the health awareness program on postnatal exercises should be conducted by the health personnel to improve the knowledge and practice among the mothers about the postnatal exercises. (Sarkar et al. 2014). The result of one study showed there was significant gain in knowledge score of postnatal mothers after conduction of postnatal exercises (R. Mistry et al. 2017). Another study stated that the participants had poor knowledge and practice, but had positive attitude (Vishnu G Ashok, Aazmi Mohamed 2019). There was positive association between the 4E's (education, employment, economic, empowerment) and maternal health care services utilization. The steps should be taken to promote girl education, job creation for poverty reduction to facilitate women empowerment (Yadav et al. 2020). The supervised exercise program of more than 8 weeks was effective for reducing postpartum fatigue (Liu et al. 2020). The household Activities despite adequate knowledge were the commonest barrier in doing postnatal exercises (Sundaramurthy et al. 2020). Core stability exercises alongwith postural care and education will increase the strength of lumbo-pelvic muscles, improve posture, physical activity level, decrease the pain intensity, and improve the functional disability in postpartum period (Sekar et al. 2020). Livingstone 1990 described the postnatal physiotherapy as helping mothers to recover physically after pregnancy with a safe, effective, and enjoyable exercises and relaxation program addressing any specific individual needs relating to her physical changes in the postpartum period. The findings of this study might provide the physiotherapists with the information that could enhance their role as health promoters. The findings must be disseminated to mothers who might get educated on the use of postnatal physiotherapy services. Such information could minimize the mother's physical and possible psychological disorders and create awareness among mothers about the importance of postnatal exercises. The study showed that women lacked awareness about their needs. They take changes after pregnancy as something natural that women have to bear. The physiotherapists should come up with their aims at improving maternal health by creating awareness among mothers about their changes in body mechanics during pregnancy. The awareness program will help mothers to cope up with postnatal complications.

Limitations

The study was limited within defined area.
The sample size was small.

Clinical Implication

The survey had focused on the factors that had affected the level of awareness among mothers, and reasons for not attending physiotherapy services. The barriers to utilization of postnatal services need to address. As the most mothers were not aware, the postnatal exercises awareness program should be created by physiotherapists, and the government among mothers, caregivers, family members and other health care professionals.

Recommendations

The study can be conducted on larger population. With the combined knowledge of research and clinical skills the physiotherapists should define their roles in cure, health promotion, rehabilitation, and prevention services in women's health to mothers, caregivers, family members and other health care professionals.

Conclusion

In our study we concluded that very few women were aware of postnatal exercises. Analyzed data showed there were only 18% women who were aware of postnatal exercises. The postnatal exercises and physical activities have very important role to play in postpartum period of mothers and the timely preventive measures needs to taken to improve the health of mothers. The physiotherapists should create awareness among mothers, caregivers, and the other health care professionals about the importance of postnatal exercises in treating postnatal complications.

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