

# To Study the Knowledge, Attitude and Practice of Postpartum Exercises in Nursing Mothers

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**Abstract** - Postpartum period has three distinct phases - immediate, early and remote.<sup>[1]</sup> First six weeks following childbirth known as puerperal period is a stressful for any women due to physiological and psychological adaptation which happens during this period and pelvic organ returns to pre pregnant state.<sup>[1]</sup> Breastfeeding starts immediately after the birth of the infant and as per the recommendation of WHO it is to be continued exclusively for 6 months.<sup>[2]</sup> During this period, Postpartum exercises like Kegel's, abdominal and breathing exercises helps to improve the pelvic floor and abdominal muscle tone, bowel and bladder function and cardiovascular fitness which will have a positive influence on the health of the mother.<sup>[3]</sup> Two hundred and sixteen postpartum nursing mothers between the time period of six weeks to six months and Women who have given birth in hospitals and have been informed about post-natal exercises during the duration of hospitalization. In conclusion, the findings of this study provided an excellent insight on how many of the participants had knowledge about postnatal exercises and attitude is relatively positive which they were fully aware of the potential benefits of postnatal exercises but most of them did not practice postnatal exercises in their postpartum period regularly because majority of mothers were facing barriers because of household chores and baby care.

**Key Words:** knowledge, attitude and practice of postpartum exercises, nursing mothers, postpartum health.

## 1.INTRODUCTION

The initial six weeks following childbirth, known as the puerperal period, can be particularly challenging for women due to the physiological and psychological adjustments taking place, alongside the return of pelvic organs to their pre-pregnancy state. Postpartum exercises such as Kegel exercises, abdominal workouts, and breathing exercises aid in enhancing pelvic floor and abdominal muscle strength, as well as improving bowel and bladder control and cardiovascular fitness. These exercises contribute positively to the overall health of the mother. Inadequate care during this crucial time can lead to various complications such as perineal muscle weakness resulting in bladder incontinence, back pain, and even postpartum psychosis. Participating in postnatal exercise (PNE) can have a positive impact on preventing depression and other psychological issues by promoting relaxation in mothers. PNE plays a significant role in averting complications like bladder incontinence, yet many women may not fully understand its benefits, and cultural beliefs may discourage them from engaging in such exercises.<sup>[1]</sup>

Postnatal exercise is crucial, focusing on strengthening and toning weakened abdominal, lower, and upper back muscles. These exercises aim to optimize the functioning of all systems and prevent complications, offering a wide range of benefits for mothers. They expedite the recovery process and specifically target muscles like the transverse

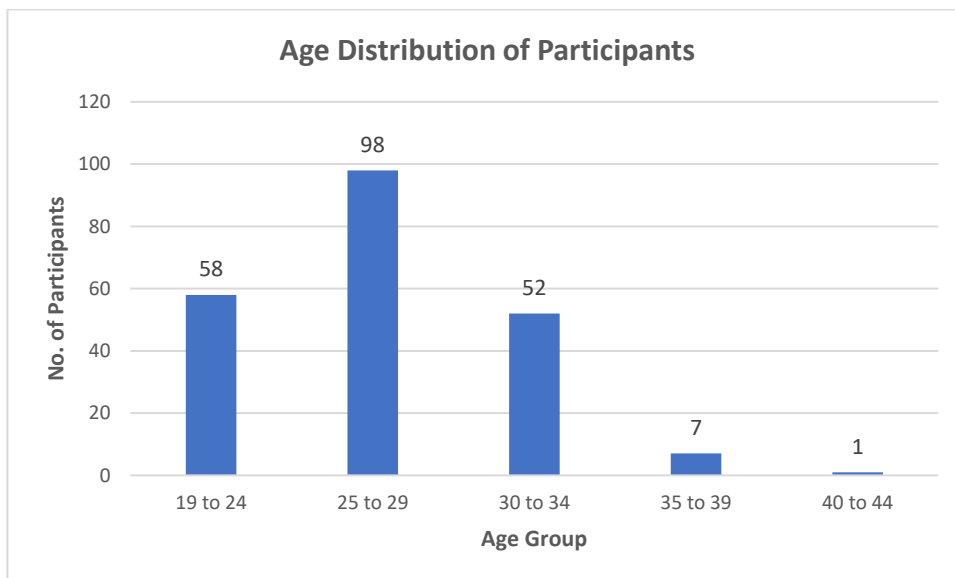
abdominal muscle, which aids in treating back pain. This specific exercise approach aims to enhance the dynamic stability role of local muscles, providing stiffness to spine and pelvic segments during functional postures and movements. The postnatal period marks the adjustment, both physically and psychologically, to childbirth. It spans six weeks during which the body's tissues, particularly the genital and pelvic organs, return to their pre-pregnancy condition. Physiological changes during this period include the reversion of the cardiovascular system, initial swelling and subsequent toning of the vaginal wall, and temporary persistence of perineal edema. Biologically, the postnatal period entails the return of hormone levels and uterus size to pre-pregnancy conditions.<sup>[2]</sup>

Engaging in physical exercise following pregnancy has been associated with improvements across physical, physiological, psychological, and social well-being domains. Specifically, postnatal exercise has been correlated with enhancements in cardiovascular fitness, restoration of abdominal muscle tone stretched during pregnancy and labour, decreased risk of overweight or obesity, improved lactation and breastfeeding, and reduction in potential postpartum complications such as musculoskeletal issues, urinary and faecal incontinence, and constipation. Additionally, it has shown promise in mitigating pregnancy-related psychosocial challenges like anxiety and depression.

**Materials and Method:** In this study, Vaccination centres and housing societies were selected for collecting the data and women who have given birth in hospitals and have been informed about post-natal exercises during the duration of hospitalization were selected. The mothers were explained about the study and procedure. The mothers were explained to fill the informed consent form for participation in the study. Mothers who fulfilled the inclusion criteria were checked and consent was taken before explaining the self-made questionnaire and then 216 postpartum mothers were made to fill the self-made questionnaire. Data was collected and statistical analysis was done.

**Results:**

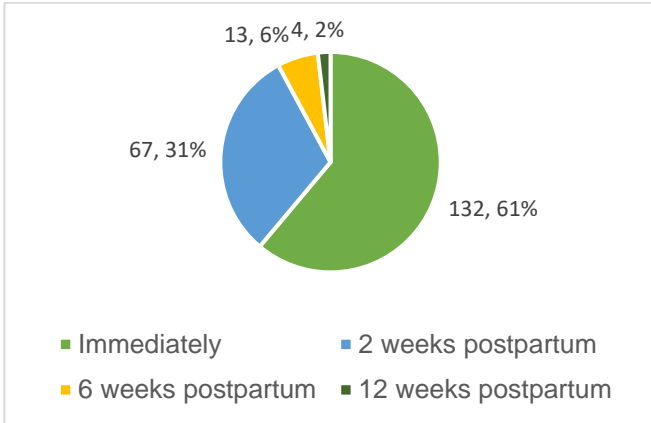
Graph 1: Age Distribution



Interpretation - Nearly, 45% participants are from the age group 25 to 29. The 27% are from the age group of 19 to 24 and 24% are from 29 to 34 years old. Only 3% are above the age group 34 years old.

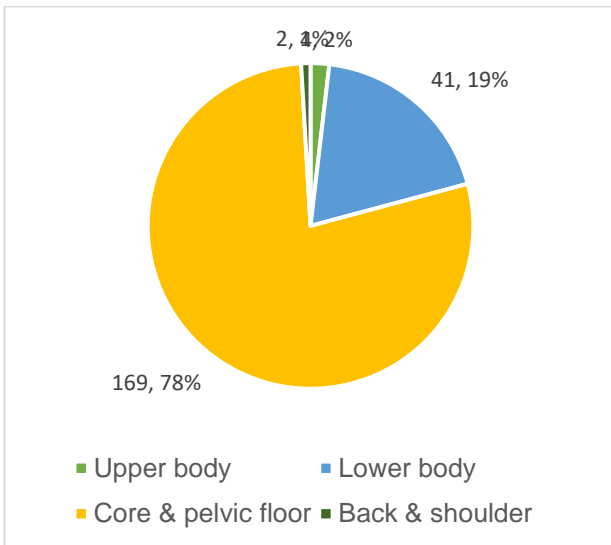
**KNOWLEDGE OF POSTPARTUM EXERCISES**

Graph 2: Recommended timeframe for starting postnatal exercises after giving birth



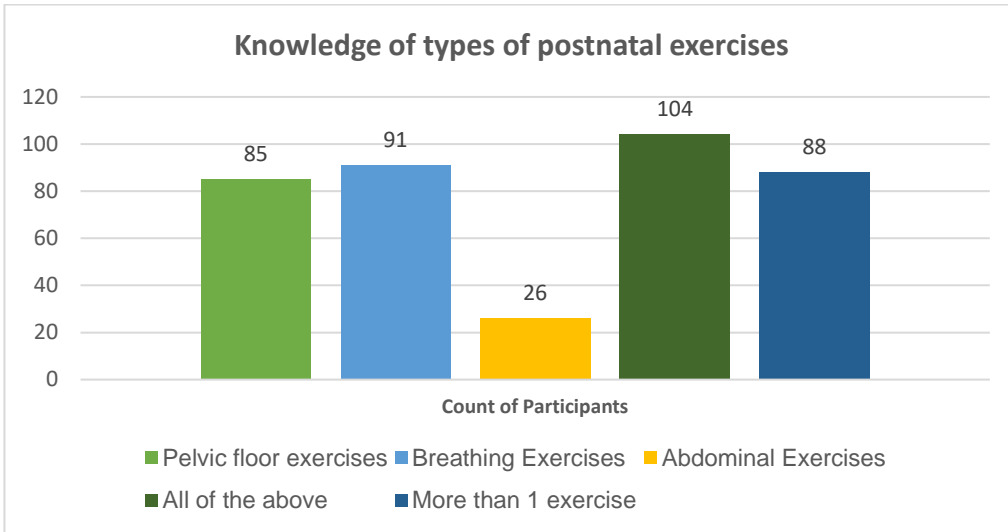
Interpretation - Only 61% participants knew that recommended timeframe for starting postnatal exercises is immediately after giving the birth.

Graph 3: Which of the following muscle groups does postpartum exercises primarily target for a faster recovery?



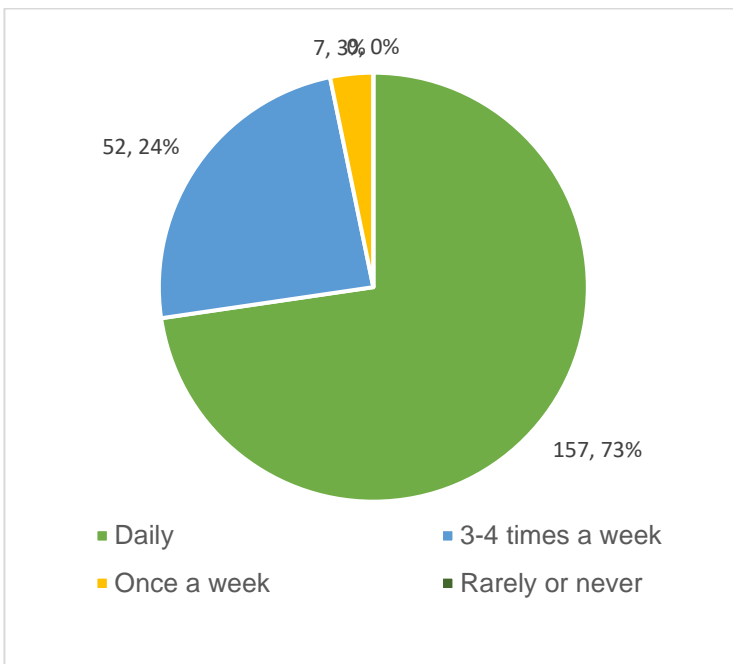
Interpretation – Nearly 78% participants were aware that postpartum exercises primarily target Core & pelvic floor muscles for a faster recovery.

Graph 4: What are the types of postnatal exercises you know?



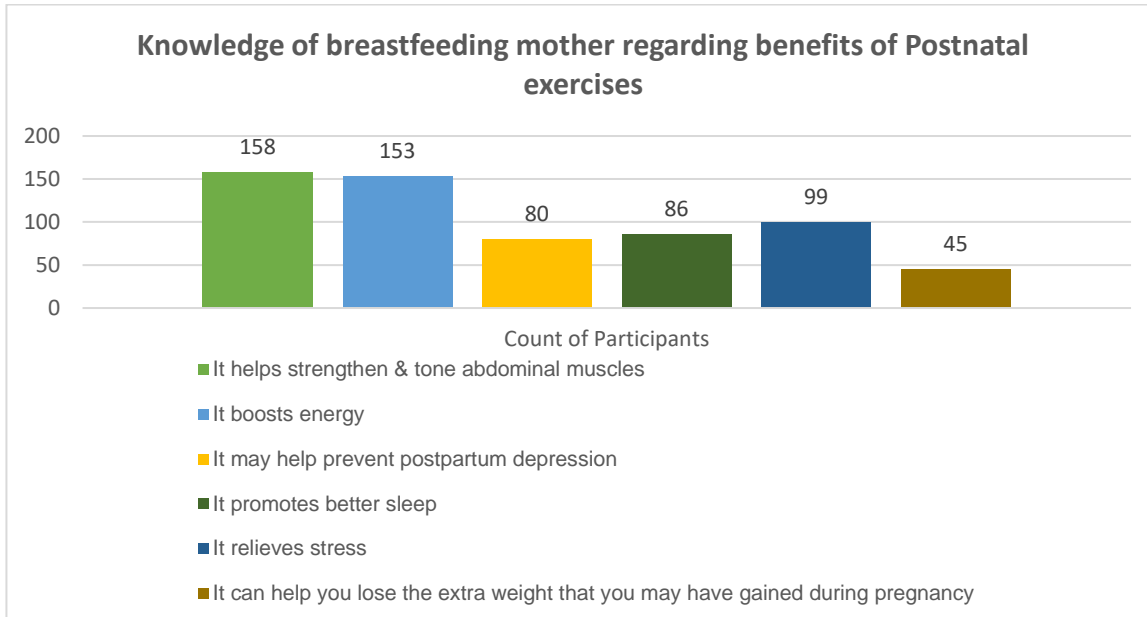
Interpretation – 104 participants knew all of the postnatal exercises.

Graph 5: How often should postpartum mothers include postnatal exercises weekly routine?



Interpretation - Almost 73% participants knew that postpartum mothers should include daily postnatal exercises in their routine.

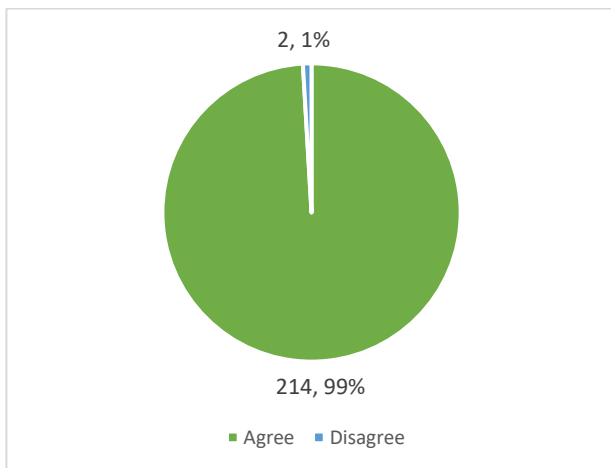
Graph 6: What are the benefits of engaging in postnatal exercises as a breastfeeding mother?



Interpretation – Nearly, 158 out of 216 participants knew that it helps strengthen & tone abdominal muscles and 45 participants knew that it can also help in losing the extra weight gained during pregnancy

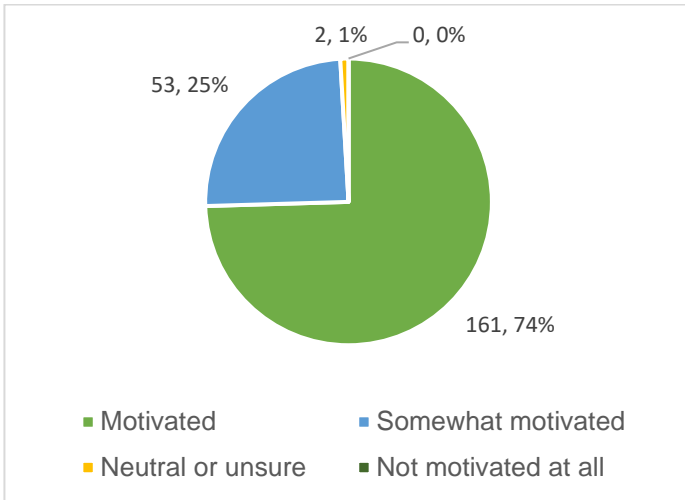
### ATTITUDE TOWARDS POSTPARTUM EXERCISES

Graph 7: Do you agree that postnatal exercise is necessary?



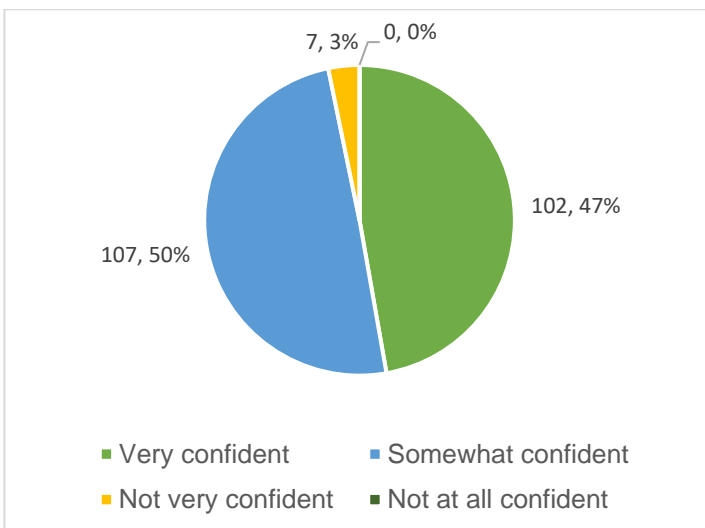
Interpretation - Almost 99% participants agree that postnatal exercises are necessary.

Graph 8: How motivated are you to incorporate postnatal exercises into your routine for postnatal recovery?



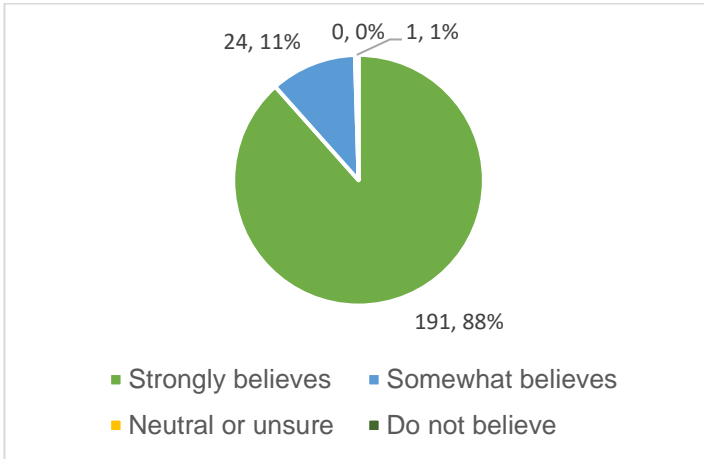
Interpretation - Almost 74% participants are positively motivated to incorporate postnatal exercises into their routine for postnatal recovery.

Graph 9: How confident do you feel about your ability to find time for postnatal exercise in daily schedule?



Interpretation - The 47% participants were very confident on their ability to find time for postnatal exercise in daily schedule. Almost 50% were somewhat confident and very few were not confident.

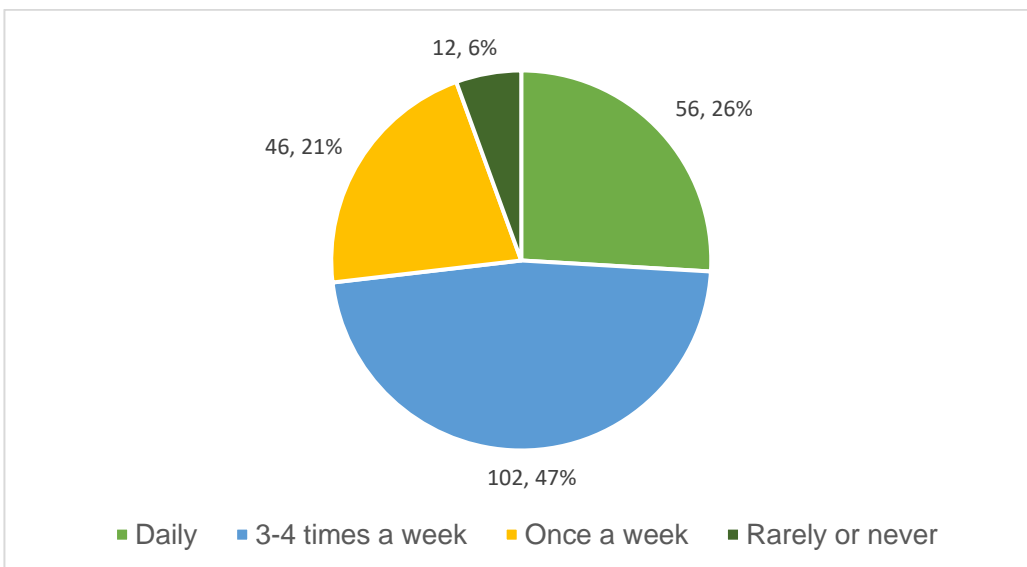
Graph 10: To what extent do you believe that postnatal exercise can positively impact your physical and emotional wellbeing as a postpartum mother?



Interpretation - Almost 88% participants strongly believe that postnatal exercises can positively impact your physical and emotional wellbeing as a postpartum mother. Only 1% did not believe at all. The rest somewhat believed or were neutral.

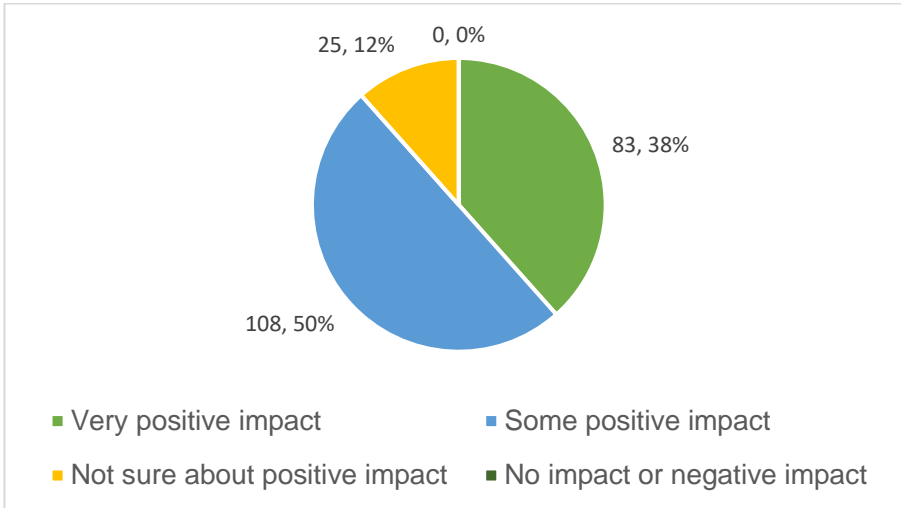
### PRACTICE OF POSTPARTUM EXERCISES

Graph 11: How often do you currently engage in postnatal exercise as a part of your postpartum routine?



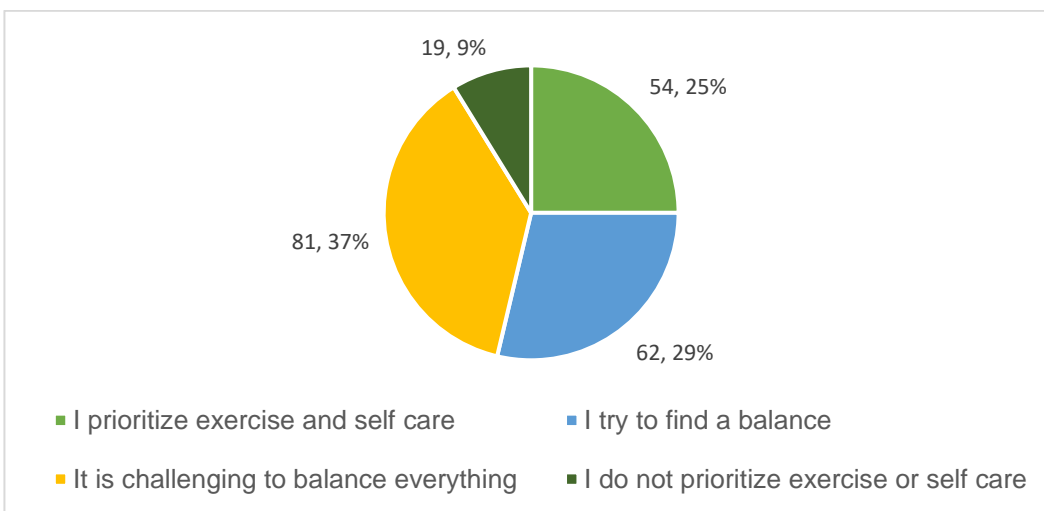
Interpretation - Only 26% participants daily engage in postnatal exercise as a part of their postpartum routine. The 47% engage 3-4 times a week and nearly 21% engage once a week. Only 6% rarely or never engage.

Graph 12: How do you feel about the impact of your postnatal exercise routine on your postpartum recovery and overall, wellbeing?



Interpretation - Only 38% participants experienced very positive impact of postnatal exercise routine on their postpartum recovery and overall, wellbeing. The 50% participants reported somewhat positive impact and the rest, only 12% were unsure of positive impact.

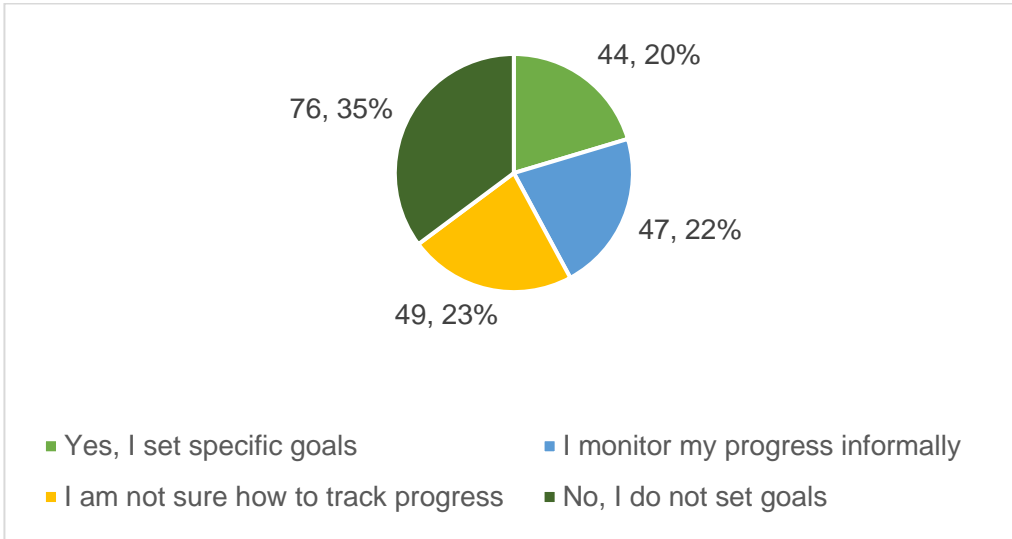
Graph 13: How well do you balance your postnatal exercise routine with other responsibilities and self-care activities?



Interpretation - The 25% participants prioritized exercise and self-care. The 29% participants tried finding a balance in the routine while 37% struggled for balance. Very few, i.e. 9% did not prioritize postnatal exercise routine with other responsibilities and self-care activities.

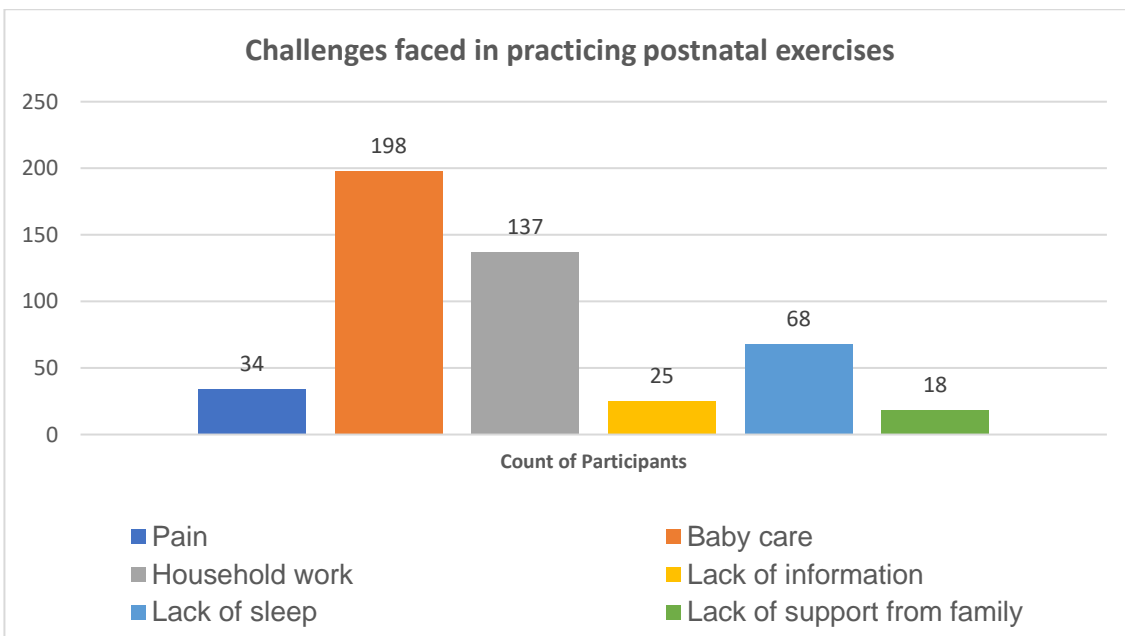


Graph 14: Do you track progress or set goals for your postnatal exercise routine, such as increasing reps or duration over time?



Interpretation - Only 20% participants set goals for their postnatal exercise, 22% monitored their progress informally. The 23% participants were not sure on the way to track the progress. And 35% did not set any goals.

Graph 15: Challenges faced in practicing postnatal exercises



Interpretation – Nearly, 198 out of 216 participants were facing challenges to practice postnatal exercises due to baby care and 137 participants were also facing challenges due to household chores.

**Discussion:**

61% participants knew that recommended timeframe for starting postnatal exercises is immediately after giving the birth but in the previous study done by Pooja Negi et al 'Study to Assess the Knowledge of Post-Natal Mothers Regarding Post-Natal Exercises' revealed that 68.33% of postnatal mothers had inadequate knowledge, 28.33% had moderate knowledge, and only 3.33% had adequate knowledge about postnatal exercises. In recent years, postpartum mothers have gained a better understanding of postnatal exercises due to factors such as increased access to online information, social media, and community support groups. These platforms offer a wealth of educational resources, including expert tutorials and shared personal experiences, helping to foster a sense of connection and empowerment. Additionally, healthcare providers have become more proactive in discussing the importance of postnatal fitness during prenatal visits, emphasizing its benefits for physical recovery and mental well-being. This heightened awareness has contributed to a more informed and engaged community of postpartum women, eager to include exercise as a key part of their recovery process.

Nearly 78% of participants were aware that postpartum exercises primarily focus on strengthening the core and pelvic floor muscles for faster recovery. However, a study by Rabia Majeed, Samer Zehra, and Zaara Furqan et al., titled 'Knowledge, Attitude, and Practice among Women Regarding Postnatal Exercises; A Cross-Sectional Study Across Lahore in Private Sector', revealed that 74.2% of participants believed postnatal exercises help prevent uterine prolapse. Additionally, 13.3% thought that postnatal exercises could prevent urinary incontinence, 9.2% believed they could prevent diastasis recti, and 3.3% thought they could help prevent bowel incontinence. The study also found that 80.8% of participants believed weight gain was a common consequence of not performing postnatal exercises, while 15% associated back pain and 4.2% associated postpartum depression with the omission of these exercises. Postpartum mothers often learn about exercises targeting the core and pelvic floor muscles through various sources, including prenatal education, healthcare professionals, and postpartum support programs. During pregnancy, women are frequently educated on the physical changes their bodies will undergo and the importance of strengthening these muscle groups for recovery. Midwives, obstetricians, and physical therapists stress the need for core and pelvic floor rehabilitation to prevent issues like diastasis recti, urinary incontinence, and prolapse. Furthermore, many mothers turn to online platforms, fitness classes, and support groups that emphasize the role of these exercises in restoring strength, stability, and overall postpartum health. However, knowledge and awareness may vary depending on access to healthcare, socioeconomic status, and cultural beliefs, influencing how much postpartum women understand the benefits of these targeted exercises.<sup>[7]</sup>

A 2020 study by Sundaramurthy et al., titled 'Knowledge, Attitude, and Practice of Post-Natal Exercises among Postnatal Women from a Tertiary Care Centre, South India', found that 56% of participants practiced postnatal exercises (PNE) daily, while 36.3% practiced once a week. In contrast, our study revealed a disparity, with only 26% of participants willing to engage in daily PNE as part of their postpartum routine, and 47% ready to exercise 3-4 times a week. Despite understanding the importance of postnatal exercises, many postpartum mothers face challenges in incorporating them into daily life. One major barrier is the physical and emotional exhaustion that comes with caring for a newborn, especially when dealing with sleep deprivation and the constant demands of feeding, diapering, and soothing the baby. This fatigue often leaves mothers with little energy or motivation to focus on their own recovery. Additionally, time constraints play a significant role. Many mothers find it difficult to set aside time for exercise amidst the overwhelming responsibilities of caring for their baby, particularly when they lack consistent help or support from partners or family members. Their schedules often revolve entirely around their baby's needs, leaving little room for self-care.<sup>[1]</sup>

**Conclusion:** In conclusion, the findings of this study provided an excellent insight on how many of the participants had knowledge about postnatal exercises and attitude is relatively positive which they were fully aware of the potential benefits of postnatal exercises but most of them did not practice postnatal exercises in their postpartum period regularly because majority of mothers were facing barriers because of household chores and baby care.

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