



A STUDY TO ASSESS THE: KNOWLEDGE AND ATTITUDE REGARDING PELVIC FLOOR MUSCLE EXERCISE IN REDUCING URINARY INCONTINENCE AMONG THE POSTNATAL MOTHER'S IN SELECTED HOSPITALS OF THIRUVANANTHAPURAM DISTRICT

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ABSTRACT

One of the common issues that postpartum women face is urinary incontinence, which significantly affects their social, psychological, and physical well-being. Pelvic floor muscle exercises (PFME), also referred to as Kegel exercises, and are a successful non-invasive treatment option for controlling and preventing postnatal urine incontinence. The purpose of this study was to evaluate postpartum moms' attitudes and knowledge about using PFME to reduce urine incontinence. In Bangladesh, 121 postpartum moms (in selected hospitals in the Thiruvananthapuram city) participated in a cross-sectional descriptive study using a non-probability sampling technique. A standardized questionnaire was used to collect the data, and SPSS version 20 was used for analysis. The results showed that 84 out of 69 individuals knew the advantages of exercising the pelvic floor muscles. Out of the samples, 59 (48.8%) of the respondents were experiencing urinary incontinence and only 37 (30.6) of the respondents were exercising PFME regularly. Most postnatal mothers 103 (85.1 percent) have reported a good attitude towards the relevance of PFME in the postnatal period. On the whole, 78 (64.76) of the participants were well informed and 87 (71.96) participants were positive in regard to the pelvic floor muscle exercises. The research concludes that despite the significant percentage of postnatal mothers having good knowledge and positive attitude to PFME, the practice is constrained. Increasing awareness and education processes in the course of the antenatal and postnatal care could enhance the adoption of PFME and assist in the mitigation of the urinary incontinence issue in postnatal mothers.

Keywords: Pelvic Floor Muscle Exercise, Urinary Incontinence, Postnatal Mothers, Knowledge, Attitude

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Mrs. Karthika Mohan is a researcher and Ph.D. Scholar at Himalayan University, Itanagar, Arunachal Pradesh, India. Her academic journey is marked by a strong commitment to advancing knowledge in her field of study.



Dr. Santosh Sharma is a distinguished academician with extensive experience in teaching, research, and mentorship. Dr. Sharma has guided numerous Ph.D. scholars across diverse disciplines, fostering scholarly excellence and innovation. She has published several research articles in reputed national and international journals. Her research contributions span critical areas of health sciences, community well-being, and evidence-based practices, reflecting both academic rigor and societal relevance. As a committed scholar and mentor, Dr. Sharma continues to inspire the next generation of researchers while contributing meaningfully to the advancement of knowledge in her field.



INTRODUCTION

Urinary incontinence is a prevalent health issue among postnatal mothers which is not well reported, although it is caused by the changes that occur to the body during pregnancy and childbirth and which weaken the pelvic floor muscles. A number of circumstances, including vaginal birth, extended labor, multiparity, and hormonal changes, can lead to the development of pelvic floor dysfunction throughout the postnatal period. Urinary incontinence has a negative effect on postpartum women's psychological health, social lives, and general quality of life in addition to their physical comfort.

Kegel exercises, sometimes referred to as pelvic floor muscle exercises (PFME), are an easy, affordable, and non-invasive way to strengthen the pelvic floor muscles and treat lower urinary tract incontinence. PFME practice leads to a stronger degree of bladder control, stronger pelvi muscles, and an accelerated postpartum recovery. PFME is not fully used even though there is evidence that it is effective because of the lack of knowledge, wrong guidance, and beliefs among postnatal mothers.

To enhance the use and effectiveness of pelvic floor muscle exercises among postnatal mothers, it is essential to comprehend the extent of their knowledge and attitudes regarding these exercises. Attitude and positive knowledge are very instrumental in encouraging women to embrace PFME as a normal component of the postnatal care. Consequently, the proposed study would evaluate postpartum moms' attitudes and knowledge of pelvic floor muscle workouts for lowering urine incontinence. The results will offer evidence-based data to direct educational initiatives and improve the postpartum health of moms.

LITERATURE REVIEW

Khanom et al. (2025) to ascertain the extent of knowledge and attitude regarding pelvic floor muscle exercises (PFME) for urinary incontinence prevention among postnatal mothers. The research indicated that urinary incontinence was a prevalent issue during postnatal and almost fifty percent of the respondents had symptoms. Despite the fact that most of the postnatal mothers had sufficient knowledge and positive attitude to PFME, the actual implementation of pelvic floor muscle exercises was low. The authors pinpointed the absence of guidance and awareness during the postnatal period as a factor contributing to low adherence to PFME. They suggested that postpartum mothers might be encouraged to do pelvic floor muscle exercises through educational interventions like structured learning activities.

Alharbi et al. (2019) evaluated postpartum women in Al Madinah Al Munawarah, Saudi Arabia, about their knowledge, attitude, and use of Kegel exercises. The research revealed that, though a significant number of postnatal women had sufficient knowledge and positive attitude towards pelvic floor muscle exercises, it was established that Kegel exercises were not undertaken on a regular basis. The results showed that inadequate training, inadequate guidance by medical workers, and inadequate education throughout the post-natal stage are some factors that led to poor adherence to exercise. The authors put much emphasis on the need to integrate systematic education and teaching about pelvic floor muscle exercises into routine postnatal care in order to enhance practice and avoid urinary incontinence.

Alagirisamy et al. (2022) evaluated the effectiveness of a pelvic floor muscle training program in enhancing pregnant women's knowledge, attitude, practice, and self-efficacy through a randomized controlled experiment. The paper has indicated that the participants treated with the structured PFME intervention had much greater knowledge, more positive attitudes, better exercise behaviors, and levels of self-efficacy than the controls. The results emphasized the value of training and educational initiatives to improve adherence to pelvic floor muscle exercises. Additionally, providing information on timely instruction during pregnancy could contribute to better pelvic floor health and urinary incontinence prevention after childbirth.

Lin et al. (2025) undertook a cross-sectional study to evaluate postmenopausal and postpartum women's knowledge, attitudes, and practices about pelvic floor dysfunction. It was found that while many women showed a modest level of awareness and a generally good attitude regarding pelvic floor health, there was little actual practice of pelvic floor muscle exercises. The results showed that women's knowledge and practices on pelvic floor care are insufficient, resulting from sociodemographic factors, a lack of health education, and restricted access to expert advice. The authors highlighted the necessity of special educational interventions that enhance the health education of the pelvic floor and the efficacy of preventive measures in postpartum women.

RESEARCH METHODOLOGY

The methodological framework used to accomplish the goals of the study is described in this section. The research design, study area, sample size, data collection techniques, variables and their measures, and data

analysis techniques are all specified. The chosen approach was required to have a methodical data collection process and to be able to conduct a trustworthy analysis to ascertain the postpartum moms' knowledge and attitudes on pelvic floor muscle workouts in order to lessen urine incontinence.

Research Design

Postpartum moms' knowledge and attitudes on pelvic floor muscle workouts as a means of lowering urine incontinence were assessed using a cross-sectional descriptive research methodology. This design was deemed to be suitable to get the information on the knowledge and attitudes which existed at one point only.

Sample Size and Study Area

The research was carried out with 121 postnatal mothers who were patients in selected hospital in Thiruvananthapuram city, Kerala. The Women and Child Hospital, Thukkadu Thiruvananthapuram, Kerala. Non-probability convenience sampling was the sample technique employed since it included participants who satisfied the inclusion criteria, such as postpartum mothers who were accessible and willing to participate throughout the data collection period.

Data Collection Method

A structured, pre-tested questionnaire was used in order to gather data on the basis of the pertinent literature and the objectives of conducting the study. The questionnaire was divided into three sections: sociodemographic information, pelvic floor muscle exercise knowledge, and attitudes on pelvic floor muscle workouts. The data were collected through face-to-face interviews, ensuring informed consent from the respondents and upholding confidentiality and ethical standards throughout the study.

Variables and Measurement

The independent variables were the socio-demographic factors that were age, parity, educational status, mode of delivery, and postnatal period. The dependent variables were knowledge and attitude related to pelvic floor muscle exercises. Knowledge was assessed by using multiple-choice questions, and the scores were divided into adequate and inadequate groups according to mean scores. Attitude was measured in the form of Likert and answers were categorized according to the question as positive and negative attitudes towards pelvic floor muscle exercises.

Data Analysis

The Statistical Package for the Social Sciences (SPSS) version 20 was used to code, input, and analyze the collected data. The data was summarized using descriptive statistics including frequency, percentage, mean, and standard deviation. To facilitate interpretation, the results were collated and graphically shown.

RESULT & DISCUSSION

The socio-demographic profile of postnatal mothers selected for the study is presented in Table 1. The variables to be addressed in this table are age, parity, education and mode of delivery. Four age divisions have been established for the participants: Age ranges: 20–25, 26–30, 31–35, and age over 35. Parity is either primiparous or multiparous. The level of education is classified into primary education, secondary education and tertiary education. Mode of delivery can be divided into normal vaginal birth and cesarean. This table presents the description of the background features of the participants of the study.

Table 1: Socio-Demographic Characteristics of Postnatal Mothers

Variables	Category	Frequency (n)	Percentage (%)
Age (years)	20–25	38	31.4
	26–30	46	38.0
	31–35	27	22.3
	>35	10	8.3
Parity	Primiparous	44	36.4
	Multiparous	77	63.6
Educational Status	Primary	29	24.0
	Secondary	56	46.3
	Higher	36	29.7
Mode of Delivery	Normal vaginal	79	65.3
	Cesarean section	42	34.7

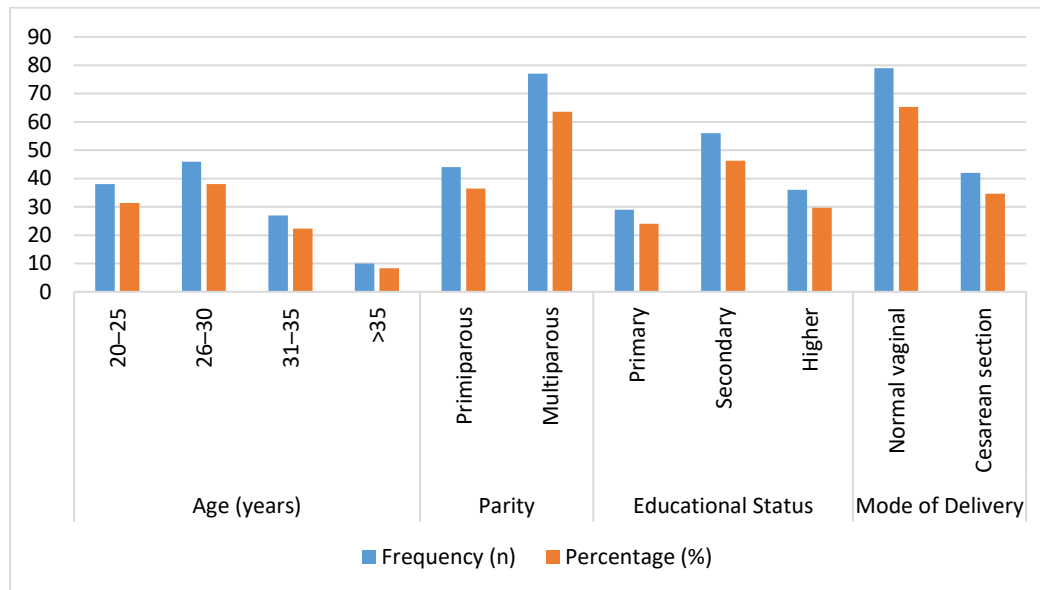


Figure 1: Graphical Representation on Socio-Demographic Characteristics of Postnatal Mothers

The findings indicate that most of the postnatal mothers were aged 26-30 years (38.0%), then 20-25 years (31.4%). The vast majority of the participants were multiparous (63.6%), which implied that they had a previous childbirth experience. On the area of academic status, about half of the mothers (46.3) were of secondary level education and 29.7 were of higher learning. Regarding mode of delivery, more people (65.3) delivered normally than those (34.7) who delivered through cesarean section. This data indicate that the sample population is mostly comprised by young, multiparous, moderately educated postnatal mothers with vaginal delivery mode of childbirth as the most prevalent one.

Table 2 shows the postpartum mothers' distribution based on their degree of pelvic floor muscle exercise expertise. The levels of knowledge were categorized as adequate or inadequate based on the scoring criterion used in the study. The participants' comprehension of pelvic floor muscle workouts and their effect on lowering urine incontinence is revealed in this table.

Table 2: Knowledge Regarding Pelvic Floor Muscle Exercises

Knowledge Level	Frequency (n)	Percentage (%)
Adequate knowledge	78	64.76
Inadequate knowledge	43	35.24
Total	121	100

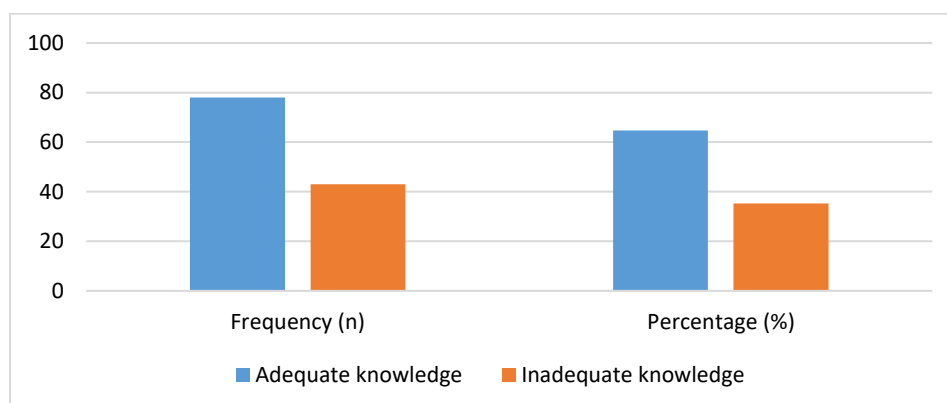


Figure 2: Graphical Representation on Knowledge Regarding Pelvic Floor Muscle Exercises

The results showed that 43 (35.24%) postpartum moms lacked sufficient information about pelvic floor muscle workouts, whereas 78 (64.76%) had sufficient knowledge. The results indicate that while a significant percentage

of participants were aware of pelvic floor muscle exercises and their benefits, a substantial number lacked adequate knowledge. This suggests that improved educational interventions should be incorporated into postnatal care provision.

Table 3 shows the proportion of the postnatal mothers according to their attitude towards pelvic floor muscle exercises. The level of attitude is categorized in terms of positive attitude and negative attitude in respect to the scoring standards of attitude measurement tool. The following table provides an overview of participants' views on the value and application of pelvic floor muscle exercises in the postpartum phase.

Table 3: Attitude toward Pelvic Floor Muscle Exercises

Attitude Level	Frequency (n)	Percentage (%)
Positive attitude	87	71.96
Negative attitude	34	28.04
Total	121	100

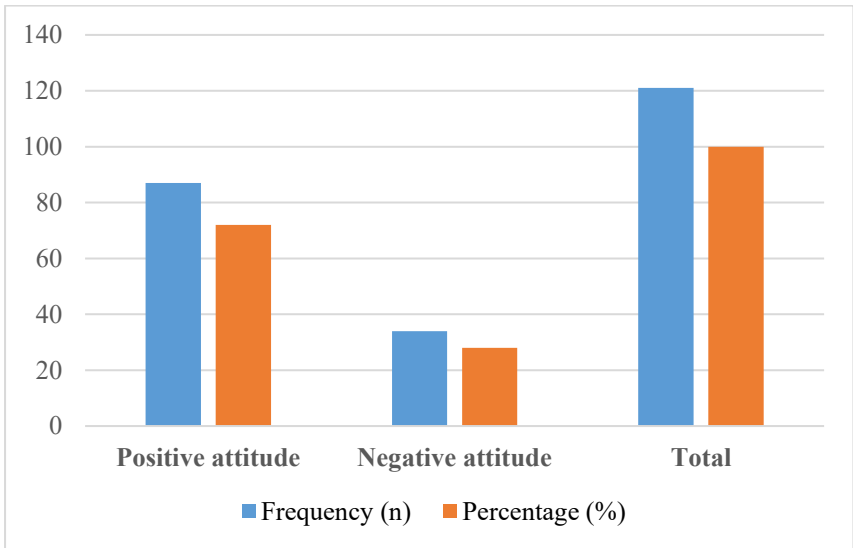


Figure 3: Graphical Representation of Attitude toward Pelvic Floor Muscle Exercises

Findings indicate that most of the postnatal mothers 87 (71.96%) showed positive attitude towards pelvic floor muscle exercises, and 34 (28.04%), showed negative attitude. The results imply that most respondents were aware of the benefits of pelvic floor muscle training for postnatal health, suggesting they would have a positive attitude toward such training if provided with accurate information and guidance.

CONCLUSION

The current research is a conclusion that urinary incontinence is a prevalent health issue in postnatal mothers with almost half of the participants experiencing the symptoms in the postnatal period. Their research indicated that, despite the fact that most postnatal mothers demonstrated adequate knowledge and a favorable attitude regarding pelvic floor muscle exercises, these exercises were not performed on a regular basis. The need for better health education and continuing counseling for pelvic floor muscle workouts during the prenatal and postpartum periods is indicated by this awareness-attitude-practice gap. Incorporating structured PFME training with frequent follow-ups can further improve postnatal moms' quality of life by increasing compliance with these exercises and decreasing the occurrence of urine incontinence.



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