Universe International Journal of Interdisciplinary Research
(International Peer Reviewed Refereed Journal)
DOI No. – 08.2020-25662434

© UIJIR | ISSN (O) – 2582-6417
APRIL 2026 | Vol. 06 Issue 11
www.uijir.com

A STUDY TO ASSESS THE KNOWLEDGE REGARDING PELVIC FLOOR MUSCLE EXERCISES DURING PREGNENCY TO PREVENT URINARY INCONTINENCE AMONG PRIMIGRAVIDA MOTHERS AT SELECTED HOSPITAL IN TONK

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ABSTRACT

Pelvic floor muscle exercises (PFME) are effective in strengthening pelvic floor muscles and preventing urinary incontinence during pregnancy. Due to hormonal changes and increased pressure on pelvic muscles, primigravida mothers are at risk of developing urinary incontinence. Adequate knowledge regarding PFME is essential to prevent this problem. The present study aimed to assess the knowledge regarding pelvic floor muscle exercises during pregnancy to prevent urinary incontinence among primigravida mothers at selected Sahadat Hospital, Tonk. A non-experimental descriptive research design was adopted. Primigravida mothers were selected using a convenient sampling technique. Data were collected using a structured knowledge questionnaire. The findings revealed that most primigravida mothers had inadequate knowledge regarding pelvic floor muscle exercises. The study emphasizes the need for antenatal education to improve awareness and promote maternal health.

Keywords: Pelvic Floor Muscle Exercises Knowledge, Urinary Incontinence Prevention, Primigravida Women's, Knowledge Level

DOI Link :: https://doi-ds.org/doilink/05.2026-22722451/UIJIR

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INTRODUCTION

Pelvic floor muscle exercise (PFME) or Kegel exercise was introduced by Dr Arnold H. Kegel in 1948 in order to build up strength of the pelvic floor muscles and improve their function: to control urinary bladder and bowel motions. This exercise is proven effective in treating stress urinary incontinence in general female population in particular during antenatal and postnatal period. Therefor this exercise taught to all antenatal mothers during antenatal that can guide local health care providers to teach antenatal mothers.

Pelvic Floor Muscle Exercise (PFME), commonly known as Kegel exercise have been scientifically proven to strengthen the pelvic floor muscles, improve bladder control, and reduce the risk of urinary incontinence during and after pregnancy. Despite the proven benefits, awareness and practice of pelvic floor exercise among pregnant women remain low, especially among primigravida's, due to lack of knowledge, misconceptions, or absence of routine counseling during antenatal care.

Kegel exercise, have been widely recognized as an effective, non-pharmacological intervention for preventing and managing urinary incontinence during and after pregnancy. These exercises involve the voluntary contraction and relaxation of the pelvic floor muscles, which helps to improve strength, endurance, and control. When initiated early in pregnancy, especially among primigravida women, PFME can significantly reduce the risk of developing UI, enhance labor outcomes, and aid in postpartum recovery.

Pelvic floor dysfunction and urinary incontinence are two of the most frequent gynecological problems, and pelvic floor muscle training is recommended as a first-line treatment.

Kegel exercise, involve the rhythmic contraction and relaxation of the pelvic floor muscles. These exercises are a well- established, non-invasive, cost-effective method for strengthening the pelvic floor, improving muscle tone, endurance, and bladder control. Studies have demonstrated that regular practice of PFME during pregnancy significantly reduces the incidence and severity of urinary incontinence, shortens the duration of the second stage of labor, improves postpartum recovery, and enhances overall maternal health outcomes.

STATEMENT OF THE PROBLEM

"A study to assess the knowledge regarding pelvic floor muscle exercises during pregnancy to prevent urinary incontinence among primigravida mothers at selected Hospital in Tonk."

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OBJECTIVES OFTHE STUDY

- To assess the knowledge regarding pelvic floor muscle exercises during pregnancy to prevent urinary incontinence among primigravida mothers at selected hospital in tonk.
- To find out association between the knowledge regarding pelvic floor muscle exercises during pregnancy to prevent urinary incontinence among primigravida mothers and their background variables at selected hospital in tonk.
- To develop a pamphlet knowledge regarding pelvic floor muscle exercises during pregnancy to prevent urinary incontinence among primigravida mothers at selected hospital in tonk.

MATERIALS & METHOD

A quantitative research approach with a descriptive design was used. The study was conducted in Sahadat Hospital, Tonk, Rajasthan, with a sample size of 80 primigravida mothers selected through non-probability purposive sampling technique. The data collection tool included a structured knowledge questionnaire, which was validated by 8 experts. The reliability coefficient of the tool was 0.874. Data were collected and analyzed using descriptive statistics (frequency, percentage, mean) and inferential statistics (chi-square test) to identify the association between knowledge level and selected background variables.

RESULT

Table No. 1, Frequency and Percentage Distribution of Socio Demographic Variables Among Primigravida Mothers

s.no.	Socio demographical variables	Categories	Frequency	Percentage
1	Age (in years)	Below 24 years	16	20%
		25-28 year	38	47.5%
		29-32 year	14	17.5%
		Above 32 years	12	15%
2	Educational Qualification	No formal education	6	7.5%
		Upto secondary	20	25%
		Upto 12th class	32	40%
		Graduation	22	27.5%
3	Occupation	Housewife	30	37.5%
		Private employee	18	22.5%
		Govt. employee	8	10%

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		Self-employee/ other	24	30%
4	Type of family	Nuclear family	50	62.5%
		Joint family	30	37.5%
5	Gestational age	1st trimester	8	10%
		2nd trimester	42	52.5%
		3rd trimester	30	37.5%

Table no. 1.1 & figure no.1 reveals that age, the majority of respondents 47.5% (38) belong to the 25–28 years age group. This is followed by 20% (16) in the below 24 years category and 17.5% (14) in the 29–32 years age group. The least number of respondents 15% (12) are in the above 32 years category.

In terms of educational qualification, the highest proportion 40% (32) of mothers have studied up to 12th class. This is followed by 27.5% (22) who are graduates and 25% (20) who have education up to secondary level. Only 7.5% (6) of respondents have no formal education, indicating that most participants have at least basic education.

Regarding occupation, the majority 37.5% (30) of respondents are housewives. About 30% (24) are self-employed or engaged in other work, while 22.5% (18) are private employees. The least 10% (8) are government employees.

With respect to type of family, most of the respondents 62.5% (50) belong to a nuclear family, whereas 37.5% (30) belong to a joint family, indicating nuclear family predominance.

In relation to gestational age, more than half of the respondents 52.5% (42) are in the 2nd trimester. This is followed by 37.5% (30) in the 3rd trimester, while only 10% (8) are in the 1st trimester.

Table no. 2, Frequency and percentage distribution according to the knowledge score regarding dementia among nursing students

LEVELOF KNOWLEDGE	SCORE	FREQENCY(f)	PERCENTAGE (%)
GOOD	17-25	20	25%
AVERAGE	9-16	42	52.5%
POOR	0-8	18	22.5%

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This table shows the Percentage Distribution According to the Level of Knowledge Score for primigravida mothers. The knowledge levels are categorized into three groups: Good, Average and Poor.

52.5% (42), had average knowledge regarding pelvic floor muscle exercises, whereas 25% (20) of the primigravida mothers had good knowledge, and only 22.50% (18) had poor knowledge regarding pelvic floor muscle exercises.

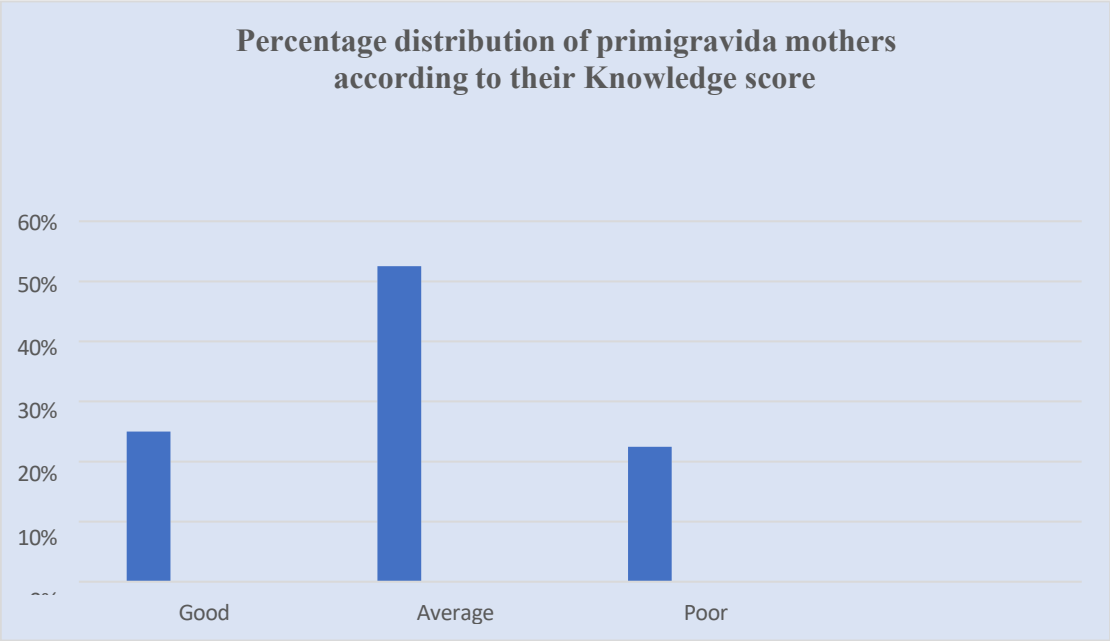

Fig.1 percentage distribution of primigravida mothers according to their knowledge score

Table No. 3, Mean, Median, Mode and Standard Deviation of level of knowledge score regarding pelvic floor muscle exercises among primigravida mothers.

Maximum score	Mean	Median	Mode	Standard Deviation
25	13.987	14	14	6.54

This table presents key descriptive statistics. The average (mean) knowledge score among the primigravida mothers regarding pelvic floor muscle exercises is 13.987. The median score, which is the middle value when all scores are ranked, is 14. The mode, representing the most frequently occurring score, is 14. The measure of data spread, the standard deviation, is 6.54.

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Table No. 4, Association between knowledge regarding pelvic floor muscle exercises among primigravida mothers and their selected socio-demographic variables.

N=80

S. N	Background Variables and Categories	Frequency (f)	Knowledge score			Calculated value	Df	Tabulated value	Remark
			Good	Average	Poor				
1	**Age (in years)**								
	Below 24 years	16	2	8	06	**4.61**	**6**	**12.59**	**NS**
	25-28 year	38	12	20	06				
	29-32 year	14	03	07	04				
	Above 32 years	12	03	07	02				
	Total	**80**	**20**	**42**	**18**				
2	**Education status**								
	No formal education	6	00	02	04	**14.799**	**6**	**12.59**	**S**
	Upto secondary	20	04	10	06				
	Upto 12th class	32	06	20	06				
	Graduation	22	10	10	02				
	Total	**80**	**20**	**42**	**18**				
3	**Occupation**								
	Housewife	30	08	26	12	**4.801**	**6**	**12.59**	**NS**
	Private employee	18	7	10	3				
	Govt. employee	8	2	4	2				
	Self employee/ other	24	3	2	1				
	Total	**80**	**20**	**42**	**18**				
	Type of family								
	Nuclear family	50	12	26	10	**0.21**	**2**	**5.991**	**NS**
	Joint family	30	08	16	08				
	Total	**80**	**20**	**42**	**18**				
5	**Gestational age**								
	1st trimester	8	02	05	07	**9.221**	**4**	**9.488**	**NS**
	2nd trimester	42	10	27	07				
	3rd trimester	30	08	10	04				
	Total	**80**	**20**	**42**	**18**				

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Association between the knowledge of primigravida mothers regarding pelvic floor muscle exercises and their selected background variables was calculated by using the chi- square test. In the background variables such as **Age, Occupation, Type of family, Gestational age,** the calculated value was less than the tabulated value. So, the researcher fails to reject the null hypothesis hence, the association between the knowledge of primigravida mothers regarding pelvic floor muscle exercises and their selected background variables is **non-significant.**

In the background variables **education status**, the calculated value was more than tabulated value, so, the researcher rejects the null hypothesis so, association between the knowledge of primigravida mothers regarding pelvic floor muscle exercises and their selected background variables is **significant.**

DISCUSSION

The study findings showed that primigravida mothers had an average level of knowledge regarding pelvic floor muscle exercises pelvic floor muscle exercises during pregnancy. The presence of only Average knowledge indicates a gap in routine antenatal education. The results suggest that strengthening antenatal counselling on pelvic floor muscle exercises can help prevent urinary incontinence and promote better maternal health.

CONCLUSION

The study concludes that primigravida mothers had average knowledge about pelvic floor muscle exercises during pregnancy. This highlights the need for effective antenatal education to reduce the risk of urinary incontinence. Strengthening health teaching by nurses can significantly improve maternal awareness and promote better pregnancy outcomes.

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APRIL 2026 | Vol. 06 Issue 11
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DOI Link :: https://doi-ds.org/doilink/05.2026-22722451/UIJIR