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A STUDY TO ASSESS THE KNOWLEDGE REGARDING PARTOGRAPH AMONG STAFF NURSE IN SMVMCH, PUDUCHERRY

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Abstract:

Introduction: The partograph functions as an essential instrument for monitoring maternal labor progression during pregnancy. Labor monitoring depends on the partograph as a visual tool which shows crucial maternal and fetal data throughout pregnancy. **Methodology:** The research design implemented a quantitative approach for this investigation. For this current study researchers applied a descriptive research design. The researcher adopted a convenience sampling strategy for selecting 30 staff nurses who full fills the criteria. **Result and Findings:** The research data showed that 70% of participants had mild knowledge levels while 30% demonstrated moderate knowledge levels. Staff nurses demonstrated relationship between their age and educational attainment and their knowledge of partograph usage according to the assessment data. **Conclusion:** The researcher concluded that most of the staff nurses had mild understanding regarding partograph. Further studies can explore the role of digital or electronic partographs in improving labor monitoring and decision-making.

Keywords: Partograph, Labor, Staff nurse, Knowledge

INTRODUCTION:

Over 14 crore females have childbirth annually, with complications causing maternal deaths, stillbirths, and newborn deaths. The partograph functions as a monitoring instrument to detect developments so appropriate referrals or care steps can be initiated. The WHO Labor Care Guide (LCG) aims to optimize care that revolves around women by promoting joint decisions between patients and their health practitioners.

A partograph is a valuable tool used in monitoring labor progress among pregnant mothers, providing a visual representation of essential maternal and fetal parameters. It is crucial in detecting deviations from the normal labor process, allowing healthcare professionals to make informed decisions and take necessary interventions to optimize maternal and fetal outcomes. The partograph acts as an affordable tool which presents labor progression data continuously so healthcare providers can prevent labor complications like prolonged and obstructed labor.

The primary purpose of a partograph is to track labor progress and identify potential complications or abnormalities. It includes information such as the dilation of the cervix, descent of the fetal head, maternal vital signs, and contractions. Deviations from the alert line can indicate potential issues, prompting healthcare providers to closely monitor the situation and take appropriate actions.

The benefits of using a partograph include early detection of complications, reduced risk of prolonged labor, enhanced communication among healthcare providers, and empowerment for pregnant mothers to actively participate in their care. However, it is essential to recognize its limitations and the importance of individualized care, considering factors such as maternal preferences, cultural considerations, and clinical context.

NEED FOR THE STUDY

Worldwide, partographs are used for monitoring labor, yet their usage remains low in developing countries, particularly Africa and India, due to staff shortages, a lack of training, time constraints, and the unavailability of partograph paper. In 2017, 295,000 maternal deaths occurred globally, with 94% in low- and middle-income countries, highlighting the need for improved labor monitoring. Studies in Nigeria and Ethiopia reveal that while awareness is high, detailed knowledge and consistent utilization are lacking. In India, interventions increased partograph usage from 29% to 61%, and staff competency improved significantly. Research confirms that partograph use enhances early detection, timely intervention, and maternal-fetal outcomes, emphasizing the need for training, resource allocation, and strengthened implementation in healthcare settings. This study aims to assess knowledge regarding partograph among pregnant mothers in labor.

METHODOLOGY:

The study employed a quantitative approach with a descriptive design, conducted at SMVMCH. It focused on pregnant women in labor, with a sample of 30 selected via convenient sampling. Demographic data and a structured questionnaire assessed participants' knowledge of the partograph. Ethical approval was granted by SMVMCH's ethics committee, and informed consent was obtained. Data were analyzed using SPSS software version 27.

RESULT:

Table 1: Demographic variables of staff nurses.

S.No	Demographic variables	n	%
1.	**Age**		
	a. 21 – 25 yrs	8	26.7%
	b. 26 – 30 yrs	12	40.0%
	c. 31 – 35 yrs	6	20.0%
	d. Above 36 yrs	4	13.3%
2.	**Education Status**		
	a. B.sc Nurse	12	40%
	b. GNM	18	60%
3.	**Occupation**		
	a. Homemaker	10	33.3%
	b. Private sectors	14	46.7%
	c. Government sectors	6	20.0%
4.	**Income per Month**		
	a. < 5000	4	13.3%
	b. 5001 – 10000	10	33.3%
	c. 10001 – 20000	12	40.0%
	d. Above.20000	4	13.3%
5.	**Religion**		
	a. Hindu	16	53.3%
	b. Muslim	12	40.0%
	c. Christian	2	6.7%
6.	**Type of Family**		
	a. Nuclear	10	33.3%
	b. Joint	14	46.7%
	c. Extended family	6	20.0%
7.	**Place of Residence**		
	a. Urban	12	40.0%
	b. Semi-urban	10	33.3%
	c. Rural	8	26.7%

The table 1 shows that majority (40%) were aged 26–30 years, while 60% had higher education. Most were private employees (46.7%), followed by housewives (33.3%) and government employees (20%). Income

distribution showed 40% earning Rs.10,001–20,000, while Hindus (53.3%) formed the largest religious group. Joint families (46.7%) were the most common, and 40% resided in urban areas, with the rest in semi-urban (33.3%) and rural (26.7%) areas.

Table 2:Knowledge level among staff nurse. N = 30

S.NO	KNOWLEDGE LEVEL	n	%
1.	Mild	21	70%
2.	Moderate	9	30%
3.	Adequate	0	0%

The distribution of the level of knowledge regarding partograph among staff nurse is outlined as follows. Among the 30 participants, the majority (70%) demonstrated a mild level of knowledge, while 30% exhibited a moderate level of knowledge. Notably, none of the participants (0%) were found to have an adequate level of knowledge.

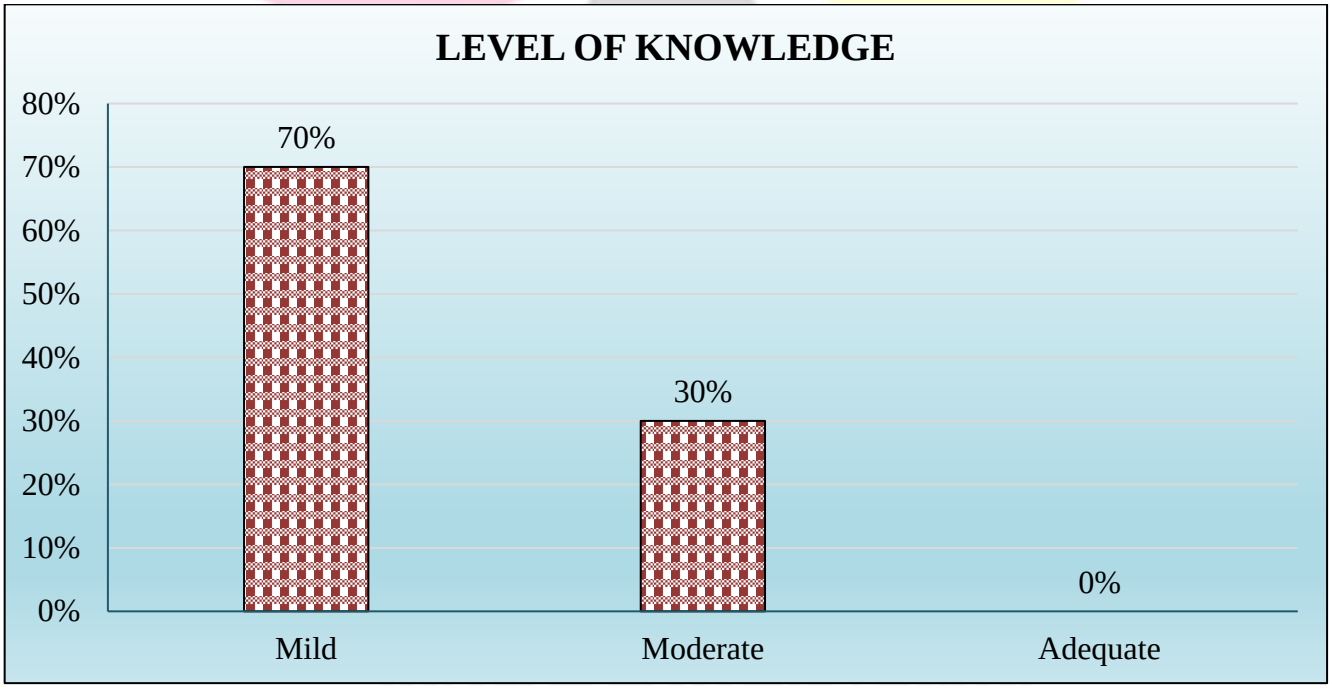

Figure 1: Staff nurse according to their level of knowledge

Table 3: Association of demographic variables with knowledge score.

S. No	Demographic variables	KNOWLEDGE						χ^2value
		Mild		Moderate		Adequate		
1	**Age**	N	%	N	%	N	%	X2 = 13.520 p =0.031 (S)*
	a. 21 – 25 yrs	6	20	2	6.7	0	0	
	b. 26 – 30 yrs	8	26.7	4	13.3	0	0	
	c. 31 – 35 yrs	4	13.3	2	6.7	0	0	
	d. Above 36 yrs	3	10	1	3.3	0	0	
2.	**Education Status**							X2 = 5.264 p = 0.021 (S)*
	a. B.sc Nurse	8	26.7	4	13.3	0	0	
	b. GNM	13	43.3	5	16.7	0	0	
3.	**Occupation**							X2 = 3.500 p = 0.254 (NS)
	a. Homemaker	8	26.7	2	6.7	0	0	
	b. Private sectors	9	30	5	16.7	0	0	
	c. Government sectors	4	13.3	2	6.7	0	0	
4.	**Income per Month**							X2 = 2.333 p =0.562 (NS)
	a. < 5000	2	6.7	2	6.7	0	0	
	b. 5001 – 10000	7	23.3	3	10	0	0	
	c. 10001 – 20000	8	26.7	4	13.3	0	0	
	d. Above.20000	4	13.3	0	0	0	0	
5.	**Religion**							X2 = 3.000 p = 0.294 (NS)
	a. Hindu	12	40	4	13.3	0	0	
	b. Muslim	8	26.7	4	13.3	0	0	
	c. Christian	1	3.3	1	3.3	0	0	
6.	**Type of Family**							X2 =5.000 p = 0.523 (NS)
	a. Nuclear	7	23.3	3	10	0	0	
	b. Joint	9	30	5	16.7	0	0	
	c. Extended family	5	16.7	1	3.3	0	0	
7.	**Place of Residence**							X2 = 3.500 p = 0.254 (NS)
	a. Urban	8	26.7	4	13.3	0	0	
	b. Semi-urban	7	23.3	3	10	0	0	
	c. Rural	6	20	2	6.7	0	0	

***p<0.05 - Significant; p<0.01 - Highly Significant**

The above table shows that there is significance association of age, education status with level of knowledge regarding partograph among staff nurse.

DISCUSSION

The study assessed staff nurses' knowledge of partograph at SMVMCH, Puducherry, using a descriptive research design with 30 participants selected via convenient sampling. The largest age group was 26–30 years (40%), and 60% had higher education. Most were private employees (46.7%), while 40% earned Rs.10,001–20,000 monthly. Hindus (53.3%) formed the majority, and joint families (46.7%) were the most common. Urban residents (40%) predominated, followed by semi-urban (33.3%) and rural (26.7%) populations. The findings highlight the demographic diversity of staff nurses, emphasizing the need for enhanced training and awareness on partograph utilization in clinical settings. The study findings revealed that 70% of staff nurses had a mild level of knowledge, while 30% exhibited a moderate level. A significant association was observed between age, education status, and knowledge levels regarding partograph use, highlighting the need for targeted training programs to enhance staff nurses' competency in labor monitoring.

CONCLUSION

The study assessed knowledge levels of staff nurses about the partograph management in a specified hospital facility. Research showed most staff nurses held basic knowledge of the partograph while several others possessed moderate understanding. Research revealed a strong relationship between staff nurses' partograph knowledge and their age alongside their level of education.

RECOMMENDATIONS

- Further research should investigate the correlation between nurses' experience levels and their proficiency in using the partograph.

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