

ORIGINAL ARTICLE

A Study to assess the Impact of Structured Teaching Programme on Knowledge of Plotting of Partograph among Nursing Student, Rajkot

Usha Devi. S¹, Mira Vala²

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ABSTRACT

Labour has been described as the most perilous journey a person ever embarks on. The reason is that, despite being a natural process, complications may occur at any point along the way. A partograph is a preprinted one-page form utilized to track labour and avert extended and obstructed labour, on which observations of labour are documented. The aim of the partograph is to assist healthcare professionals in documenting, understanding, analysing, and utilizing information to inform clinical management choices during ongoing labour. The form offers a visual representation of labour progression and logs details regarding the health of both the mother and foetus during labour. The partograph indicates variations from the typical labour progress and highlights any issues with maternal or fetal health during this time. It notifies providers when a woman might require an intervention and supports continuous assessment of the outcomes of those interventions. A significant advancement in labour management was the implementation of the partograph.

A partograph illustrates the variations that take place during labour, such as cervical dilation, fetal heart rate, maternal pulse, blood pressure, and temperature. It additionally presents a numerical documentation of characteristics like urine production and the amount and kind of intravenous infusions (including oxytocin drips). Thus, one can easily spot irregularities in any of these variables. Midwives' staff can utilize the partograph to evaluate the progression of labour and determine when intervention is required. Research indicates that employing the partograph can be very beneficial in minimizing complications arising from prolonged labour for mothers, including postpartum hemorrhage, sepsis, uterine rupture, and its consequences, as well as for new-borns, such as death, anoxia, and infections. It plays a crucial role in aiding the proper decision-making regarding transfer, caesarean delivery, or other critical interventions.

AUTHOR'S AFFILIATION:

¹ Associate Professor, Murlidhar College of Nursing, Kalipat, Rajkot, Gujarat, India.

² B.Sc. Nursing, Murlidhar College of Nursing, Kalipat, Rajkot, Gujarat, India.

CORRESPONDING AUTHOR:

Usha Devi. S, Associate Professor, Murlidhar College of Nursing, Kalipat, Rajkot, Gujarat, India.

E-mail: ushashankar0506@gmail.com

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The partograph is a crucial tool for overseeing labour progress. This aids in recognizing extended labour, determining the need for assisted labour, and for surgical delivery. The current pre-experimental design involving one group with pre-test and post-test was implemented among women to assess the impact of a structured teaching program on knowledge about the plotting of partographs among nursing students. The researcher chose 60 samples using a non-probability sampling method. The results indicated that knowledge levels increased following the implementation of the structured teaching program, demonstrating its effectiveness. The researcher determined that the educational tools will aid in enhancing knowledge among women and the general public. The researcher suggested that an education program and personal behaviour change training are necessary to raise awareness about the use of partographs among nursing students.

KEYWORDS:

• Knowledge • Plotting of Partograph • Nursing Student

INTRODUCTION

A partograph is a simple, low-cost monitoring tool for intrapartum care recommended by the World Health Organization (WHO) which has the potential to identify obstetric complications by graphically presenting the critical events of labour progression, including the condition of both the woman and the foetus.

The World Health Organization's partograph model was created by an informal working group that reviewed most of the existing published research regarding partographs and their designs. It embodies a synthesized and simplified compromise that incorporates the finest aspects of various Partographs. This partograph distinctly distinguishes between normal and abnormal labour progress and identifies women who may need intervention. Its application is advised in all labour wards. When the partograph is utilized properly, it will reduce the incidence of prolonged or obstructed labour, responsible for roughly 8% of maternal fatalities. Most deaths and complications could be avoided through affordable and cost-effective health measures such as the partograph; in fact, the same interventions that halt maternal deaths would also reduce morbidity and enhance neonatal outcomes.

Maternal mortality continues to range from 500 to 1000 deaths per 100,000 live births in emerging nations. India ranks significantly high on the list of nations with elevated maternal mortality, recording 420 per 10,000 live births.

Complications during childbirth cannot be anticipated or averted. Prolonged and obstructed labour are significant contributors to maternal and new-born morbidity and mortality, potentially resulting in ruptured uterus, postpartum haemorrhage, infection, obstetric fistula, as well as fetal injury or death. Therefore, every woman should undergo evaluation by experienced birth attendants and receive prompt emergency assistance. The partograph, often referred to as a partogram, is typically a pre-printed document where labour observations are noted. The purpose of a partograph is to offer a visual summary of labour, to inform midwives and obstetricians of any variations in maternal or fetal health and the progress of labour. The partograph includes preprinted lines for alerts and actions.

Labour is regarded as the most difficult experience a woman endures. Even though it concerns, issues can emerge at any moment. Enhancing maternal health is a significant concern on the domestic front. Sufficient and suitable care during the intranatal phase leads to positive labour outcomes, fostering confidence and emotional well-being, which contributes to a successful delivery. About 800 women lose their lives daily worldwide due to complications related to pregnancy or childbirth. A partograph is one of the tools utilized during the intra-natal period; it is a single-page document where observations of labour are noted. The World Health Organization suggested a partograph featuring a four-hour action line originating from the alert line. Indicating the timing for intervention in prolonged labour comprises

three elements: a) Monitoring and managing the fetal condition b) Maternal condition c) Progress of labour.

A total of 1070 partographs utilized for monitoring labour in two public hospitals were examined to assess the documentation of partograph parameters, and descriptive statistics were calculated using the statistical package for the social sciences software version 22.0. Out of the 1070 partographs examined, 58.6% (n = 627) did not include records of maternal blood pressure, and 65.3% (n = 699) lacked temperature documentation. Moulding was not noted in 25.4% (n = 272) of the partographs, foetal heart rate was absent in 14.9% (n = 159) of the partographs, and descent of the foetal head was lacking in 12.0%

(n = 128) of the partographs.

Of the 648 partographs examined for recording quality, 61% included and 18% documented moulding of the foetal skull. The cervical dilation line was accurately plotted in 70% of all partographs and in 82% of those showing any abnormalities. The data elements with the lowest and highest records were maternal pulse (3%) and urine analysis for protein (92%), respectively. Blood pressure was documented in two-thirds of every partograph. Partographs showing abnormal labour had notably greater proportions (p-value<0.05) of documentation for foetal heart rate, moulding of the foetal skull, and cervical dilation compared to those not indicating abnormal labour.

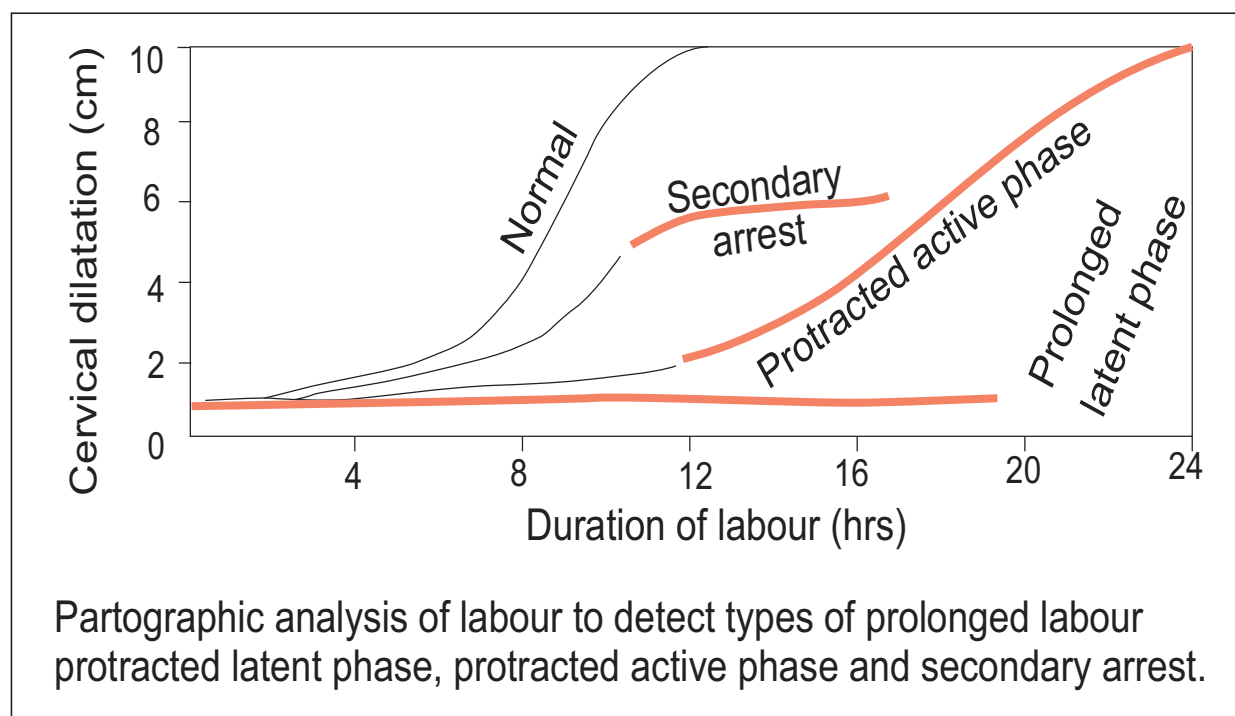


Figure 1: This diagram reveals the importance of partograph in identifying different types of prolonged labour

OBJECTIVES

- To Assess the level of Knowledge Regarding plotting of partograph among the selected nursing college of Rajkot.
- To assess the effectiveness of structured teaching partograph by comparing the mean pre-test and post-test level of knowledge score among the selected nursing students.
- To find the association between the mean post-test level of Knowledge score among

the selected nursing students with their selected demographic variable.

Research Design: Pre experimental Research design, one group pretest and post research design was adopted for this study.

Research Study Setting: The study was conducted in selected nursing colleges at, Rajkot Gujarat.

Population: Nursing students.

Sample: The sample consists of nursing student selected nursing college of Rajkot.

Sample Size: The sample size of the study comprised of 60 nursing students.

Sampling Technique: Non-probability sampling technique was used to select the sample for the study.

RESULTS

The distribution of demographic variables of nursing students, majority 39 (65%) of the subjects are below the age of 19 to 21 years, all the samples (100%) are females, 49 (81.7%) are Hindus, regarding marital status 58 (96.7%) of

them were married, 32 (53.3%) of them were studying GNM. Regarding academic year each 28 (46.7%) are from GNM - III year and ANM - II year, 24 (40%) of them got information from friends, 32 (53.3%) of them from joint family, 37 (61.7%) of them had previous knowledge about plotting of partograph.

The level of knowledge on plotting of partograph among nursing students, in pre-test majority 32 (53.3%) of nursing students have inadequate level of knowledge whereas in post-test 39 (65%) of them had adequate knowledge.

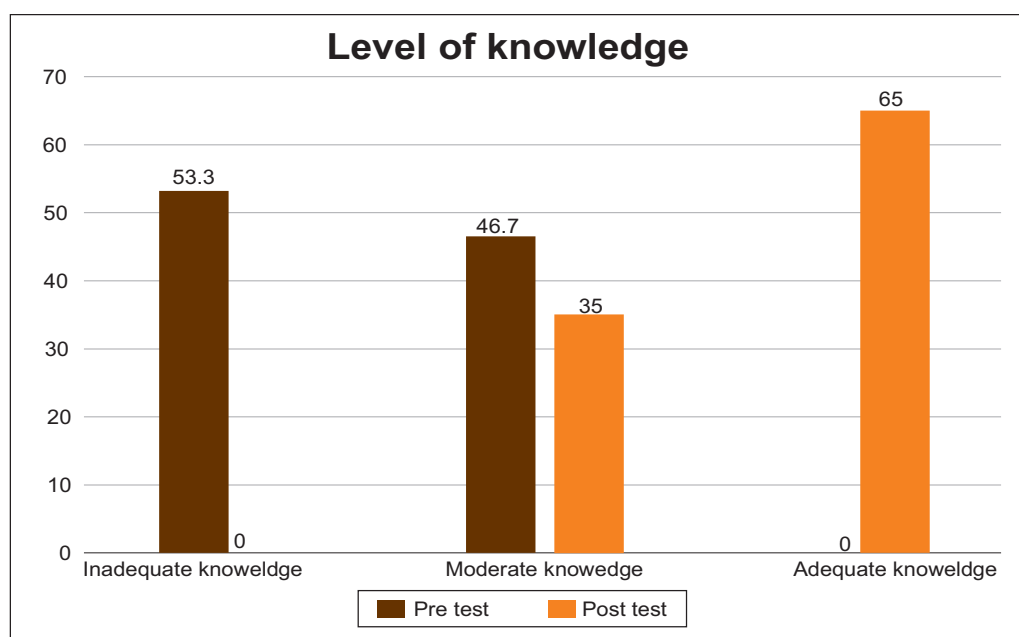


Figure 2: Pre and Post-test level of knowledge regarding plotting of partograph among nursing students

Table 1: Paired 't' test comparison of pre and post-test scores regarding plotting of partograph among nursing students

Variable	Pre-test	Post-test	Mean difference	SD difference	't' value	p-value
	Mean±SD	Mean±SD				
Knowledge	10.58±3.121	20.62±2.034	10.033	1.087	21.799	0.000 S*

*p<0.05 - significant, S - Significance, NS - Nil significant

The demographic variables of the mean and standard deviation of the level of knowledge regarding plotting of partograph among nursing students. The pre-test score was 10.58±3.121, post-test score was 20.62±2.034. Paired 't' value is 21.799, which statically significant at the p level (0.000). Hence, the structured teaching programme regarding plotting of partograph was effective in improving the level of knowledge among nursing students.

The association of level of knowledge on plotting of partograph was significantly

associated with the source of information at the p level 0.005.

CONCLUSION

The current research concludes that the knowledge level increased by examining the frequency and percentage of the pre and post-test outcomes. The findings confirmed that the organized teaching program was effective in enhancing the knowledge level related to partograph plotting among nursing students.

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