



Original Article

Knowledge and Practice on Partograph

Abstract:

Introduction: E. A. Friedman first described partograph in 1954. Partograph is the graphic statistical analysis of progress of labour in primigravida and multipara. "It is a composite graphical record of cervical dilation and descent of head against duration of labor in hours." It also gives information about foetal and maternal conditions at a glance as all are recorded on a single sheet of paper.

Objectives: The study was undertaken to assess the existing knowledge and practice regarding plotting of partograph among nurses working in labor room and also to evaluate the effectiveness of planned teaching program. Other objectives were to find out the association between knowledge, practice and selected demographic variables, to correlate between knowledge and practice

Methods and Materials: One group pre-test and post- test interventional study was done to attain the objectives. Thirty nurses were selected by non- probability convenience sampling from selected hospitals of Vidarbha region who were working in Labor room.

Results: The result of this study shows that 73.3% of samples were GNM and 46.7% of the sample had above 5 year of experience. Post- test knowledge score (91%) and practice score (91.66%) was quiet high than pre- test knowledge score (53%) and practice score (24.76) respectively. There was a positive correlation between knowledge and practice of nurses ($p=0.04$)

Conclusion: The finding concluded that the intervention was very effective in increasing their knowledge and practice regarding partograph.

Key Words: Planned teaching program, Effectiveness, Knowledge, Practice, Partograph, Nurses, Labor room.

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Introduction

E. A. Friedman first described partograph in 1954 as graphic statistical analysis of progress of labor in primigravida and multipara. "It is a composite graphical record of cervical dilation and descent of head against duration of labor in hours." It also gives information about fetal and maternal condition that are all recorded on a single sheet of paper.¹

Regional health director for western region said capacity building is essential to keep people abreast of development affecting their careers. He observed that training the midwives on the use of the partograph will go a long way in reducing infant mortality in the country. According to him, since the introduction of the partograph in the country last year, there has been a significant drop in the number of deaths especially during birth.²

According to WHO, maternal mortality is currently estimated to

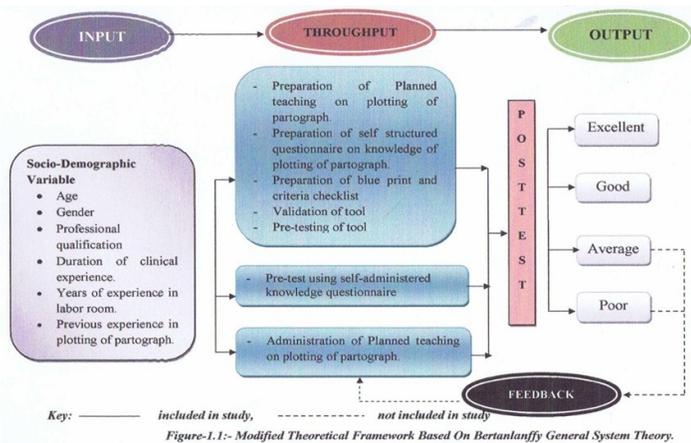
be 529,000 death per year, a global ratio of 400 maternal deaths per 1, 00,000 live births. Between 11 to 17 percent of maternal deaths happen during child birth itself, and between 50 to 71 percent in the postpartum period. About 45 percent of postpartum maternal deaths occur during the first 24 hour, and more than two thirds during the first weeks. In India 60% of maternal death occurred between 1996 & 2004 and 48% maternal death in 2000. Active management of third stage labor has three sample components. Administration of appropriate uterotonics (oxytocin/misoprostol) immediately after the delivery of the baby controlled cord traction and uterine massage.²

Partograph is a very simple tool to note down the progress of labor and it alerts the user to decide on future course of action. For leading obstetricians in India and teachers in the medical colleges, there was nothing new about active management

of third stage of labor and partograph. No one has got any doubt on the benefits of active management of third stage of labor and partograph. ³

Conceptual framework

Conceptual framework was based on Bertalanffy General System Theory.



Hypothesis

H0 – There will be No significant differences between the pre and post- test knowledge and practice scores regarding plotting of partograph.

H1 – There will be significant differences between the pre and post- test knowledge and practice scores regarding plotting of partograph.

Methodology

One group pre-test and post- test quasi- experimental design was found to be effective for the present study. In this study the target population was consisted of all Nurses working in Labour room in hospitals of Vidarbha region. The accessible population was the nurses working in Labour room in selected area of hospitals of Vidarbha region. The sampling technique used in this study was non probability convenience method of sampling; Samples were consisted of 30 nurses working in Labour room in selected hospitals of Vidarbha region. There were 20 questions regarding knowledge and 14 questions of observation checklist regarding technique of plotting of partograph. The content validity of the tool was established in consultation with guide and experts from the field of Obs & Gyn department. Suggestions of the experts were considered and changes were made accordingly. The collected data was coded, tabulated and analysed by using

descriptive statistics (mean, mean percentage, standard deviation) and coefficient correlation to find out the association between the demographic variables and knowledge and practice score.

Result

The result of this study shows that 73.3% of samples were GNM and 46.7% of the sample had above 5 year of experience.

Fig 1: Assessment of pretest & posttest levels of knowledge scores

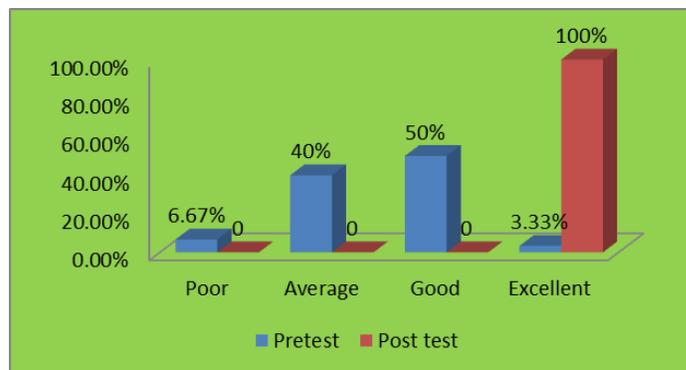


Fig 1 shows that most of the study participants had average to good knowledge in the pre-test. There were only 6.67% of participants with poor knowledge and only 3.3% of participant with excellent knowledge. It was found that after planned teaching program all of the study participants (100%) had excellent knowledge in the post test.

Fig 2: Assessment of pretest & post- test levels of practice scores

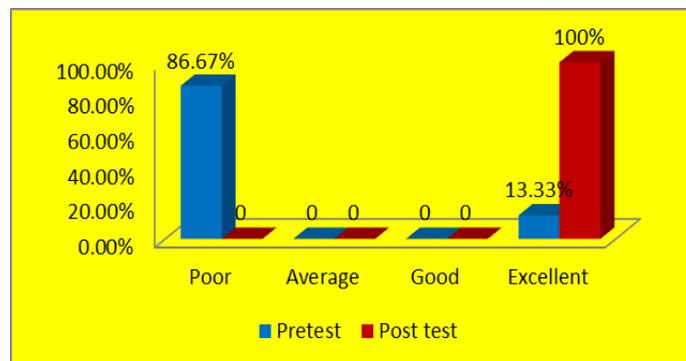


Fig 2 shows that most of the study participants had poor practice (86.67%) and only 13.33% of participants had excellent practice score. It shows that after planned teaching program 100% of the study participants had excellent practice.

Fig 3: Comparison of difference between overall knowledge before and after planned teaching

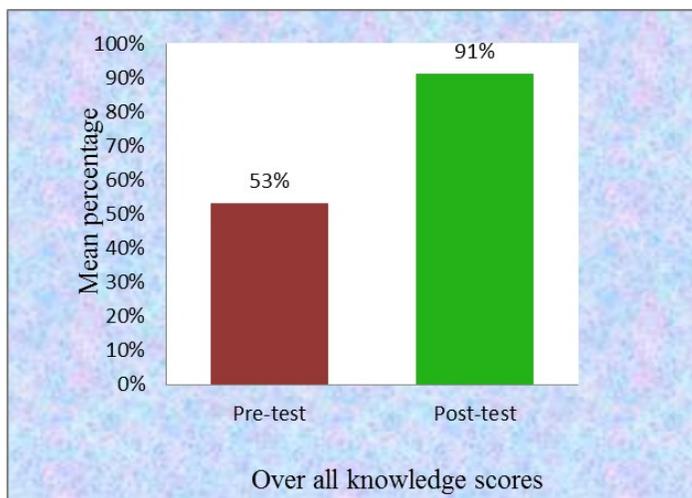


Fig 3 shows that overall knowledge score before planned teaching program (53%) was increased to 91% after providing teaching on partograph.

Fig 4: Comparison of difference between overall practice score before and after planned teaching

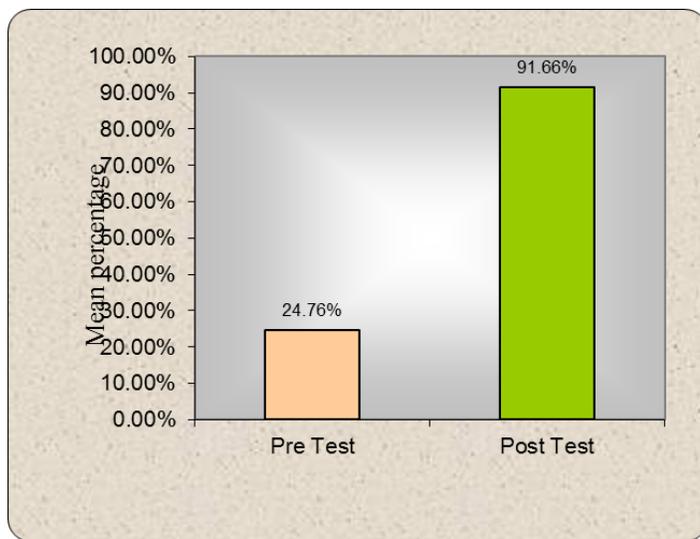


Fig 4 shows that overall practice score before planned teaching program (24.76%) was increased to 91.66 % after providing teaching on partograph.

There was no significant association between knowledge, practice and demographical variables. Only significant association was found between practice and previous experience in plotting partograph (p-value= 0.006). Hence it was interpreted that previous experience in plotting of partograph of the study participants is associated with the post- test practice scores.

Table 1: Correlation of knowledge and practice scores (n=30)

	Mean ± SD	Correlation (r)	p-value
Knowledge	18.2 ± 1.32	0.41	0.04*
Practice	12.83 ± 0.94		

***Level of significance 0.05**

Table 1 show that there was marked correlation (p= 0.04) between knowledge and practice of nurses in plotting of partograph. This means with increase in knowledge there is improvement in nurse’s practice. Thus null hypothesis (H0) was rejected and alternate hypothesis (H1) was accepted.

Conclusion

The present study concludes that though majority of the nurses had not very good knowledge or practice on plotting of partograph but most of them gained excellent knowledge and practices after providing planned teaching program. Study showed that work experience is associated with practice as well as there was a positive correlation between knowledge and practice. The finding concluded that the intervention was very effective in increasing their knowledge and practice regarding plotting of partograph.

Recommendations

Keeping in view the findings of the study, the following recommendations are made:

- A comparative study can be done to find out the knowledge of nurses in different Hospitals.
- A teaching manual can be developed for the nurses.
- A similar study can be conducted by using a larger sample size which would help to generalize the findings.
- Similar study could be conducted by using Self Instructional Module.
- An exploratory study can be conducted to find out the knowledge and practices of the nurses regarding plotting of partograph.

Acknowledgement

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Ethical clearance

Research proposal was approved by research committee. Due permission from authorities was sought out and obtained. Written consent was taken from participant.

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