Knowledge and Practice Regarding Plotting of Partograph in Staff Nurses in Order to Develop and Administer a Need Based on the Job Training Program

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Abstract

A partograph is one of the important tools to monitor the progress of labor and is also helpful for managing labor. Therefore, it should be used for all women during the first stage of labor admitted to a labor room. Partograph is needed for observations of the mother and fetus and also assists in early decision-making in the intranatal period, such as transfer, augmentation, and termination of labor.

Aim of the study: The study was aimed to assess the knowledge and practice regarding the plotting of partograph.

Materials and methods: The nonexperimental descriptive design was used for the study. Thirty staff nurses were selected by nonprobability purposive sampling technique. A structured knowledge questionnaire and practice checklist were used for data collection.

Results of the study: The results revealed that the majority (53.3%; $n = 16$) of respondents were having average knowledge score, whereas 43.3% (13) of respondents had good knowledge scores, and only 3.3% (1) of respondents had a poor level of knowledge on partograph. Moreover, 70% (21) of respondents have inadequate practice, and 30% (9) of respondents have adequate practice.

Conclusion: This study concluded that staff nurse has average knowledge regarding partograph but practicing plotting of partograph.

Clinical significance: This study shows that staff nurses were having an adequate knowledge regarding partograph but do not adequately practicing the plotting of partograph. Therefore, it can use as a tool to monitor labor and prevent unnecessary problems for mothers and fetuses by reducing the total duration of labor.

Keywords: Knowledge, Labor room, Partograph, Practice, Staff nurses.

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Introduction

Partograph is a graphical presentation that provides a pictorial summary of the progress of labor and also helps midwives to alert any problems with the mothers and baby during childbirth.[1]

World Health Organization (WHO) in the early 1990s century recommended globally to adopted partograph during the assessment of mother to note the progress of labor.[2] It is an "easy-to-use" during the first stage of labor, but if not correctly plotted, it will affect the outcome of delivery.[3] In India, the maternal mortality rate was 122 per 1 lakh live births in 2011–2017 and 201 per lakh in Uttarakhand (2014–2016).

In a developing country, the leading cause of maternal and newborn death is due to prolonged labor.[4]

Thus, all women should be assessed by skilled birth attendance and timely emergency care. The initial part of conducting delivery is to assess the first stage of labor confidently by using partograph. Successful implementation of the partograph can result in improving the quality of care for mother early in labor. ANM are working at village level as female health worker in India.[5] They should be able to conduct normal deliveries at home in an emergency and also need to identify high-risk cases and their referral accordingly. Partograph is needed for observations of the mother and fetus. It is significantly influencing decision-making during labor. Trained midwifery provides quality care for women in labor.

Partograph use in the active management of labor has been reported to reduce the occurrence of prolonged labor and the need for cesarean section. Therefore, regular training should be provided for all staff nurses regarding the plotting of partograph. Partograph helps in early decision-making based on findings, whereas training is necessary to improve labor management and reduce maternal and fetus mortality. Thus, the study aims to assess the knowledge and practices regarding the plotting of partograph among the staff nurse.

It is recommended by the WHO that the basic purpose of partograph is to facilitate health professionals to assess the progress of labor and give timely intervention in case of abnormal labor.

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OBJECTIVES

- To assess the knowledge of partograph in staff nurse working in the labor room.
- To assess practices of staff nurses regarding plotting of partograph.

MATERIALS AND METHODS

An observational study was adopted to assess the knowledge and practices checklist regarding the plotting of the partograph. The study was conducted among 30 staff nurses working in the labor room in the selected hospital. The subjects for the study were determined by the purpose sampling technique. A structured questionnaire on knowledge and a checklist on practice was administered to assess knowledge and practice regarding the plotting of partograph. The tool was organized into Section I: Personal information, Section II: Knowledge regarding paragraph, and Section III: Practices checklist regarding plotting of partograph.

DATA COLLECTION PROCEDURE AND ANALYSIS

The ethical approval was obtained from the institution's ethical committee. Formal permission was obtained from selected settings. Informed consent was taken from each participant after explaining the purpose of the study and methods of filling the questionnaire. It took 30 minutes for each participant to answer the knowledge questionnaire. In the end, the participants were thanked for their cooperation.

The collected data were analyzed by using descriptive statistics. Frequency and percentage-wise distribution were used for personal information.

RESULT

Section I: Personal Information of Staff Nurse

- The majority of samples (63.33%; $n = 19$) were aged between 20 and 30 years.
- Regarding educational qualification, the majority of (73.33%; $n = 22$) staff nurses were GNM.
- Regarding total working experience, the majority of staff nurses were having experience between 1 and 5 years (56.7%), whereas regarding experience in the maternity unit, the majority of staff nurses had experience between 1 and 4 years (86.7%).

Section II: Knowledge of Staff Nurse Regarding Partograph

Figure 1 shows knowledge of staff nurses regarding partograph. The majority (53%) of staff nurses were having average knowledge, 43.33% were having good knowledge, and only 3.33% were having poor knowledge about partograph.

Section III: Practice of Staff Nurse Regarding Plotting of Partograph

Figure 2 shows that the majority (70%) of staff nurses were having inadequate practice scores, and only 30% were having adequate practice scores, which means they were not practicing adequately for plotting of partograph during labor.
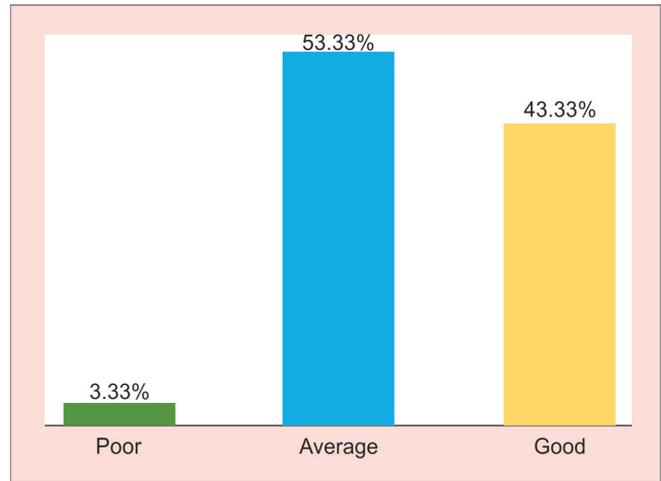

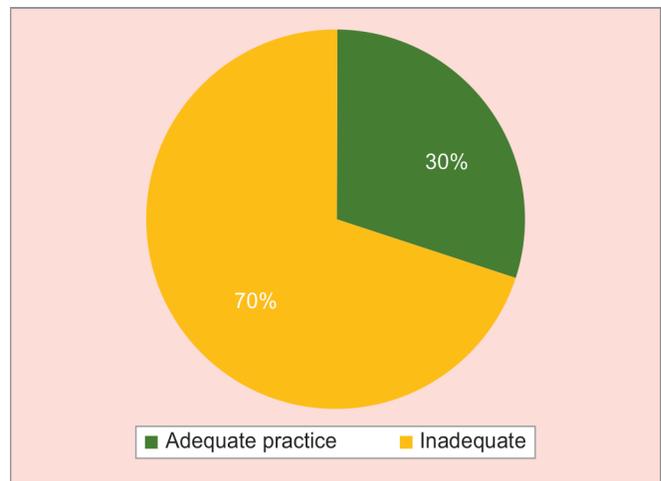**Fig. 1:** Percentage distribution of knowledge regarding partograph

Fig. 2: Percentage distribution of practice score regarding plotting of partograph

DISCUSSION

The main aim of the study was to assess the knowledge and practice of staff nurses regarding the plotting of partograph. The present study finding show that the majority of staff nurses were in the age-group between 20 and 30 years, whereas majority (73.33%; $n = 22$) of staff nurses' educational qualifications were GNM, and they were having experience between 1 and 5 years (56.7%), whereas regarding experience in maternity unit, the majority of staff nurses had experience between 1 and 4 years (86.7%).

A similar study was conducted by Sharma Shalu in 2019; the result showed that the majority (53.33%) of staff nurses were in the age-group of 20–29 years, whereas 53.33% of staff nurses were having qualification in nursing midwifery (GNM), the majority of nurses' total working experience was less than 5 years, and the majority of nurses (48.33%) had an experience in maternity unit between 1 and 5 years.

In the present study, the majority (53.33%; $n = 16$) of staff nurses were having average knowledge, whereas 43.33% (13) of

staff nurses had good knowledge, and only 3.33% (1) were having poor knowledge.

The present study was compared to a study conducted by Geetha (2013)[6] to assess the knowledge of staff nurses regarding plotting of partograph; the result showed that 9 (30.0%) of respondents had good knowledge, 17 (56.7%) of respondents have poor knowledge, and 4 (13.3%) of respondents were having very poor of knowledge on partograph.

The findings of this study showed that the majority (70%; $n = 21$) of staff nurses were having inadequate practices, and 30% (9) of staff nurses had performed adequate practice of plotting of partograph, which is partially consistent with the study conducted by Saranya (2013);[6] the result showed that among staff nurses, 50% (15) belonged to good practices score, 46.7% (14) of respondents had average practice score, and only 3.3% (1) subject belongs to poor practice score.

CONCLUSION

The partograph is measured as a valuable tool in the enhancement of maternity healthcare service during labor. The present study showed that the majority of staff nurses had average knowledge scores and inadequate practice in the plotting of partograph. Moreover, there is a need to work on using some more effective methods of teaching partograph and make the entire staff nurses expert in plotting partograph. So, the staff nurse has to improve and practice of plotting of partograph to prevent certain complications and positive outcomes of delivery.

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