

Nurse Mentoring as a Capacity Building Approach to Strengthen PPH Management in Low-Resource Settings

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Abstract: Background: Postpartum hemorrhage (PPH) remains a leading cause of maternal mortality in low-resource settings, where the effectiveness of emergency response depends not only on individual provider skills but also on the strength of supportive systems. While Skilled Birth Attendant (SBA) training improves theoretical knowledge, sustained clinical readiness requires continuous supervision, guidance, and reinforcement. Nurse mentoring has emerged as a health-system strengthening strategy to enhance clinical performance, teamwork, and adherence to PPH management protocols at facility level.

Objectives: To examine the role of nurse mentoring as a capacity-building approach for improving preparedness and system responsiveness to PPH emergencies among SBA-trained nurses in public healthcare facilities of Kanpur Division, Uttar Pradesh.

Methods: A descriptive evaluation was conducted among 62 SBA-trained staff nurses posted at PHC, CHC, CHC-FRU, and District Women Hospital facilities. Data were collected using a structured demographic form, knowledge questionnaire, practice checklist, and Objective Structured Clinical Examination (OSCE). Descriptive statistics were used. The analysis emphasized how mentoring exposure, frequency, and facility context influenced competency and emergency readiness rather than only individual scores.

Results: Although mean knowledge (76.6%), practice (72.6%), and skill scores (63.1%) indicated moderate overall competency (70.8%), mentoring exposure contributed significantly to better adherence to PPH protocols, timely uterotonic use, improved team coordination, and more systematic emergency response practices. Facilities reporting regular mentoring visits demonstrated higher consistency in OSCE performance and fewer procedural gaps. Demographic and facility-level patterns further highlighted mentoring as an enabling factor for competency retention and institutional readiness.

Conclusion: Nurse mentoring strengthens PPH management not merely by improving individual competencies but by enhancing broader health-system functions such as supervision, teamwork, clinical decision-making, and continuity of quality care. Integrating structured mentoring into routine maternal health programs can improve institutional preparedness and support the sustainability of training outcomes in low-resource settings.

Keywords: Nurse Mentoring; Skilled Birth Attendant; Postpartum Hemorrhage; Capacity Building; Maternal Health.

1. INTRODUCTION

Postpartum hemorrhage (PPH) remains a major contributor to maternal mortality worldwide.^[1] In India, despite policy-level initiatives and SBA training programs, challenges continue in ensuring timely clinical interventions and emergency preparedness. ^[2] Health systems in resource-constrained regions frequently encounter shortages of skilled personnel, emergency supplies, and real-time supervision during obstetric emergencies. These factors create a significant knowledge–practice–skill gap that affects the quality of maternal care.

Nurse mentoring is a supportive capacity-building approach that enables hands-on clinical guidance, real-time supervision, reflective learning, and reinforcement of evidence-based practices.^[3] Unlike one-time training, mentoring strengthens health systems by improving provider confidence, teamwork, decision-making, and emergency response readiness.

This study examines the role of nurse mentoring in improving competency in PPH management among SBA-trained nurses in Kanpur Division, illustrating its contribution to sustainable health system strengthening.

2. MATERIALS AND METHODS

Study Design: It was a Descriptive evaluation study.

Study Setting: The study was conducted in Selected PHC, CHC, CHC-FRU, and District Women Hospital facilities of Kanpur Division, Uttar Pradesh.

Data Source: Structured knowledge questionnaire, practice assessment checklist including the demographic details pertaining to years of experience, qualification and Training status.

Inclusion Criteria: Skill Birth attendant who were present and willing to participate in the study at Public Health Facilities in Kanpur Division were included in the study.

Data Analysis: Descriptive statistics were used to determine the competency in three aspects.

3. RESULT

In our study a total of 62 Skilled Birth Attendant (SBA)-trained staff nurses participated in the study. The majority were in the age group of 26–35 years (61.3%), followed by 36–45 years (22.6%), and above 45 years (16.1%). All participants were female (100%). (Figure 1)

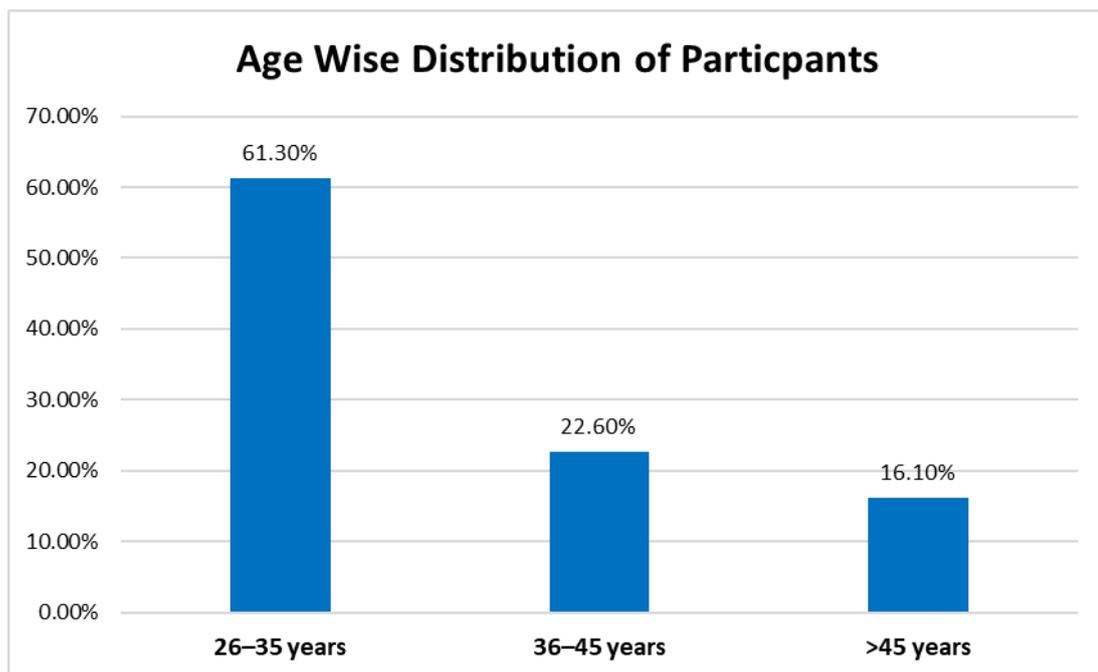


Figure 1- Bar Graph showing Age Wise Distribution of Participants

Regarding qualifications, 74.2% were General Nursing and Midwifery (GNM) nurses and 25.8% held a B.Sc. Nursing degree. (Figure 2)

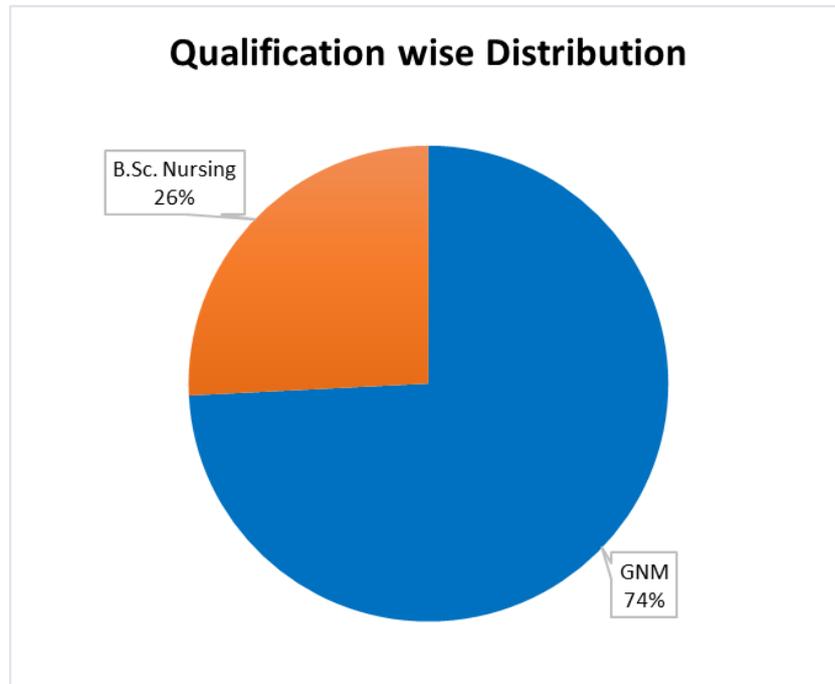


Figure 2- Pie chart for Qualification wise Distribution of Participants

By years of professional experience, 48.4% had 6–10 years, 27.4% had less than 5 years, and 24.2% had more than 10 years of labour-room experience. Facility-wise distribution showed that 40.3% were posted at Community Health Centres (CHCs), 29.0% at Primary Health Centres (PHCs), 17.7% at CHC-FRUs, and 12.9% at the District Women Hospital (DWH). (Figure 3)

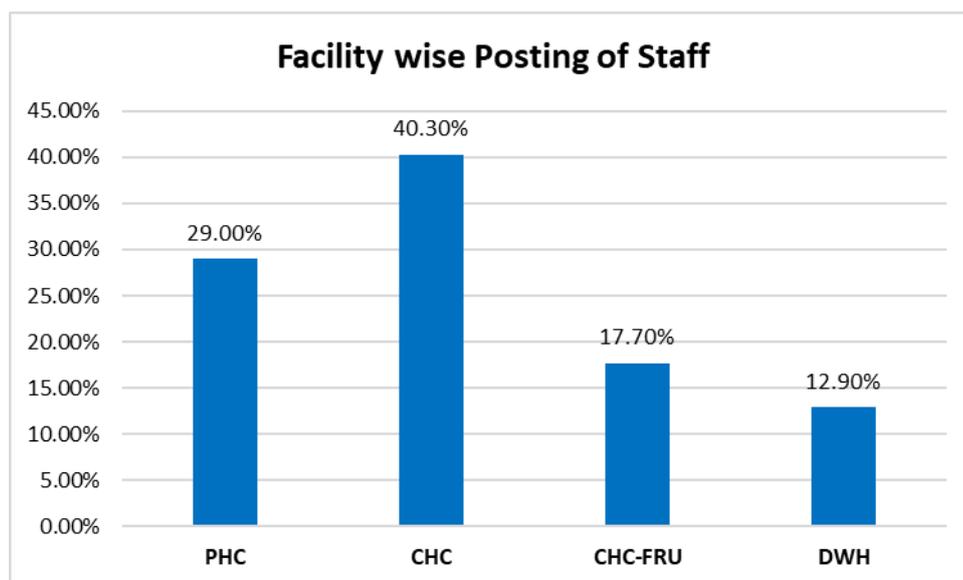


Figure 3- Bar Graph showing Faculty wise posting of Staff

A large proportion (88.7%) had completed SBA training within the last five years, and 64.5% had received at least one round of on-site nurse mentoring in the previous year. The Table 1 illustrates the summary of the demographic profile of the participants.

Table 1- Demographic characteristics of participants (n = 62)

Variable	Category	n (%)
Age (years)	26–35	38 (61.3)
	36–45	14 (22.6)
	>45	10 (16.1)
Sex	Female	62 (100)
Qualification	GNM	46 (74.2)
	B.Sc. Nursing	16 (25.8)
Experience (years)	<5	17 (27.4)
	6–10	30 (48.4)
	>10	15 (24.2)
Facility Type	PHC	18 (29.0)
	CHC	25 (40.3)
	CHC-FRU	11 (17.7)
	DWH	8 (12.9)
Recent SBA training	Within last 5 years	55 (88.7)
Mentoring exposure	≥1 round in last year	40 (64.5)

The Table 2 illustrates the mean score of domain wise of the evaluation of the participants.

Table 2- Mean Score Competency by Domain

Competency Domain	Mean Score (%)
Knowledge	76.6%
Practice	72.6%
Skills	63.1%
Overall Competency	70.8%

4. DISCUSSION

The demographic profile shows an experienced workforce predominantly in the 26–35 year age group, with most nurses having 6–10 years of experience and prior SBA training. This base supports the interpretation that gaps observed in skills are less about lack of exposure and more about the need for continuous reinforcement. Mentoring helps convert theoretical awareness into consistent bedside practice by promoting protocol adherence, confidence, and coordinated team response. [3]

From a health systems perspective, embedding nurse mentoring within routine service delivery can enhance emergency readiness, improve adherence to PPH protocols, and sustain quality gains beyond initial training episodes. [4]

5. CONCLUSION

Incorporating a structured nurse mentoring program alongside SBA training strengthens health system capacity for PPH management. Given the demographic profile and competency distribution, institutionalizing mentoring, simulation drills, and periodic evaluation is recommended to sustain improvements.

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