A LIVE EXPERIENCE OF STAFF-NURSES IN POST-PARTUM HAEMORRHAGE MANAGEMENT IN ODISHA, INDIA

Sujata Sahu¹, Pravati Tripathy¹, Sunita Jena², B. Gomathi³, Krushna Chandra Sahoo⁴

¹Sum Nursing College, Siksha 'O' Anusandhan University, Bhubaneswar-751030, India
¹Dean, Sum Nursing College, Siksha 'O' Anusandhan University, Bhubaneswar-751030, India.
²All India Institutes of Medical Sciences, Bhubaneswar -751019, India.
³Associate Professor Sum Nursing College, Siksha 'O' Anusandhan University, Bhubaneswar-751030, India.
⁴ICMR-Regional Medical Research Centre, Bhubaneswar-751023, India.

Abstract:

Objective: This study explored the experiences of the midwives (staff-nurses) in six public and three private hospitals on the management of postpartum haemorrhage (PPH) in Odisha, India.

Study design: Qualitative explorative study

Methods: A total of 18 In-depth Interviews (IDIs) were conducted among staff-nurses who were handling the PPH. The IDIs were carried out by the first author in the local language, digitally recorded, transcribed, translated into English, and analyzed using a content analysis approach.

Results: Theme emerged was "Opportunity and obstacle in PPH management" with four categories: preparedness for the management of PPH, participation in the actual situation, challenges faced during the management, and suggestion for better management. This study highlighted the major obstacles for proper management of PPH includes lack of human resources, adequate infrastructure, stock-out of emergency-medications and little skilled-based-training of staff.

Conclusions: Training of staff-nurses is necessary to bridge the gap in negligence and to solve life-threatening obstetric emergencies. Capacity building, supervision, refresher training and support are needed to enhance expertise in the management in obstetric complications to reduce the incidence of PPH. Besides, early referral, timely emergency services, blood bank facilities and successful management of the third stage of labour are strongly recommended.

Keywords: Postpartum Haemorrhage; Midwives; A Qualitative Study
Introduction:

The welfare of women and children is vital to the sustainability of a healthy environment(1). Despite great progress, so many mothers and children are still dying – mostly because of reasons that could have been prevented(2). According to the World Health Organization, almost 800 mothers die every day, which may be preventable (3). The right to better quality and mothers-centred care is universal. Low-quality care – delays in care, poor facilities, and delivery by unskilled practitioners frequently result in increased maternal morbidity and mortality(2).

Therefore, facility-based delivery is always recommended. The lives of mothers can be saved by facility-based skilled healthcare, but maternity care delivered in poor facilities or by untrained professionals also poses a risk. Above 90 percent of all maternal deaths occur in low- and middle-income countries (LMICs)(2)(3). Nearly one-third of maternal death was accounted for by haemorrhage as per a systematic review(4). Postpartum haemorrhage (PPH) is a significant and widespread obstetric complication, and despite attempts to minimize PPH, it remains one of the most common causes of maternal morbidity and mortality(5). The most common cause of PPH is uterine atony or lack of successful uterine contraction accompanied by inflammation, hereditary coagulation deficits and sub-involution of the placental site(6). In many settings, especially LMICs, increased PPH rates and related complications relate to insufficient awareness and skills of healthcare professionals in the management of PPH, the failure of health workers to make timely and effective decisions, and delays in referral and transport systems(6).

In India, the majority of maternal health services are rendered by midwives (staff nurses). They should therefore be skilled in the provision of health care and able to save the lives of women in life-threatening circumstances. Several studies have been conducted to assess the knowledge and practice of health care professionals regarding the management of PPH(7)(8), although no such related studies have been conducted to examine the experience, including obstacles, difficulties and concerns within staff nurses at the time of PPH management. This study explored the experiences of the staff nurses in six public hospitals and three private hospitals on the management of PPH in the state of Odisha, India.

Methods:

Study setting & participants:

In the state of Odisha, one District Headquarters Hospital, two Sub-Divisional Hospitals, and three Community Health Centres were chosen from public hospitals. A total of 18 In-depth Interviews (IDIs) were conducted among nurses who were handling the PPH. The participants were between 27 and 45 years of age with an average age of 35 years. Four of them have a bachelor's degree in nursing, and the rest have a General Nursing and Midwifery (GNM) degree. Many of them had more than seven to fifteen years of experience in managing PPH.

Data collection procedure:

Total of 18 In-depth Interviews (IDIs) was performed between March and April 2019. All study participants were contacted by the first author. All IDIs were carried out by the first author. Questions were asked about the problems they faced while engaging in the management of PPH.
The researcher has tried to ask all participants the same questions. The length of the interviews ranged from 20 to 37 minutes.

**Data analysis:**

The IDIs were carried out by the first author in the local language, digitally recorded, transcribed, translated into English, and analyzed using a content analysis approach. The meaning unit from the transcripts was identified and coded. Related codes were grouped and subdivided into categories, and the main theme originated from related categories.

**Ethical approval:**

The research proposal was approved by the Ethics Committee of IMS & SUM Hospital, Bhubaneswar, Odisha, India. Permission was received from the concerned local authorities. Before the interview, information was given to the interviewee on the purpose of the study; the interview guide was shown on the consent form signed by the interviewees. The names of the hospitals have not been given to protect confidentiality.

**Findings:**

The key theme emerged was "Opportunity and obstacle in PPH management" with four major categories: preparedness for the management of PPH, participation in the actual situation, challenges faced during the management of PPH, and suggestion for better management of PPH (Table 1).

**Preparedness for the management of PPH:**

There were many criteria for prior readiness to handle the PPH, such as proper infrastructure, a sufficient number of trained staff, appropriate medicines and stocks of consumables, as well as specialized referral facilities and a proper transport network system. The labour/delivery room must be supplied with 24-hour water and electricity backup. The toilet facilities in the room with appropriate flooring and lighting were necessary. Most of the participants felt that the quality of service was influenced by the availability of required numbers of staff and emergency drugs such as oxytocin injection, methargin, carboprost and misoprostol. The participants stated, "We had enough staff in our hospital – at least three nurses, one gynaecologist, and one sweeper in each shift. We often maintain a full stock of PPH drugs and injections". They also expressed the need for an effective referral system with adequate transport facilities.

**Participation in the actual situation:**

The participants stated that they engaged entirely in the management of the PPH. According to them, any time a mother begins to bleed after birth, they immediately administer drugs, massage the uterus, extract clots and control the blood pressure and the pulse rate of the mother. They expected appreciation for their work as the quality of treatment was correlated with a higher level of job satisfaction. They perceived that, although they frequently attended PPH training at various facilities, much of the training was theoretical, there was little practical exposure. They stated that practical training was required to learn effectively and improve their PPH management skills.
Challenges faced during the management of PPH:

According to the participants, the successful management of PPH was hampered by both personal and professional challenges. The perceived personal challenges were lack of confidence, helplessness and disappointment. The younger and newly appointed nurses felt that it was very important to have the competence and confidence to provide optimal care. They clarified that, at the time of emergencies, being encountered by experienced staff provides greater exposure to learning and builds confidence. They said, "If there is senior staff, they dare to deal with PPH situations". Some of them were unable to provide treatment during an emergency obstetric condition. They expressed experiences for which they were disappointed as they used to be blamed even after taking every opportunity to manage emergency situations. The perceived professional problems included lack of support for co-workers, lack of human resources and poor control of the mind. Nurses with long experience have argued that lack of human resources; staff cooperation and poor infrastructure have an impact on the quality of care, particularly during the management of critical conditions. The participants thought that the lack of collaboration between workers had a significant effect on the quality of health care. As per their view “Doctors don't support us-they don't come even after informing us, especially in night shifts”. Also, several times they were faced with problems due to the disrupted supply of electricity – inverter was not working properly. Furthermore, few of the newly appointed felt they had lost control of their minds when coping with emergencies.

Suggestion for the better management of PPH:

They indicated that successful management of PPH requires expertise in this area, good coordination, collaboration, frequent discussion of updated PPH-related information. It focused on the need for a sufficient number of qualified staff and progress in the clinical management of PPH can be made if experienced staffs are trained regularly. Some informants said that training in teams strengthened mutual understanding and improved relationships between physicians and nurses, which were often needed to cope with the emergency. "Doctor must be present in the labour-room and nurses during their shift must be active at all times".

Discussion:

The higher prevalence of PPH in developing countries is due to the lack of early detection and treatment, as well as the lack of availability of newer drugs used in the battle against PPH or the treatment of third stage labour complications. As a consequence, the focus has been transferred to a team or a multidisciplinary approach to PPH management. This study highlighted the major obstacles to the proper management of PPH, including lack of human resources, adequate infrastructure, stock-out of emergency medications and little skilled-based-training of staff. These findings are consistent with the study conducted by Jogchum Jan Beltma. However, other factors such as lack of blood for transfusion, infrastructural shortcomings include lack of electricity, and proper water supply was also listed as the key barrier in the provision of quality emergency obstetric care. In this study, the study participants explained that they had experienced the incapability of the health system while ensuring transportation services. Participants stated ambulance services were not properly functioning at the community level. Commencement of ambulance services plays an important role in obstetric management because delay in commencement may lead to maternal death. The previous study in other countries also found that transportation was one of the barriers to
providing emergency transport services\textsuperscript{(11)}. This finding is also similar to the findings of Krishnamurthy Jayanna et al.\textsuperscript{(12)} Training of midwives is necessary to bridge the gap in negligence and to solve life-threatening obstetric emergencies – capacity building, supervision, refresher training and support are needed to enhance expertise in the management in obstetric complications to reduce the incidence of PPH\textsuperscript{(13)}\textsuperscript{(8)}. Besides, early referral, timely emergency services, blood bank facilities and successful management of the third stage of labour are strongly recommended. Moreover, Samiksha Singh also suggested that skill-building, supervision, refresher training, and support are required to improve the knowledge in the management of obstetrical complications\textsuperscript{(14)}. The finding is similar with the study conducted in Iran found that improvement of the practice environment, with adequate staffing and adequate supplies, help to resolve the challenges of imbalanced workloads, inappropriate nurse-patient ratios, and inadequate physical resources which negatively affect the quality of the nursing practice\textsuperscript{(9)}

\textbf{Policy Implication:}

If the challenges which were faced by the staff nurses will be resolved at the managerial level, and then nurses will be able to manage the PPH more effectively. The nurse educator should organize an induction programme, workshop, in-service education programme for nurses to get more knowledge regarding obstetrical emergencies. It will help them to update their knowledge about proper management of PPH.

\textbf{Conclusion:}

The findings indicated that the practice environment as perceived by nurses in both public and private hospitals plays a vital role in the prevention and management of PPH. Inadequate human resources, lack of adequate infrastructure, delay in ambulance services, lack of staff support, unfavourable nursing work environments, are important challenges that the staff nurses, especially in rural health care systems, were facing. If these factors are notified to Government and corrected by respectful hospitals (private and Government hospital), then MMR can be reduced and Odisha will achieve the National target set by WHO under SDGs.

\textbf{Table no 1}

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<tr>
<th>Theme</th>
<th>Opportunity and obstacle in the management of postpartum-haemorrhage (PPH)</th>
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<td>Codes</td>
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<td>• 24 hours water and electrical supply</td>
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<td>• Spacious labour room</td>
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<td>• Attached toilet</td>
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\textbf{Professional challenges} | • Lack of staff |
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References:


