



## A STUDY TO ASSESS THE KNOWLEDGE AND PRACTICE REGARDING PREVENTION AND MANAGEMENT OF POSTPARTUM HEMORRHAGE AMONG STAFF NURSES AT SELECTED HOSPITAL, PUDUCHERRY

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### ABSTRACT:

**Background:** The term "postpartum haemorrhage" (PPH) refers to heavy bleeding after giving delivery. It is a serious condition that can be life-threatening. **Objectives:** The objectives of the study to assess the knowledge and practice of staff nurse on the prevention and management of PPH. **Methods:** Quantitative approach and a descriptive research design adopted for the study. The sample included 80 staff nurses from a selected hospital, chosen using convenient sampling. **Results:** The study shows that about 16.3% have low knowledge, around 33.7% have medium knowledge, and half have high knowledge. In contrast, only 8.7% show poor practices, while roughly 91.3% have good practices. This shows a big difference between what people know and how they use it. But because most people show good practices, it seems they can use what they know in real life. **Conclusion:** The study concluded that there is a significant gap between theoretical understanding and practical application, with most people showing high knowledge levels but only a smaller percentage demonstrating poor practices, the prevalence of good practice scores is commendable.

**Keywords:** Postpartum Hemorrhage, Staff Nurses, Knowledge and practice, Prevention, Management.

## 1. INTRODUCTION

Postpartum hemorrhage refers excessive bleeding after childbirth. It occurs in about 1 to 5 out of 100 women and is more common after a cesarean birth. This bleeding typically occurs after the delivery of the placenta, but it can also occur later<sup>1</sup>.

Postpartum haemorrhage (PPH) is a risky condition that can develop after caesarean or vaginal delivery. It is a leading cause of maternal morbidity and one of the top three causes of maternal mortality in both affluent and low-income nations. However, the risk of death from PPH is significantly lower in developed countries. Haemorrhage is the most prevalent reason for postpartum women's admission to critical care units and it is perhaps the greatest preventable cause of maternal death. A timely and correct diagnosis is crucial in commencing effective actions to improve outcomes<sup>1</sup>.

According to the World Health Organisation, heavy bleeding after childbirth, often known as postpartum haemorrhage (PPH), is the biggest cause of maternal death worldwide. PPH affects around 14 million women each year, accounting for over 70,000 maternal deaths worldwide. Even if women survive, they frequently require immediate surgical intervention to control the bleeding and may be left with permanent reproductive impairments<sup>2</sup>.

Globally, the prevalence of postpartum hemorrhage (PPH) is estimated to be between 6 and 11 percent. The rates vary depending on the data source, country, and assessment method. Objective appraisal of blood loss shows a prevalence of 10.6 percent, while subjective techniques indicate a prevalence of 7.2 percent. According to the review study, the prevalence of PPH in Africa is estimated to be 10.5% in cases of 500 mL or more of blood loss, and 8.9% in other regions<sup>3</sup>.

Postpartum haemorrhage (PPH) is responsible for 38% of maternal mortality in India, according to FOGSI. Most of these fatalities happen within four hours of delivery. In worldwide, PPH is the primary cause of maternal mortality. According to FOGSI, 5.8% of women will experience PPH in their first pregnancy, while 4-5% of women will experience PPH for the first time in a second or third pregnancy<sup>4</sup>.

In developing countries, postpartum haemorrhage is the main cause of mother mortality. Prenatal care should begin with assessing women's risk factors at every visit, and after that, in partnership with the women, care should be planned to identify the best lead healthcare provider<sup>5</sup>.

Staff nurses are critical in preventing, identifying, and treating PPH. They must be aware of the risk factors and respond appropriately when recognised. Furthermore, they should be trained in basic life support to manage PPH. This knowledge should be linked with an understanding of women's social, cultural, and psychological well-being. To significantly contribute to reducing PPH and maternal mortality and promoting safe motherhood, all healthcare workers participating in maternity care must have a wide range of lifesaving abilities.

### Objectives of the Study

1. To assess the knowledge and practice of staff nurse on the prevention and management of PPH.
2. To associate the knowledge and practice of staff nurse on the prevention and management of PPH.
3. To correlate the knowledge with practice on the prevention and management of PPH.

## 2. MATERIAL AND METHODS

The study selected a quantitative approach with a descriptive research design. It consists of 80 staff nurses working in a selected hospital. Staff nurses who fulfilled the inclusion criteria were selected for the study using a convenient sampling method. The study was approved by the Institutional Ethical Committee. The inclusion criteria consist of staff nurses working in labour wards. Exclusion criteria include staff nurses unwilling to participate in the study and staff nurses absent during the data collection.

### Data Collection Procedure:

All the participants were explained regarding the study. Informed consent was obtained from the staff nurses. Demographic profile was collected using self-administer questionnaires. Knowledge and practice questionnaires were used to assess the knowledge and practice. The collected data was analyzed through descriptive and inferential data using SPSS statistics software version 26.

## 3. RESULTS AND DISCUSSION

The study found that most participants were aged 25-30, comprising 44.7% of the sample. The next largest age group was 31-35, accounting for 22%. Those aged 41-55 constituted 32.5%, while the 20-28 group made up 24.7%. Young staff nurses predominated among the various age groups.

Regarding educational level, the majority of the staff nurses 74% graduated as bachelor of nursing. As for marital status, the majority of the staff nurses (79.3%) are married, while 16% are single and 4.7% are widowed, divorced, or separated.

**Table: 1 Knowledge and practice score of staff nurses on prevention and management of PPHN =80**

S.NO	Items	Frequency	Percentage
Knowledge score			
1.	Low	13	16.3%
2.	Moderate	27	33.7%
3.	High	40	50%
Practice score			
1.	Poor	7	8.7%
2.	Good	73	91.3%

The data provided reveals the distribution of knowledge and practice scores among the surveyed individuals. Approximately 16.3% of participants fall into the low knowledge category, while around 33.7% demonstrate a moderate level of knowledge. The largest segment, comprising 50% of the total, boasts a high level of knowledge. In contrast, only 8.7% of individuals exhibit poor practices, while approximately 91.3% showcase good practices. This difference between knowledge and practice scores highlights a notable gap between theoretical understanding and practical application. Nevertheless, the prevalence of good practice scores suggests a commendable ability among the surveyed population to effectively implement their knowledge into real-world scenarios. The result was supported by similar findings reported in a previous study conducted by Hailu, D et al. (2014) in Ethiopia<sup>6</sup>.

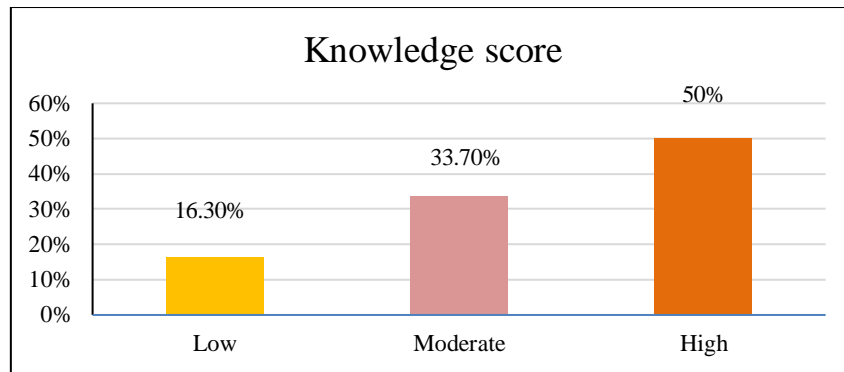


Figure: 1 representing the level of knowledge score of staff nurses on prevention and management of PPH

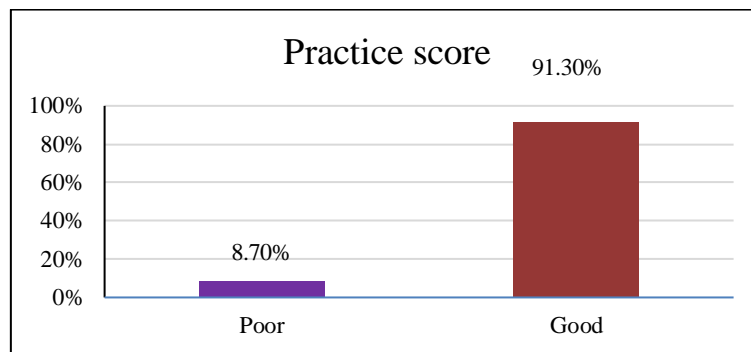


Figure: 2 representing the level of Practice score of staff nurses on prevention and management of PPH

**Table 2: Association of knowledge and practice with selected demographic variables. (n=80)**

S.NO	Variables	P value
1	Age in years <ul style="list-style-type: none"> <li>• 25-30 years</li> <li>• 31-35 years</li> <li>• 36-40 years</li> <li>• 41-55 years</li> </ul>	P = 0.018
2	Education level <ul style="list-style-type: none"> <li>• Diploma</li> <li>• Degree</li> <li>• Post graduate</li> </ul>	P = 0.379
3	Monthly income <ul style="list-style-type: none"> <li>• &lt;15000</li> <li>• 15001-2000</li> <li>• &gt;20001</li> </ul>	P = 0.756

The study used an ANOVA test to investigate the relationships between age group, education level, and monthly income with knowledge regarding PPH. Age was significantly associated with the outcome, while education level and monthly income showed no significant relationship. Further research may be needed to explore other contributing factors or validate these findings in different populations. A study by Purani et al. (2015) suggested that providing

mothers with better education regarding post-partum hemorrhage can enhance their awareness and attitude, particularly through regular continuing education<sup>7</sup>.

### **Correlation between Knowledge Scores and Practice Scores on PPH**

An average correlation in this association is indicated by the correlation coefficient, which has an r-value of 0.333. A positive correlation is also suggested by the positive r value, and the p-value of 0.001 indicates that the link is significant.

## **4. CONCLUSION**

The study revealed an interesting dynamic in the knowledge and practice scores of the surveyed individuals. Although there is a significant gap between theoretical understanding and practical application, with most people showing high knowledge levels but only a smaller percentage demonstrating poor practices, the prevalence of good practice scores is commendable. This suggests that the surveyed population can effectively apply their knowledge in real-world scenarios despite the gap. As we advance, efforts to bridge the gap between knowledge and practice could enhance the application of theoretical understanding in everyday situations, potentially leading to even greater effectiveness and efficiency in various domains.

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There are no funding sources for this study.

### **Conflicts Of Interest**

Not Interest.

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