

An Investigation to Evaluate the Efficacy of a Structured Education Program On Postpartum Hemorrhage Management Among Nursing Officers at Several Hospitals in Indore

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Abstract

Postpartum hemorrhage (PPH) is the term for severe vaginal bleeding following childbirth. This acute illness has the potential to be lethal. Other signs of postpartum hemorrhage include weakness, dizziness, and blurred vision. PPH can occur up to 12 weeks after giving birth. A complete recovery is possible with early detection and prompt medical care. Postpartum hemorrhage (PPH) is the leading cause of maternal death. Every woman who carries a pregnancy past 20 weeks is susceptible to PPH and its complications. Even though rates of maternal mortality have drastically declined in the industrialized countries, PPH is still a substantial contributor to maternal deaths abroad.

Keywords: Postpartum haemorrhage, management, vaginal bleeding.

1. Introduction

Excessive bleeding after birth—more than 500 milliliters in a vaginal delivery and more than 1000 milliliters in a cesarean delivery—combined with hypovolemia symptoms is known as postpartum hemorrhage. Clinical indications and symptoms must be taken into account when assessing PPH since visual measurement of blood loss is inaccurate. The primary reason for the vast variations in incidence is the inconsistency of the definition criteria. It affects roughly 4-6% of all deliveries.

Early (primary) and late (secondary). Primary hemorrhage happens 24 hours after the infant is born. Secondary bleeding, also known as late puerperal hemorrhage, occurs after 24 hours of puerperism.

NEED FOR THE STUDY

Health is more than just the absence of disease and incapacity; it is a complete condition of physical and social well-being and ought to be a basic human right. During her pregnancy and labor, every woman has excitement and expectations.

For the remainder of her life, she is plagued by uncertain recollections and events related to giving birth. Over 500,000 women worldwide lose their lives to pregnancy and childbirth complications every year.

STATEMENT OF PROBLEM:

An investigation on the efficacy of a structured teaching program on postpartum hemorrhage management among nursing officers at various hospitals in Indore.

OBJECTIVES:

1. To evaluate nursing officers' proficiency in managing postpartum hemorrhage.
2. To assess how well a structured education program works for nursing officers in managing postpartum hemorrhage.
3. To determine the relationship between the nursing officer's pre-test knowledge of postpartum hemorrhage care and the chosen demographic characteristics.

Hypothesis

H1: The nursing officers' pre-test knowledge scores on the treatment of postpartum hemorrhage will differ significantly.

H2: Among nursing officers, there will be a strong correlation between the pre-test knowledge scores about postpartum hemorrhage management and the chosen demographic characteristics.

REVIEW OF LITERATURE

A review of the literature provides background information and proof for every research project. Finding out what is already known about a problem of interest is the goal.

One stage in the creation of a research project is the review of the literature. It aids the investigator in gaining a deeper understanding of the issue as well as knowledge about the issue and previous solutions. It offers a foundation for further research, justifies the necessity of replication, and sheds light on the study's viability in an effort to create a comprehensive body of scientific knowledge from which reliable and enduring hypotheses may be built.

A critical synopsis of a person of interest's research is called a review of literature. In order to justify a new satisfaction, it is generally necessary to highlight gaps and weaknesses in previous studies in order to place a research problem in context.

REVIEW RELATED TO MANAGEMENT OF POSTPARTUM HAEMORRHAGE

The Emergent Pelvic Artery Embolization in the Management of Postpartum Hemorrhage: A Systematic Review and Meta-analysis was the subject of a study by Xiu Quan Zhang et al. (2020). The objective is We carried out a comprehensive review and meta-analysis of PAE for PPH in the literature to assess its effectiveness, safety, complications, and results. On March 31, 2020, the Chinese database Sino-Med, the database of abstracts of reviews, the index to allied health literature, and Medline were searched for research on PAE for PPH. For meta-analysis, information on PAE indication, agents, arteries, success rate, complications, and outcomes was taken out and combined. 43 papers were ultimately determined to match the inclusion criteria after 113 abstracts or complete articles were retrieved from the 1075 recognized articles.

The findings showed that uterine atony, placental abnormalities, delivery tract injury, disseminated intravascular coagulation, arteriovenous malformation, and vaginal hematoma were the grounds for PAE. Gelatin sponge particles, polyvinyl alcohol particles, Gelfoam, N-butyl cyanoacrylate, microcoil, and glue were the most common embolization agents; the internal iliac artery and uterine artery were the

most common arteries. While the technical success rate was 99.3%, the clinical success rate was 90.5%. Menstrual irregularities and postembolization syndrome were the most frequent side effects of PAE.

A non-experimental study on GNM students' knowledge and abilities about active management of the third stage of labor in Haryana was carried out by Deepshikha et al. (2018). Purposive sampling was used to choose 100 GNM students in total. Data was gathered using an observational checklist and a structured knowledge questionnaire, and statistical software package -20 was used for analysis. According to the study's findings, 100% of GNM students were unable to actively manage the third stage of labor, and 92% of them had knowledge that was below average.

A prospective cohort study on postpartum hemorrhage incidence and risk variables was carried out at six Ugandan health institutions by Sam Ononge et al. (2016). A cluster-randomized study was used to recruit a sample of 1188 women who had experienced postpartum hemorrhage. Questionnaires and interviews were used to gather data, which was then analyzed. According to the study, of the 1188 women, 107 had PPH, 14 had severe PPH, 31 did not receive auterotonic medications, 82 received extra uterotonic medications, and 78 received misoprostol. HIV positive status, repeated pregnancies, and fetal macrosomia more than 4000 are risk factors for severe PPH. Extra caution during labor and readiness for PPH management are risk factors.

METHODOLOGY

The most crucial component of any research project is methodology, which gives the researchers the blueprint for the investigation. It looks into how to gather, arrange, and analyze data. Methodology studies deal with the creation, verification, and assessment of research instruments or techniques.

The research approach, research design, study setting, population sample and sample size, sampling techniques, sampling criteria, instruments, validity and reliability pilot study, data collection method, and study data analysis plan are all described in this chapter. The purpose of this study is to evaluate how well nursing officers at various hospitals in Indore treat postpartum symptoms.

RESEARCH METHODS

For this study, a quantitative research approach is chosen.

Design of Research

In this work, a pre-experimental one-group pre-test and post-test design was used.

SETTING FOR STUDY

The study was carried out in several hospitals in Indore.

POPULATION All nursing officers employed by various hospitals in Indore are included in the study's population.

A SAMPLE

Nursing officers who met the inclusion criteria made up the study's sample.

SIZE OF SAMPLE

Fifty nursing officers make up the current sample size.

Techniques for sampling

The sample was chosen using a straightforward random sampling procedure.

SAMPLE SELECTION CRITERIA INCLUDING CRITERIA

The nursing officials who are willing to take part in this research.

B.sc. and M.sc. nurses regardless of wards, both male and female

CRITERIA FOR EXCLUSION

The nursing officers who are physically ill

GNM/ANM nursing officers at the administrative level

ORGANISATION OF THE DATA

TABLE – I: Frequency and percentage wise distribution of demographic variables.

TABLE – II: Frequency and percentage wise distribution of the level of management of postpartum haemorrhage

TABLE – III: Mean and Standard deviation of the level of management of postpartum haemorrhage among the nursing officers

TABLE – IV: Association on assess the knowledge of the level of postpartum haemorrhage among the nursing officer.

Table 1: Frequency and percentage wise distribution of demographic variables[N=50]

S.NO	DEMOGRAPHIC DATA	FREQUENCY	PERCENTAGE
1.	Age		
	a) 20-30 years	42	84
	b) 31-40 years	8	16
	c) 41- 50 years	0	0
	d) 51-60 years	0	0
2.	Gender		

	a) Male	10	20
	b) Female	40	80
3.	Religion		
	a) Hindu	40	80
	b) Christian	8	16
	c) Muslim	2	4
	d) Others	0	0
4.	Educational status		
	a) Bsc nursing	48	96
	b) Post basic BSC	0	0
	c) Msc nursing	2	4
	d) Dipoloma nursing	0	0
5.	Year of working experience		
	a) 1-2 years	28	56
	b) 2-3 years	4	8
	c) 3-4 years	5	10
	d) above 5 years	13	26

6.	Seminars, conferences		
	a) Yes	21	42
	b) No	29	58
7.	Type of living place		
	a) rural	43	86
	b) urban	7	14
8.	Years of experience in labor room		
	a) less than 1 year	35	70
	b) 2- 3 years	15	30
	c) 3- 5 years	0	0
	d) more than 5 years	0	0
9	Marital status		
	a) married	21	42
	b) unmarried	29	58
	c) divorced	0	0
	d) Widow.	0	0
10.	Monthly income		
	a) 10,000 INR	6	12
	b) 10,000-15,000 INR	30	60
	c) 15,000-20,000 INR	8	16
	d) more than 20,000 INR	6	12

TABLE – II: Frequency and percentage wise distribution of the level of management of postpartum haemorrhage [N= 50]

SCORING INTERPRETATION	FREQUENCY	PERCENTAGE
Inadequate knowledge	12	24
Moderate adequate knowledge	38	76
Adequate knowledge	0	0

Table II displays the frequency and percentage distribution of postpartum hemorrhage management. Of the nursing officers, 38 (76%) had moderately adequate knowledge and 12 (24%) had insufficient knowledge. of expertise, and the postpartum hemorrhage management level's mean and standard deviation are (10.54+2.92), respectively.

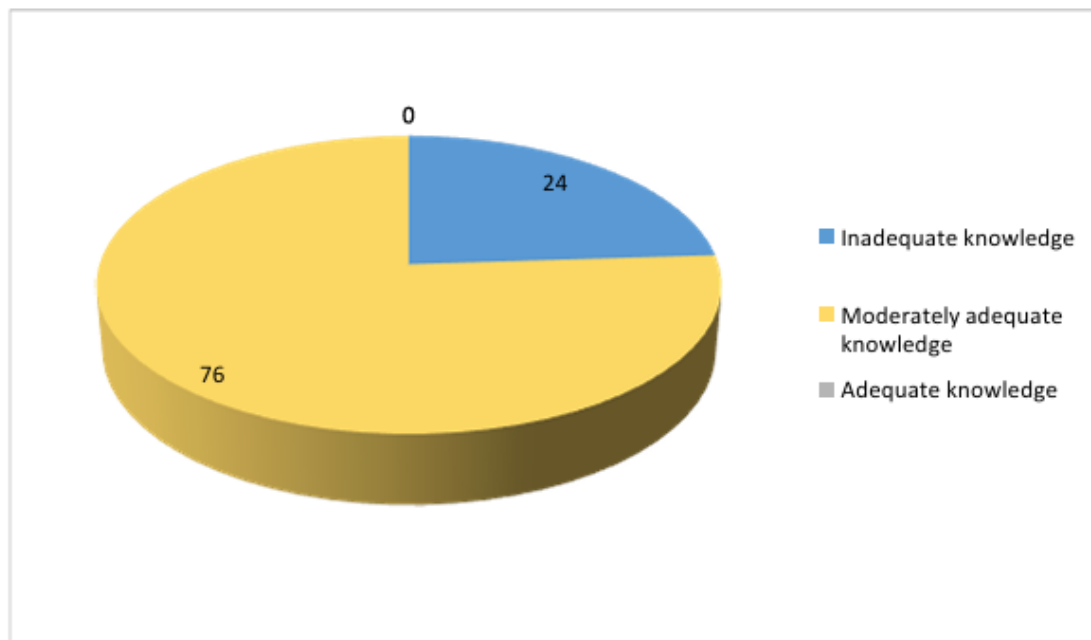


Fig: 3 pie diagram Frequency and percentage wise distribution of the level of management of postpartum haemorrhage

Table III displays the area-specific mean and standard deviation for the nursing officers' degree of postpartum hemorrhage management.

The results show that the nursing officers' mean (10.54) and standard deviation (2.92) of postpartum hemorrhage level management

TABLE – III: Mean and Standard deviation of the level of management of postpartumhaemorrhage among the nursing officers [N = 50]

MEAN	STANDARD DEVIATION
10.54	2.92

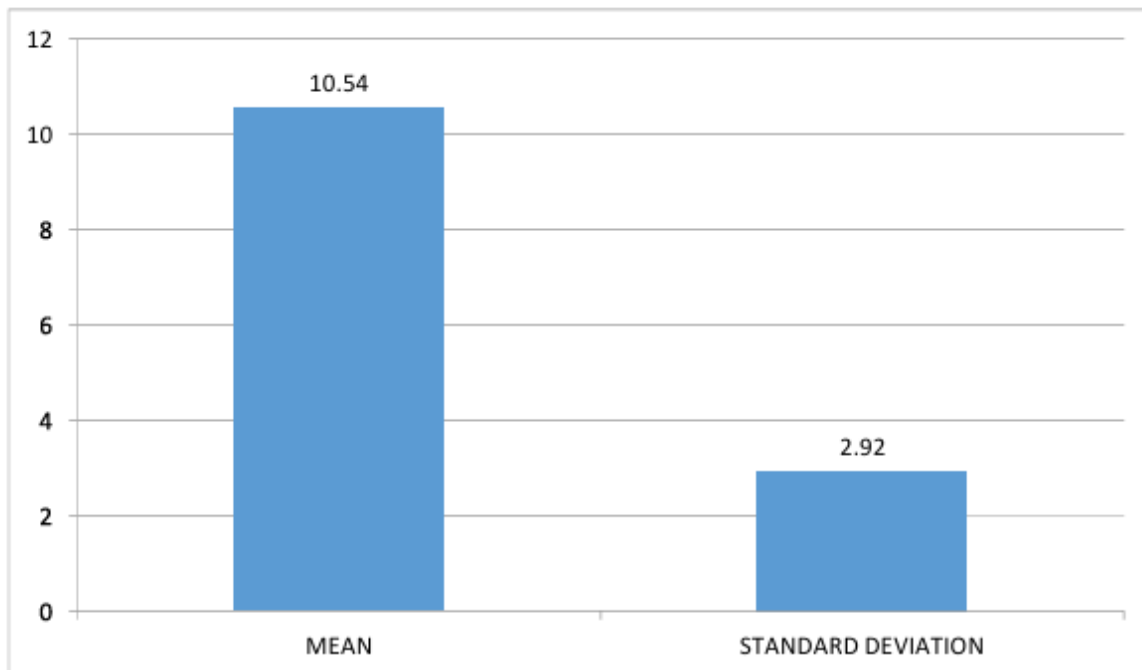


Fig: 4 bar diagram mean and Standard deviation of the level of management ofpostpartum haemorrhage among the nursing officers

TABLE – II: Frequency and percentage wise distribution of structured teaching programme on management of postpartum haemorrhage among the nursing officers [N= 50]

SCORING INTERPRETATION	FREQUENCY	PERCENTAGE
Inadequate knowledge	0	0
Moderately adequate knowledge	5	10
Adequate knowledge	45	90

Table II: Shows that Frequency and percentage wise distribution of structured teachingprogramme on management of postpartum haemorrhage among the nursing officers

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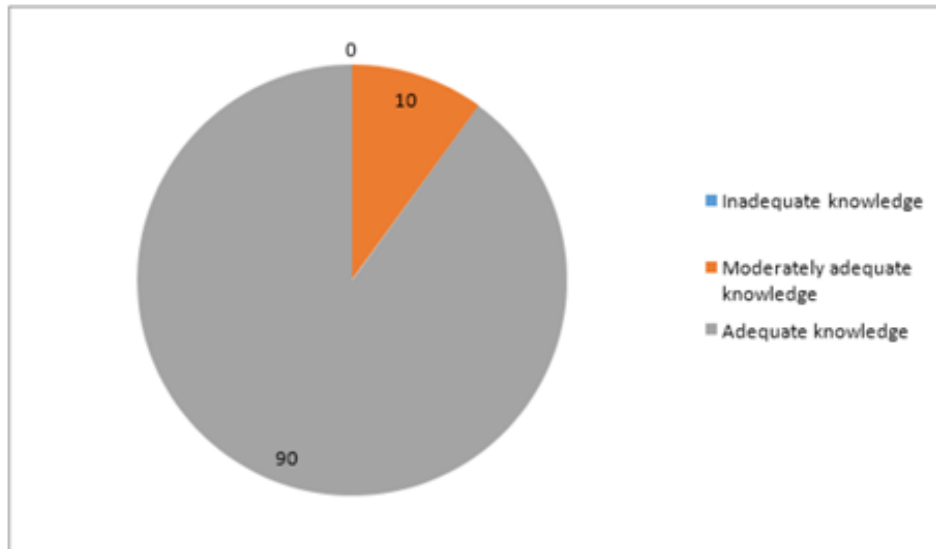


Fig: 5 pie diagram frequency and percentage wise distribution of structured teaching programme on management of postpartum haemorrhage among the nursing officers

TABLE – IV: Association on assess the knowledge of the structured teaching programme on management postpartum haemorrhage among the nursing officers [N = 50]

S.NO	DEMOGRAPHIC DATA	Inadequate		Moderate		X ²
		N	%	N	%	
1.	Age					X ² =.691 Df=1 P=.4060
	e) 20-30 years	11	22	31	62	
	f) 31-40 years	1	2	7	14	
	g) 41- 50 years	0	0	0	0	
	h) 51-60 years	0	0	0	0	
2.	Gender					X ² =1.754 Df=1 P=.1853
	c) Male	4	8	6	12	
	d) Female	8	16	32	64	
3.	Religion					X ² =1.891 Df=2 P=.3884
	e) Hindu	8	16	32	64	
	f) Christian	3	6	5	10	
	g) Muslim	1	2	1	2	
	h) Others	0	0	0	0	
4.	Educational status					X ² =.658 Df=1 P=.4173
	e) Bsc nursing	12	24	36	72	
	f) Post basic BSC	0	0	0	0	
	g) Msc nursing	0	0	2	4	
	h) Dipoloma nursing	0	0	0	0	
5.	Year of working experience					X ² =1.908 Df=3 P=.5917
	e) 1-2 years	8	16	20	40	
	f) 2-3 years	1	2	3	6	
	g) 3-4 years	0	0	5	10	
	h) above 5 years	3	6	10	20	
6.	Seminars, conferences					X ² =1.729 Df=1 P=.1885
	c) Yes	7	14	14	28	
	d) No	5	10	24	48	
7.	Type of living place					X ² =.093 Df=1 P=.7601
	c) rural	10	20	33	66	
	d) urban	2	4	5	10	
8.	Years of experience in labor room					X ² =6.036 Df=1
	e) less than 1 year	5	10	30	60	

	f) 2- 3 years	7	14	8	16	P=.0140*
	g) 3- 5 years		0		0	
	h) more than 5 years		0		0	
9	Marital status					X ² =1.729 Df=1 P=.1885
	e) married	7	14	14	28	
	f) unmarried	5	10	24	48	
	g) divorced		0		0	
	h) widow.		0		0	
10	Monthly income					X ² =1.160 Df=3 P=.7625
	e) 10,000 INR	2	4	4	8	
	f) 10,000-15,000 INR	8	16	22	44	
	g) 15,000-20,000 INR	1	2	7	14	
	h) more than 20,000 INR	1	2	5	10	

Table IV displays the association's evaluation of the efficacy of a structured postpartum hemorrhage management education program for nursing officers at Sri Manakula Vinayagar Medical College and Hospital.

It is statistically associated, according to the chi square. Years of labor room experience are significant *-p<0.05; the remaining values fall into the non-significance category.

Results

According to the study's findings, 42 (84%) of the individuals who were interviewed were older than 20 to 30. Eighty percent of the forty people were female. Eighty percent of the forty people are Hindus. 18 (60%) of them are in hospitals. The majority of nursing officers have 28 (56%) years of professional experience. The majority of nursing officers attended conferences and seminars (29, or 58%). The majority of nursing officers

35 (70%) years of labor room experience. 29 (58%) of them were single, and 17 (57%) had two to three children.

The majority of nursing officers (60%) make less than \$30 per month.

Recommendation:

The present study's findings have led to the following recommendations: Sri Manakula Vinayagar Medical College and Hospital could do the similar study.

To improve generalization, the study might be repeated with larger samples. The study can be implemented in all of India's states.

Conclusion:

The purpose of this study was to evaluate postpartum hemorrhage management knowledge. In this study, quantitative research was employed. Fifty samples were used to gather the data. Twelve (24%) of the nursing officers had inadequate knowledge, and thirty-eight (76%) had moderate knowledge. The mean and standard deviation of the postpartum hemorrhage management level are 10.54+2.92, respectively.

NURSING IMPLICATION:

The current study can improve the hospital's nursing officer's understanding of postpartum hemorrhage. The study's conclusions have implications for nursing administration, nursing services, nursing research, and nursing education.

NURSING ADMINISTRATION:

A nurse administrator can establish the rules required to apply nursing care services expertise regarding the management of postpartum hemorrhage among nursing officers.

NURSING SERVICES:

As a counselor and educator, nurses should educate nursing officers on how to treat postpartum hemorrhage. When interacting with people, nurses should be kind and personable.

NURSING EDUCATION:

A sufficient understanding of postpartum care should be given to nursing officers. hemorrhage Nursing educators should encourage undergraduate and graduate nursing students to use evidence-based nursing practices.

NURSING RESEARCH:

By offering a baseline on the World Wide Web, the study's results assist nurses and students in developing their investigation. Further replication of the study can yield general elements of the findings.

Future research is required to assess the factors related to a systematic instruction program on managing postpartum hemorrhage among nursing officers.

The findings should be reviewed on a regular basis and published in journals, conferences, and seminars.

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