

Effect of Demonstration on Knowledge & Practices Regarding Selected Obstetric Drugs among Nurses Working in Labour Room in Urban Area

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Abstract:

Background: *The aim of this study was to describe the demographic characteristics of nurse, to assess the effect of Demonstration on knowledge & practices regarding selected obstetric drugs among nurses. The present study was conducted in selected tertiary care Hospitals in urban area.*

Methods: *The research approach was an evaluative approach with one group pre-test – post-test experimental research design. The study comprised of 50 Nurses working in Labour room. The tool knowledge questionnaire & practices checklist regarding selected obstetric drug was used for data collection.*

Results: *The total 50 Nurses were assessed, most of the Nurses 66% were in the age group of 35-45 years, all of them were females, and majority 72% of them GNM. It is found that, in pre test 58% of the nurses had inadequate knowledge score, in post test 86% of the nurses had adequate knowledge score. And in pre test 62% of the nurses had perform correctly, in post test 94% of the nurse had performed correctly. There was significant relationship with age, educational qualification, years of experience of the nurses and knowledge & practices score of Nurses regarding selected obstetric Drugs.*

Conclusion: *The study result shows that the most of the Nurses had adequate knowledge and good Practices after skill demonstration. Study strongly recommends that, the competency based training improve the knowledge and practices among Nurses.*

Keywords: *Nurses, Obstetric drugs, Demonstration, Knowledge, Practices.*

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Introduction

Maternal mortality in India continues to remain unacceptably high. In an effort to reduce maternal mortality Government of India has recently taken the decision to permit Nurses to use certain drugs for specific situations in emergency obstetric care. In consultation with experts from the Federation of Obstetrics and Gynecology of India and nursing professionals it has also

been decided to permit Nurses to perform simple procedures & obstetric drugs.¹

Oxytocics are the drugs of varying chemical nature that have the power to excite contractions of the uterine muscles. Among a large number of drugs belonging to this group, oxytocin, ergot derivatives, and prostaglandins are the important ones and are extensively used in clinical practice. The midwife should have thorough knowledge of the indications, action, and side effects of these drugs as well as the nursing considerations related to each of them in order to plan and implement effective nursing process.²

The Nurse is recognized as a responsible and accountable professional who works with women to give the necessary support, care and advice during pregnancy, labour and the postpartum period. This care includes preventive measures, the promotion of normal birth, the

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detection of complications in mother and child, accessing of medical or other appropriate assistance and the carrying out of emergency measures. It is true that Nurses are serving women, & their babies. If it looks no different than the myth-based, damaging knowledge and practice of obstetrics, then it is not midwifery.³

All midwives bear a great responsibility when they administer drugs, as these may act not only upon the mother but also on the fetus during pregnancy and labour and on the baby in the early days of life. Medication administration is an activity that is prone to errors, in part because of the proliferation of new devices and new drug products. Medications are administered through a variety of routes, dosages, dosage forms and dosing regimens, adding variability. More over medication orders are changed frequently as pharmacists and medical specialists provide input into patient care based on changes in patient clinical status and the results of diagnostic tests.⁴

Objectives

1. To describe the basic characteristics of the Nurses.
2. To assess the existing knowledge & practices regarding selected obstetric drugs among Nurses.
3. To evaluate the effect of Demonstration on knowledge & practices regarding selected obstetric drugs among Nurses.
4. To associate knowledge & practices regarding selected obstetric drugs with the selected demographic attributes.

Material and Methods

An evaluative research study, to evaluate the effect of Demonstration on knowledge & practice regarding obstetric drug among Nurses was conducted during the period of October 2013 to June 2014. One group pre test post test experimental research design was used. The study population consists of all the nurses of Mumbai and samples were nurses working in labour room of selected hospitals of urban area in Mumbai. The 50 Nurses were included in the study by purposive sampling techniques. The data collection was done by using self

administered knowledge questionnaire & observation checklist, after ethical approval & consent from nurses. In first visit Pretest was conducted. The skill Demonstration regarding selected obstetric drugs carried out for nurses. After the skill demonstration on 15th day posttest knowledge and practices of nurses were assessed. Data analysis was done by using descriptive and inferential statistical methods.

Results:

Table 1: Demographic Characteristics of Nurse (n=50)

Sr. No.	Demographic Characteristics	No.	%
1.	Age (yrs.)		
	< 25 yrs.	7	14
	25 yrs. to 35 yrs.	33	66
	35 yrs. to 45 yrs.	11	22
	> 45 yrs.	2	04
2.	Gender		
	Male	00	00
	Female	50	100
3.	Education		
	GNM	36	72
	B.Sc. Nursing	14	28
	M.Sc. Nursing	0	0
4.	Experience		
	Less than 5 yrs.	07	14
	5 yrs. to 10 yrs.	12	24
	10 yrs. to 15 yrs.	16	32
	More than 15 yrs.	18	36
5.	Participated in In-service Training		
	Yes	00	00
	No	50	100

The above table 1 shows that the total 50 Nurses were assessed, most of the Nurses 33 (66%) was in the age group of 35-45 years. All of them 50 (100%) were females. Many of the Nurses 36 (72%) were GNM, and majority of them 18 (36%) having 15 and above years of experience. No any Nurse attended any Obstetric In-services education programme.

Table 2: Frequency & percentage distribution of Level of Knowledge score

Sr. no.	Level of knowledge score	Pre Test		Post Test		χ^2 -value	p-value
		No.	%	No.	%		
1	Inadequate	29	58	01	02	97.13*	P<0.0001S
2	Average	18	36	6	12		
3	Adequate	03	06	43	86		

The above table 2 depicts that, in pre test 58% of the nurses had inadequate knowledge score, 36% had average knowledge score. In post test 86% of the nurses had adequate knowledge score and 12% had average

knowledge score. The difference between pre test and post test level of knowledge score is found to be statistically significant ($O\hat{u}^2$ -value= 97.13).

Table 3: Frequency & percentage distribution of Practice score

Practices	Pre Test	Post Test	\hat{a}^2 -value	p-value
Perform correctly	31(62%)	47(94%)	14.94*	0.0001
Perform incorrectly	19(38%)	3(6%)		p<0.05

The above table 3 shows, in pre test 62% of the nurses had perform correctly, 38% had performed incorrectly. In post test 94% of the nurse had performed correctly

and 6% had performed incorrectly. The difference between pre test and post test attitude score is found to be statistically significant ($O\hat{u}^2$ -value= 14.94).

Table 4: Overall and area wise comparison of knowledge Score

Sr. no.	Area	Pre Test		Post Test	
		Mean	SD	Mean	SD
1	Indication & Contraindication	0.60	0.49	1.98	0.55
2	Mechanism of action	0.36	0.69	2.98	0.58
3	Dose & calculation	1.34	0.68	3.20	0.49
4	Side effect & drug interaction	0.74	0.48	2.56	0.54
5	Administration of drug	3.08	1.24	8.66	0.96
6	Overall	6.12	1.42	19.38	1.29

The above table 4 shows that area wise comparison of mean and SD of pre test knowledge scores reveals that during pre test the highest mean score was 3.08 on the area of "Administration of drug" whereas the lowest mean score was 0.36 on the area of "Mechanism of action". Whereas during post test it was observed that the highest mean score was 8.66 on the area of "Administration of drug" and the lowest mean score was 1.98 on "Indication & contraindication". There is significant relationship with age, educational qualification, years of experience of the nurses & knowledge & practices score of Nurses regarding selected obstetric Drugs.

Discussion

In this study 50 Nurses were assessed, it is found that, in pre test 58% of the nurses had inadequate knowledge score, in post test 86% of the nurses had adequate knowledge score. And in pre test 62% of the nurses had perform correctly, in post test 94% of the nurse had performed correctly. The findings of the study are corresponding to the findings of the study conducted by

Ndosi and Newell [5] that nurses had inadequate knowledge of pharmacology and Elnour AA & Ellahham NH [6] study shows structured program has improved medication calculation errors, influences nursing practice and patient outcome.

There is significant relationship with age, educational qualification, years of experience of the nurses & knowledge & practices score of Nurses regarding selected obstetric Drugs. The results contradict with the findings of the study conducted by Bijapurkar [7], where there was no significant association between the rate of medication errors and nurses age, sex, qualification, working experience. The study findings also similar to the study conducted by Deepak N. N., Thripathi et al [8] lack of consistent and correct knowledge regarding safe storage, dosing, and administration of oxytocin.

Conclusion

The study concludes that, Nurses are having inadequate knowledge and average practices regarding selected obstetric drugs. And the skill demonstration regarding obstetric drug improves knowledge and Practice among

Nurses. This study will help the nurse to develop appropriate teaching material to improve knowledge and practices regarding selected obstetric drug.

Declaration-

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Ethical approval : Taken

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