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Review article Nursing Research

# To assess level of knowledge of staff nurses on emergency obstetric management at orotta national referral maternity hospital

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#### ABSTRACT

The aim of this study was to assess the level of knowledge of staff nurses on emergency obstetric management, to assess demographic variable and also to find out the association between knowledge and selected demographic variable. The present study was conducted at Orotta National Referral Maternity Hospital, Asmara, Eritrea. The research design was descriptive. Non probability convenient sampling was used to select 60 samples. The selected samples were assessed by structured self-administered questionnaire and the data was analyzed by using SPSS Version 18.

**Results:** Descriptive statistics (frequency, percentage and chi-square) were used to analyze the data. The result of the study shows that majority **39** (**65%**) of the staff had adequate knowledge, **21** (**35%**) of the staff had moderately adequate knowledge and none of them had inadequate knowledge regarding emergency obstetric management.

**Conclusion**: The overall experience of conducting this study was satisfying and enriching .The study was a new learning experience for the investigators. The result highlights the need of improvement of knowledge on Emergency obstetrics management.

Key words: Obstetric management, Maternity hospital.

#### INTRODUCTION

Obstetrical emergencies are life-threatening medical conditions that occur in pregnancy, during or after labor and delivery. There are a number of illnesses and disorders of pregnancy that can threaten the well-being of both mother and child (Gale Encyclopedia of Medicine 2008).

Maternal mortality remains a major public health problem worldwide especially in low income countries. The reduction of maternal deaths by three-quarters, between 1990 and 2015, is a global concern, articulated as the fifth MDG. Direct causes including hemorrhage, unsafe abortion,

pregnancy induced hypertension, obstructed labor and sepsis contribute to 70% of maternal deaths. According a study done in Uganda, there is high maternal mortality ratio estimated at 435/100,000 live births. This is mainly attributed to direct causes of maternal deaths. [Ogwang et al. BMC Pregnancy and Childbirth 2012]

### Maternal mortality ratio per 100,000 Live births by Zoba

1,261/100,000 in SRSZ, 1,083/100,000 in Anseba, 1.040/100,000 in Gash Barka, 747/100,000 in NRSZ, 696 in Debub, 46 in Makel.

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#### Objectives of the study

#### a. General objectives:

To assess the level of knowledge of staff nurses on emergency obstetric at Orotta National Referral Maternity Hospital.

#### b. Specific objectives

- > To assess demographic variable
- > To assess the level of knowledge of the staff
- To find out the association between knowledge and selected demographic variable

#### **Hypothesis**

- There will be a significant difference in knowledge of staff nurses on emergency obstetric management.
- There will be a significant association between knowledge and selected demographic variable.

#### **METHODOLOGY**

A descriptive study design was implemented. This study project was carried out at Orotta National

Referral Maternity Hospital, Asmara, Eritrea. Our study population was the staff nurses .60 staff nurses selected by using non-probability convenient sampling technique. The main tool for data collection was structured self-administered questionnaire. Data was analyzed using the Statistical Package for Social Science (SPSS version 18.0).

#### RESULT AND DISCUSSION

#### The major findings are summarized as follows

- ➤ Most of the staff nurses (66.7%) were in the age group of 20-30 years.
- ➤ Most of the staff nurses (70%) were females.
- ➤ Most of the staff nurses (70%) were Diploma graduate.
- ➤ All of the staff nurses(100%) had attended workshop regarding emergency obstetric management(LSS)
- ➤ Highest percentage (55%) of the staff nurses had 0-3 years of work experience.

**Table – 1:** Frequency and percentage distribution of knowledge of the staff nurses regarding emergency obstetric management.

Level of Knowledge	Frequency	Percentage (%)
Adequate knowledge	39	65
Moderately adequate knowledge	21	35
Inadequate knowledge	0	0
		n-60

Table 1shows knowledge score regarding emergency obstetric management among 60 staff nurses, majority 39 (65%) of the staff had adequate knowledge and 21 (35%) of the staff had moderately adequate knowledge and none of them had inadequate knowledge regarding emergency obstetric management.

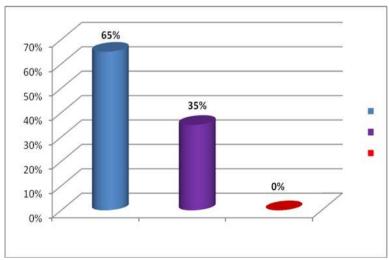


Fig 1: Percentage distribution of staff nurses regarding emergency obstetric management.

**Table – 2:** Frequency and percentage distribution of staff nurses knowledge regarding management of hemorrhage.

Level of Knowledge	Frequency	Percentage (%)	
Adequate knowledge	2	3.3	
Moderately adequate knowledge	47	78.3	
Inadequate knowledge	11	18.3	
	n=60		

Table 2 shows knowledge score regarding Hemorrhage management among 60 staff nurses, majority 47 (78.3%) of the staff had moderately

adequate knowledge and 11 (18.3%) of the staff had inadequate knowledge and only 2(3.3) had adequate knowledge regarding Hemorrhage management.

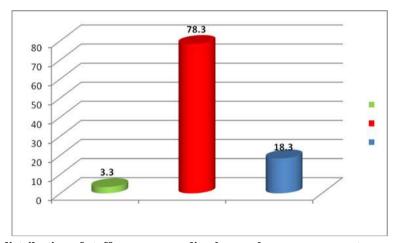


Fig 2: Percentage distribution of staff nurses regarding hemorrhage management

**Table – 3:** Frequency and percentage distribution of staff nurses knowledge regarding management of unsafe abortion.

Level of Knowledge	Frequency	Percentage (%)
Adequate knowledge	44	73.3
Moderately adequate knowledge	16	26.7
Inadequate knowledge	0	0

n=60

Table 3 shows knowledge score regarding unsafe abortion management among 60 staff nurses, majority 44 (73.3%) of the staff had adequate knowledge and 16 (16%) of the staff had

moderately adequate knowledge and none of them had inadequate knowledge regarding unsafe abortion management.

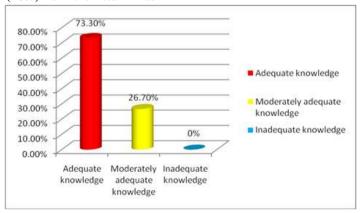


Fig 3: Percentage distribution of staff nurses regarding unsafe abortion management

**Table – 4:** Frequency and percentage distribution of staff nurses knowledge regarding management of Puerperal sepsis

Level of Knowledge	Frequency	Percentage (%)
Adequate knowledge	41	68.3
Moderately adequate knowledge	18	30
Inadequate knowledge	1	1.7

n=60

Table 4 shows knowledge score regarding Puerperal sepsis management among 60 staff nurses, majority 41 (68.3%) of the staff had adequate knowledge and 18 (30%) of the staff had

moderately adequate knowledge and 1(1.7%) had inadequate knowledge regarding Puerperal sepsis management.

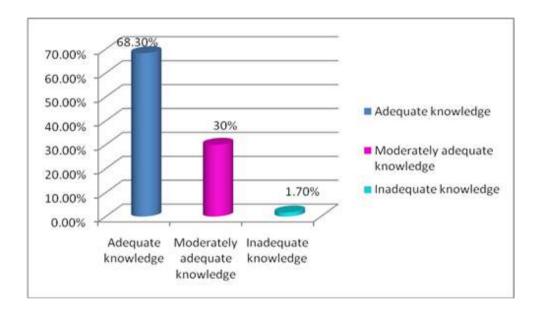


Fig 4: Percentage distribution of staff nurses regarding puerperal sepsis management

**Table – 5:** Frequency and percentage distribution of staff nurses knowledge regarding management of prolonged labor

Level of Knowledge	Frequency	Percentage (%)	
Adequate knowledge	45	75	
Moderately adequate knowledge	15	25	
Inadequate knowledge	0	0	

n=60

Table 5 shows knowledge score regarding prolonged labor management among 60 staff nurses, majority 45 (75%) of the staff had adequate

knowledge, 15 (25%) of the staff had moderately adequate knowledge and none of them had inadequate knowledge regarding Prolonged labor management

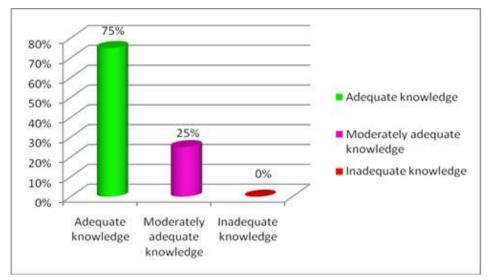


Fig 5: Percentage distribution of staff nurses regarding prolonged labor management.

**Table 6:** Frequency and percentage distribution of staff nurses knowledge regarding management of Pre-eclampsia/Eclampsia

Level of Knowledge	Frequency	Percentage (%)
Adequate knowledge	29	48.3
Moderately adequate knowledge	30	50
Inadequate knowledge	1	1.7

Table 6 shows knowledge score regarding Pre-Eclampsia /Eclampsia management among 60 staff nurses, 29(48.3%) of the staff had adequate knowledge, 30(50%) of the staff had moderately adequate knowledge and only 1(1.7%) of the staff had inadequate knowledge

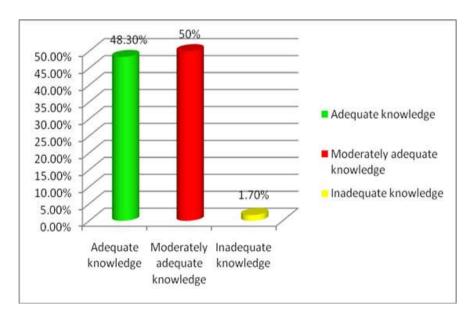


Fig 6: Percentage distribution of staff nurses regarding pre-Eclampsia /Eclampsia management.

**Table – 7:** Association of knowledge scores regarding emergency obstetric management among staff nurses with their selected demographic variables.

n = 60

Dama anankia	Level of Knowledge on emergency obstetrics management						T-1-1-	
Demographic Variables	Adequ	Adequate		Moderately Adequate		uate	$\chi^2$	Table Value
	F	%	F	%	F	%		
AGE								
20-30 yrs.	29	48.33	11	18.33	0	0	2.967	2.04
31- 40 yrs.	6	10	3	5	0	0	(NS)	3.84
>40 yrs.	4	6.67	7	11.67	0	0		
Sex			•		•		1.845 (NS)	3.84
Male	14	23.3	4	6.67				
Female	25	41.67	17	28.33				
Professional qualifi	cation	•		•				
Certificate	8	13.33	9	15			3.356	3.84
Diploma	30	50	12	20			(NS)	
Graduate nurse	1	1.67	0	0				
Work experience in	maternity		•	•				
0-3	23	38.33	10	16.67				
4-6	9	15	2	3.33			0.711 (NS)	3.84
>6	7	11.67	9	15				

NS: Not Significant S: Significant P < 0.05

Table -7 showed that Chi-square values were calculated to find out the association between knowledge of staff nurses with their age, sex, marital status, professional qualification, and experience in maternity.

All demographic variables (age, sex, marital status, professional qualification, and experience in maternity) had no association with knowledge regarding emergency obstetric management.

#### **CONCLUSION**

Generally speaking, majority of the nurses (65%) had adequate knowledge regarding emergency obstetric management. When try to go through the five categories [Hemorrhage, Unsafe abortion, Puerperal sepsis, Prolonged labor, Pre-Eclampsia/Eclampsia] separately, regarding management of Unsafe abortion, Puerperal sepsis and Prolonged labor majority of the nurses (73.3%, 68.3%, 75%) respectively had adequate knowledge, whereas in the management of hemorrhage most of

the (78.3%) nurses had moderately adequate knowledge and 18.3% of the nurses had inadequate knowledge. Concerning management of Pre-Eclampsia/Eclampsia there was nearly similar score in moderately adequate (50%) and adequate knowledge (48.3%) of the nurses. Regarding the demographic variable, among those who belonged to the age group of above 40 majority (64%) had adequate knowledge moderately regarding emergency obstetric management and out of those nurses who had >6 years of work experience, most (56%) had moderately adequate knowledge. Among those certificate graduate nurses there was nearly similar score in moderately adequate (47%) and more than half of them had adequate knowledge (53%).

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