Title: Study to Assess the Knowledge of Staff Nurses Regarding Management of Pre-

Eclampsia in Selected Areas at Lucknow

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Abstract:

Introduction: Hypertension is the most frequently occurring medical problem experienced by the others during pregnancy. It is major cause of maternal and perinatal mortality & morbidity. This disease condition includes chronic hypertension, gestational hypertension pre-eclampsia, superimposed pre-eclampsia and eclampsia. Preeclampsia is systemic disease with hypertension accompanied by proteinuria after 20th week of gestation and eclampsia is defined as the occurrence of seizure. Severe hypertension is de as a systolic blood pressure ≥ 160 mm Hg and/or diastolic blood pressure ≥ 110 mm Hg. Without severe hypertension of all pregnancies 7 to 9% are complicated by hypertension about 1% of pregnancies are complicated by pre-existing hypertension 5 to 6% by gestational hypertension without protein urea (half of which presents preterm) and 2% by pre-eclampsia. Hypertensive disorders of pregnancy occur in about 10% of all pregnant women around the world. In Asia & Africa, nearly one tenth of all maternal deaths are associated with hypertensive disorder of pregnancy. In India, the incidence of preeclampsia is reported to be 8- 10% among the pregnant women. Preeclampsia is a pregnancy specific hypertensive disease with multisystem involvement. It occurs after 20 weeks of gestation and can present as late as 4-6 weeks postpartum. Objective: The main objective was to assess the knowledge of staff nurses regarding management of pre-eclampsia so as to reduce majority of maternal and fetal deaths due to pre-eclampsia. Approach and Design: In this study, quantitative research approach and descriptive cross sectional research design was used. Samples and sampling criteria: The knowledge was assessed among 70 staff nurses working in RML Hospital, Lucknow, UP. The written consent was obtained from samples. Subjects were selected using purposive sampling technique. The data was collected using self administered self structured questionnaire. Results: The findings of the study revealed that maximum number of participants 44(62.85%) having moderate level of knowledge and 24 (34.28%) were having inappropriate level of knowledge and 2(2.85%) were having appropriate of knowledge. It was been found that there was a significant association between the knowledge scores with their selected demographic variable like working experience of staff nurses (χ^2=16.28).Conclusion: The findings of the study revealed that majority of the staff nurses were having moderate level of knowledge regarding management of pre-eclampsia on the basis of their working experience.

***KEYWORDS*: Pre-Eclampsia, Management, Staff nurses, Knowledge**

INTRODUCTION

Pregnancy is being most precious period in every woman's life. It needs continuous care for safe confinement, early detection of difficulties and prompt treatment in an appropriate period. Women in general and also during pregnancy stage are vulnerable segment of the population. In India, 23 million birth stake place very year. There would be about 24 million pregnancies in a year among them about 7 – 15 percentage of all pregnancies are complicated by hypertension. [1]

Hypertensive diseases of pregnancy are considered to be common causes of maternal deaths worldwide.It affects about 10% of all pregnant women around the world (World heath Report, 2011). This disease condition includes chronic hypertension, gestational hypertension pre-eclampsia, superimposed pre-eclampsia and eclampsia. Chronic Hypertension prior to conception or diagnosed before 20th week of gestation. [2]

Preeclampsia is systemic disease with hypertension accompanied by proteinuria after 20th week of gestation and eclampsia is defined as the occurrence of seizure. Severe hypertension is defined as a systolic blood pressure ≥ 160 mm Hg and/or diastolic blood pressure ≥ 110 mm Hg. Without severe hypertension of all pregnancies 7 to 9% are complicated by hypertension about 1% of pregnancies are complicated by pre-existing hypertension 5 to 6% by gestational hypertension without protein urea (half of which presents preterm) and 2% by pre-eclampsia.[2]

Pre-eclampsia remains one of the leading causes of maternal mortality and morbidity, complicating an estimated 2–8% of pregnancies worldwide and up to 10% in developing countries. In Ghana, the prevalence of pre-eclampsia is estimated to be between 6.55 and 7.03%. It is one of the top five leading causes of maternal and neonatal deaths. Pre-eclampsia can progress to eclampsia and cause adverse fetal outcomes such as preterm birth, small-for-gestational-age babies, placental abruption, perinatal death and increase the risk of cardiovascular and cerebrovascular diseases and venous thromboembolism later in life Furthermore, women who suffer from PE are predisposed to mental health issues such shame, guilt, feelings of failure, loss of control, personal inadequacy and postpartum depression. [3]

Early detection, rapid response, accurate management and timely delivery of women with preeclampsia with severe features and eclampsia reduces maternal and foetal complications and deaths. Nurses' knowledge and skills about diagnosis and management of these conditions is critical factor in maternal and neonatal morbidity and mortality.[4]

Objectives:

- To assess the knowledge of staff nurses regarding management of preeclampsia.
- To find out the association of knowledge score among staff nurses regarding management of preeclampsia with their selected demographic variables

Hypotheses:

The hypotheses will be tested at the 0.05 level of significance.

H_1: There will be a significant association between knowledge scores with their selected demographic variables

Research Methodology:

Research Approach: Quantitative Research Approach

Research Design: Descriptive Cross Sectional Research Design

Population: Population for this study was staff nurses who were working in Dr. Ram Manohar Lohia Hospital Lucknow.

Sampling Technique:

Sampling Technique: Purposvie Sampling Technique

Sample Size: 70 staff nurses

Setting: The study was conducted in Ram Manohar Lohia Hospital,Lucknow.

Data Collection Procedure:

First of all ethical permission was obtained from the ethics committee of KGMU, Lucknow. After ethical clearance, formal permission was taken from the department head. The data collection done between 15thJuly 2019 to 20thJuly 2019. The sample were taken by purposive sampling technique and all participants matching the inclusion and exclusion criteria. After that benefit of this study was explained to the participant informed consent were taken. Questions were explained to participants if any of the participants was not able to understand and data was collected. After data collection procedure pamphlet was distributed.

RESULT

SECTION-I

This section describes sample subject distribution according to their demographic variables. Demographic variables were age in years, gender, and education, working experience, employment, income, area of working and source of information regarding management of Pre-eclampsia among staff nurses

Table No- 1: Frequency and Percentage distribution of staff nurses according to their demographic variables

S.No.	Demographic Variables		Frequency(f)	Percentage (%)
1.	**Age in Years**	**20-30 year**	12	17.14
		30-40 year	34	48.57
		40-50 year	21	30
		> 50 year	03	4.29
2.	**Gender**	**Male**	03	4.28
		Female	67	97.14
3.	**Education**	**ANM**	04	5.71
		GNM	57	81.42
		Bachelor's degree	07	10
		Master's degree	2	2.85

SECTION II

S.No.	Demographic Variables		Frequency(f)	Percentage (%)
4.	Working experience	<5 year	20	28.57
		5-10 year	20	28.57
		10-15 year	17	24.28
		>15 year	13	18.57
5.	Employment	Permanent	51	72.85
		Contract	19	27.14
6.	Income	Rs<15000	06	8.57
		Rs.15000-Rs.30000	18	25.71
		Rs.30001-Rs.45000	01	1.42
		Rs.>45000	45	30
7.	Area of Working	Labor room	14	20
		Postnatal ward	12	17.4
		Antenatal ward	15	21.42
		OPD	29	41.42
8.	Source of information	Working experience	23	32.85
		In service education	22	31.42
		Through mass media	05	7.14
		Basic Education	20	28.57

This section describes the frequency percentage distribution of sample subjects according to their level of knowledge regarding management of pre-eclampsia

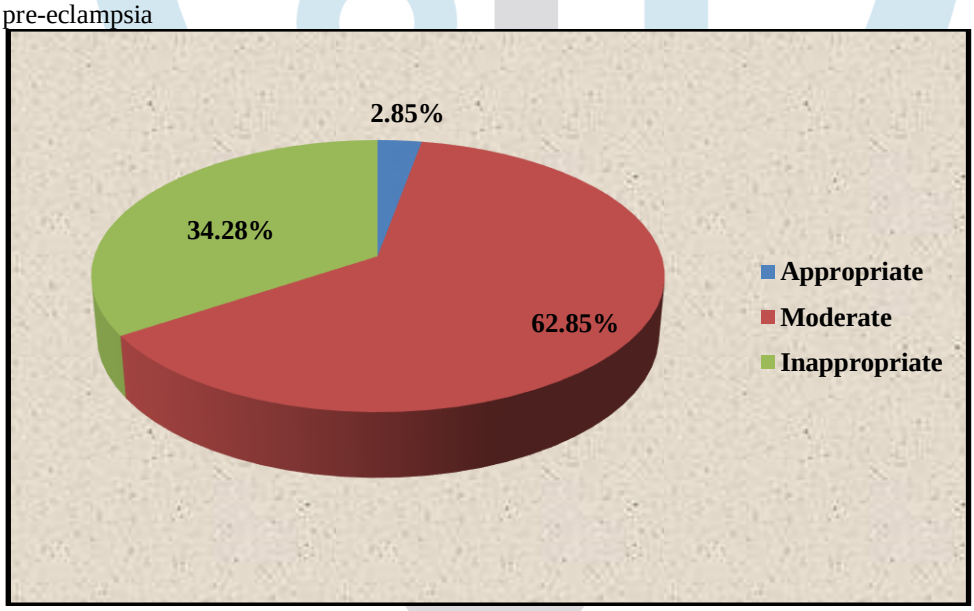

Figure No- 2: Pie chart representing percentage distribution of sample subjects according to the level of knowledge regarding management of pre-eclampsia. 44(62.85%) participants having moderate knowledge, 24(34.28%) participant having inappropriate knowledgeand2 (2.85%) participantshavingappropriateknowledge.

SECTION III

Table No- 2: Association of demographic variable with level of knowledge

(n=70)

S.No.	Demographic Variables	Level of Knowledge			Statistical Significance		
		Inadequate (2)	Moderate (44)	Adequate (24)	Chi- square	df	p-value
	Age				8.456	6	0.206
i	20-30 years	0	10	2			
ii	30-40 years	2	17	15			
iii	40-50 years	0	16	5			
iv	>50 years	0	01	2			
	Gender						
i	Male	0	2	1	0.097	2	0.952
ii	Female	2	42	23			
	Education						
i	ANM	0	4	0	6.660	6	0.353
ii	GNM	2	35	20			
iii	Bachelor's Degree	0	5	2			
iv	Master's Degree	0	0	2			
	Employment						
i	Permanent	2	32	17	0.795	2	0.671
ii	Contract	0	12	7			
	Working Experience						
i	<5 Years	0	18	2	**16.28***	6	0.012
ii	5-10 years	1	10	9			
iii	10-15 years	1	12	4			
iv	>15 years	0	4	9			
	Income						
i	<15,000	0	4	2	1.814	6	0.935
ii	15,001-30,000	0	12	6			
iii	30,001-45,000	0	1	0			
iv	>45,001	2	27	16			
	Area of working						
i	Labor Room	0	9	5	3.847	6	0.697
ii	Postnatal Ward	0	9	3			
iii	Antenatal Ward	0	10	5			
iv	OPD	2	16	11			
	Source of previous information						
i	Working experience	0	13	10	7.929	6	0.243
ii	Inservice	0	13	9			
iii	Through mass media	0	4	1			
iv	Basic education	2	14	4			

The findings of the research study also shows that there is a significant association between knowledge level and **Working experience** (p=0.012). There is a significant association at p=0.05 level of significance.

Thus it can be concluded that the research hypothesis accepted, which means there is an association between two variables.

The calculated chi-square value was found to be **(16.28)** which is more than the tabulated chi-square value i.e., **(12.59)** at 0.05% level of significance. Thus, there was a significant association between the knowledge scores and demographic variable like working experience of staff nurses.

DISCUSSION:

This study was conducted with the aim of studying knowledge level regarding management of pre among the staff nurses working in Dr. Ram Manohar Lohia hospital, Lucknow.

The first objective of the study was to assess the knowledge of staff nurses regarding management of preeclampsia.

The present study shows that majority of the samples (62.85%) have moderate knowledge, (34.28%) having inappropriate level of knowledge and (2.85%) were having appropriate level of knowledge regarding management of preeclampsia.

While comparing the study findings of the other published researches, findings of this study were also consistent with study conducted by **Jyoti Kapoor (2019).** She found majority of the staff nurses 64 (64%) had adequate knowledge followed by 36 (36%)had moderately dequate knowledge and none of them had inadequate knowledge regarding pregnancy induced hypertension.[5]

The second objective was to find out the association of knowledge scores among staff nurses regarding management of preeclampsia with their selected demographic variables.

In the present study it was been found there was a significant association between the knowledge scores with their selected demographic variable like working experience of staff nurses.(**($\square^2$=16.28)**
This result is contradicted by similar findings of **Ramyashree S (2020)** in this among staff nurses majority of them belong to the age group (20-25 years). Most of the staff nurses were having (2-5 years) of working experience. There was no association with the pre-test knowledge scores with their selected demographic variables.[6]

CONCLUSION:
The study concludes that there is a great need to increase the knowledge of staff nurses regarding management of pre-eclampsia to prevent its complication. Through distributing information booklets to the staff nurses after the data collection will significantly improve the knowledge of staff nurses regarding management of pre-eclampsia.

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