

An Evaluation Of The Efficacy Of A Comprehensive Nursing Intervention Package For Gestational Hypertension In Hospitalised Pregnant Mothers

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Abstract

Background: Hypertensive disorder, commonly known as Pregnancy Induced Hypertension (PIH), is more common during pregnancy. It is a factor in both mother and per initial mortality and morbidity, and it is a risk factor for the illness. If women who are at risk for gestational hypertension are identified early, it is possible that some of the problems of the disease can be avoided. The purpose of this study is to determine whether or not a "Nursing Interventional Package" is useful in the treatment of pregnancy-induced hypertension in prenatal moms who are receiving care in speciality hospitals.

Methodology: Methodology consisted of an evaluation method to study, with a one group, pre-test and post-test research design being utilised. In this particular investigation, the Nursing Intervention Package on Gestational Hypertension in Antenatal Mothers served as the independent variable, while the incidence of Gestational Hypertension in Antenatal Mothers served as the dependent variable. The moms who met the inclusion criteria had been diagnosed with gestational hypertension, but the expectant mothers who did not meet the exclusion criteria had severe gestational hypertension. After receiving interventions, mothers were evaluated according to a check list to identify whether or not any signs or symptoms were present. These interventions included both physical and mental support.

Results: Results showed that on day one, the level of severity of symptoms ranged from mild (ten percent), moderate (thirteen percent), severe (sixty one percent), and profound (four percent). As a result of the treatment, on the third day, the patient's symptoms improved to a mild 20 (33%) level, with moderate 35 (58%) and severe 5 (8%). The value of the paired test that was calculated is 24.5. This is an indication that the score is statistically significant at levels of p less than 0.05. Therefore, an all-encompassing nursing intervention package is excellent at improving the condition of an ANC mother who is afflicted with gestational hypertension.

Conclusion: The conclusion is that a comprehensive nursing intervention package was delivered to expectant moms who were diagnosed with gestational hypertension.

Keywords: Effectiveness, comprehensive nursing intervention, gestational hypertension, antenatal mother

Introduction

Every woman will experience joy and excitement during her pregnancy at some point in her life. During pregnancy, hypertensive disease, commonly referred to as Pregnancy Induced Hypertension (PIH), is more common and it has an impact on mother and per initial mortality and morbidity^[1, 2]. High-risk pregnancies are one of the primary contributors to the problem of maternal death and morbidity. In all parts of the world, hypertension diseases brought on by pregnancy are regarded as the most typical unfavourable consequence of carrying a child to term. This health problem is responsible for the deaths of around 49,000 women all over the world every year^[3, 4]. Having a blood pressure reading that is greater than 140/90 mm Hg taken on two consecutive occasions that are more than 6 hours apart, without the presence of protein in the urine, and identified after 20 weeks of gestation is what is meant by the term "pregnancy-induced hypertension"^[5, 6, 7]. The 20th week of gestation is the most common time to find it, and those most at risk are teenagers and women older than 40 years old. People who have had PIH in the past, have chronic hypertension, lupus, have abused alcohol, drugs, or cigarettes, have diabetes, are underweight or overweight, have kidney disease, or are expecting twins or triplets are more likely to have PIH^[8, 9, 10].

Eclampsia, placental abruption, intrauterine growth restriction, and even mortality in both the mother and the foetus can be complications of pregnancy-induced hypertension. People who are at risk for PIH should be on the lookout for sudden weight gain of 4-5 kilogrammes in a single week, an increase in blood pressure, the presence of protein in their urine, severe headaches, blurry vision, severe pain over the stomach and under the ribs and a reduction in the amount of urine they produce^[11, 12]. PIH has the ability to prevent premature birth as well as the death of the baby.

If women who are at risk for gestational hypertension are identified early, it is possible that some of the complications of the disease can be avoided^[5]. The purpose of this study is to determine whether or not a "Nursing Interventional Package" is useful in the treatment of pregnancy-induced hypertension in prenatal moms who are receiving care in speciality hospitals.

Research methodology

Objectives

1. The purpose of this study is to ascertain the signs and symptoms of pregnant moms that may be indicative of gestational hypertension.
2. To determine whether or whether a complete nursing intervention package is beneficial in reducing the risk of pregnancy-induced hypertension.
3. To determine whether or not there is a correlation between pre-test scores on knowledge of pregnancy-induced hypertension and a selection of demographic characteristics.

Because of the character of the issue that was chosen for this investigation, an evaluative research approach and a research design that included a single group doing both a pre-test and a post-test were utilised. In this particular investigation, the Nursing Intervention Package on Gestational Hypertension in Antenatal Mothers served as the independent variable, while the incidence of Gestational Hypertension in Antenatal Mothers served as the dependent variable. The Karad hospital, which is a tertiary care facility, served as the study's location. The approach of non-probability purposive sampling was used to choose a total of sixty pregnant

women who were diagnosed with gestational hypertension. The criteria for inclusion were as follows: mothers who had been diagnosed with gestational hypertension during their pregnancies; antenatal mothers; mothers who were willing to participate in the study; mothers who were available during the time of data collection; and mothers who came for a visit and who had been diagnosed with pulmonary arterial hypertension during a previous visit. The presence of severe gestational hypertension in prenatal moms was a requirement for exclusion.

Instrument for the collecting of data

SECTION 1: Socio-demographic data-This was used to collect the baseline information on the prenatal moms, such as age, education, religion, occupation, family income, type of family, and areas of living. Section 1 also included questions about the type of family the mothers came from.

This instrument was used to collect the information regarding gestational hypertension of prenatal mothers. SECTION 2 Obstetrical Profiles of Mother this tool was used to obtain the information regarding gestational hypertension of antenatal mothers.

The SECTION 3 Check List is a tool that is designed to acquire information on the signs and symptoms associated with gestational hypertension.

Methodologies for the collection of data: Formal authorization was acquired from the Ethical Committee of KIMSDU, as well as from the nursing director, head of the department of obstetrics and gynaecology, and the medical director. The participants in the study were given an explanation of the purpose of the study. When we first started out Evaluation of any and all signs and symptoms related to gestational hypertension in pregnant moms was performed. After receiving interventions, mothers were evaluated according to a check list to identify whether or not any signs or symptoms were present. These interventions included both physical and mental support. Organizing the data on the master sheet was part of the plan for the data analysis. Computation of frequency and percentage to describe background data; computation of mean, standard deviation (SD) and range to describe data on check list score; classification of score based on mean and SD in terms of mild, moderate, severe, and profound. Computation of frequency and percentage to describe background data. We employed inferential statistics like the Chi-square test to look for a correlation between pre-test scores and the factors we were interested in.

Results

Table 1: Frequency and Percentage Distribution of Demographic Variables
N=60

Sr. No.	Demographic variable	Frequency	Percentage
1.	Age		
	18-21 year	10	16.67%
	22-25 year	26	43.30%
	26-29 year	14	23.30%
	30 and above	10	16.67%
2.	Religion		
	Hindu	55	91.60%
	Muslim	4	6.67%
	Other	1	1.67%
3.	Education		
	Primary	9	15%
	Secondary	25	41.67%
	Higher secondary	15	25%

	Graduated	6	10%
	Professional	5	8.30%
4.	Occupation		
	House work	39	65%
	Business	5	8.30%
	Job	16	26.67%
	Unemployed	0	0
5.	Monthly income		
	30001-1,00,000	13	21.67%
	10,001-30,000	39	65%
	<10,000	8	13.30%
6.	Type of family		
	Nuclear family	22	36.67%
	Joint family	38	63.30%
7.	Areas of residence		
	Urban	23	38.30%
	Rural	37	61.67%
8.	Gestational age		
	20-30	1	1.67%
	31-40	55	91.67%
	Above	4	6.67%
9.	Gravida		
	Primigravida	47	78.33%
	Second gravida	11	18.33%

There were 60 PIH prenatal women, and 26 (43.30%) of those mothers were between the ages of 22 and 25. 39 (65%) of the mothers were homemakers, 25 (41.67%) of the mothers had completed their secondary education, 39 (65%) of the women were from families with an annual income of between Rs. 10,001 and 30,000, and 55 (91.6%) of the mothers identified as belonging to the Hindu religion. 38 out of 63.30 percent of mothers are part of a nuclear family. 37 out of 61.67 percent of mothers come from rural areas. There were 55 (91.67%) mothers who had gestational hypertension between the ages of 31 and 40 weeks of pregnancy, and there was 1 (1.67%) mother who had gestational hypertension between the ages of 20 and 30 weeks of pregnancy. There were 4 (6.67%) moms who had gestational hypertension at an age greater than 40 weeks during their pregnancies. Majority There are 47 moms who belong to the primi gravida category, 11 mothers who belong to the second gravida category, and just two mothers who belong to the multi gravida category.

Table 2: Pre-test and post test score of three consecutive days

Level of symptoms	Day 1				Day 2				Day 3			
	Pre test		Post test		Pre test		Post test		Pre test		Post test	
	F	%	F	%	F	%	F	%	F	%	F	%
Mild	6	10%	9	15%	11	18%	15	25%	18	30%	20	33%
Moderate	13	21%	23	38%	18	30%	30	50%	34	56%	35	58%
Severe	37	61%	26	43%	30	50%	15	25%	8	13%	5	8%
Profound	4	6%	2	3%	1	1%	0	0	0	0	0	0

On day one, the severity of the symptoms ranged from mild (ten percent), moderate (thirteen percent), severe (sixty one percent), to profound (four percent). As a result of the treatment, on the third day, the patient's symptoms improved to a mild 20 (33%) level, with moderate 35 (58%) and severe 5 (8%).

Table 3: Pre Test and Post Test Mean Scores and Computed t Test value

Sr. No	Test	Mean	Standard Deviation	Df	Calculated 'T' Value	Table 'T' Value
1.	Pre Test	7.03	2.3	59	4.58	2.0
2.	Post Test	4.17	2.19	59		

$p < 0.05$ consider extremely significant.

In the table that was just presented, it can be seen that the calculated paired's test has a value that is higher than the tabulated t value, which is 2.0. This is an indication that the score is statistically significant at levels of p less than 0.05. Therefore, an all-encompassing nursing intervention package is excellent at improving the condition of an ANC mother who is afflicted with gestational hypertension.

Table 4: Association between Pre Test Score and Demographic Variable

Sr. No.	Demographic Variable	Mild	Moderate	Severe	Profound	Chi Square value	Df	Results
1.	Age					6.283	9	Not Significant
	18 -21 Year	0	1	9	0			
	22-25 Year	3	5	17	1			
	26-29 Year	2	4	7	1			
	30 And Above	2	3	5	0			
2.	Religion					2.913	6	Not Significant
	Hindu	7	11	35	2			
	Muslim	0	2	2	0			
	Other	0	0	1	0			
3.	Education					7.121	12	Not Significant
	Primary	1	4	4	0			
	Secondary	3	4	16	2			
	Higher Secondary	2	3	10	0			
	Graduated	1	2	3	0			
	Professional	0	1	4	0			
4.	Occupation					8.243	6	Not Significant
	House Work	6	8	24	1			
	Business	0	0	4	1			
	Job	1	5	10	0			
	Unemployed	0	0	0	0			
5.	Monthly Income					8.386	6	Not Significant
	30001-1,00,000	1	4	7	1			
	10,001-30,000	6	6	27	0			
	<10,000	0	3	4	1			
6.	Type Of Family					9.153	3	Significant
	Nuclear Family	0	3	19	0			
	Joint Family	7	10	19	2			
7.	Areas of Residence					10.161	3	Significant
	Urban	0	3	20	0			
	Rural	7	10	18	2			
8.	Gestational Age					11.258	6	Not Significant
	20-30	1	0	0	0			
	31-40	5	11	37	2			
	Above							
9.	Gravida					4.531	6	Not Significant
	Primigravida	4	10	31	2			
	Second Gravida	3	2	6	0			
	Other	0	1	1	0			

It was shown that the Type of Family and Areas of Residence were important when looking at the association between the effectiveness of nurse intervention and selected demographic characteristics.

Discussion

When certain nursing interventions are administered to mothers who are experiencing prenatal hypertension, numerous studies in the field of nursing have shown that not only can the symptoms of the condition be significantly relieved, but the success rate of natural birth can also be significantly increased. This study's findings are in line with those discovered in Guixia ^[6], Zhanhui *et al.* ^[7] and Wang ZH ^[8]. A comprehensive nursing intervention package has the capacity to bring about a large change in condition; it is an effective package for the treatment of pregnant hypertension. This was found to be the case in the study. The results of this study indicate that a decrease in the severity of the symptoms of prenatal hypertension is associated with a lower risk of foetal distress, newborn hypoxia, premature birth, and postpartum haemorrhage. This finding was found in conjunction with the findings that prenatal hypertension is associated with an increased risk of stroke. The majority of patients were developing hypertension as a consequence of physiological as well as psychological causes, and the nursing treatments that we provided were geared at lowering these triggers in order to bring their blood pressure down. Tan GX ^[13] and Wang ZH ^[14] both offer their support to this concept as well by providing their own arguments.

Conclusion

The purpose of the current study was to evaluate the efficacy of a comprehensive nursing intervention package for the treatment of gestational hypertension in prenatal moms who were hospitalised in tertiary care facilities. This demonstrates that the all-encompassing nursing intervention package that was administered to expectant moms in order to treat gestational hypertension was successful.

Nursing implication

The current study contributes to the identification of signs and symptoms of prenatal hypertension that are already prevalent among pregnant moms. Therefore, the tactics of physical and psychological therapies that are used in interims to lessen the signs and symptoms are beneficial.

Limitations: The research findings may have less credibility and less potential to be generalised if the limitations of the investigation, which are the expectations of the study owing to theoretical or methodological reasons, are not taken into account.

1. The sole objective of this study is to evaluate the efficacy of a comprehensive nursing intervention package for the treatment of gestational hypertension in pregnant moms who are hospitalised to a tertiary care hospital.
2. A patient must be admitted to a tertiary care hospital in order to participate in this study if they have gestational hypertension during the prenatal trimester.
3. This study only uses a small number of participants for the sample (60).

Recommendations

It is possible to carry out an investigation of the same kind using a big sample that was followed over an extended period of time; this would provide the most reliable data for

establishing broad generalisations.

A study with the same purpose might be conducted using a comparative research approach in a variety of different environments.

It is possible to do out research on both of these groups (experimental and control).

It is possible to carry out research in order to determine the percentage of expectant moms who are affected by gestational hypertension.

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