

A Study to Assess the Prevalence of Levels of Stress Among Pregnancy Induced Hypertension Mothers Attending OBG OPD at Selected Hospitals of Bagalkot, Karnataka

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DOI: <https://doi.org/10.52403/gijash.20220706>

ABSTRACT

Background of the study: PIH and its management are critical and should be essential part of nursing concern for continuous improvement and enhanced fetal outcomes.

Pregnancy induced hypertension (PIH) is one of the leading causes of maternal and fetal morbidity and mortality. stress is considered as one of the etiological factors in PIH. Preeclampsia might be the result of inadequate maternal care and this may advance to eclampsia if proper care is not taken, resulting in various maternal complications. Endothelial dysfunction is considered as one of the etiological factors for the development of preeclampsia. PIH can be referred to a type of increased blood pressure of greater or equal 140mmHg that is associated with excess protein in urine or may not have elevated amount of protein in urine (that is more than or equal to 300mg over a 24 hour period) which begins at twenty weeks of conception, however it can clear up in 12 weeks postnatal. It also refers to a new onset of excessive protein in urine for the first 24 hour period in women who are hypertensive and who do not have excess protein in urine before 20 weeks of gestation

Material And Methods:

The research approach adopted for this study was quantitative research approach and the design used was descriptive research design. The convenience sampling technique was used

to select 100 subjects. The tool used for data collection was Cohen's perceived stress scale. Paper pencil technique was used for data collection and data obtained were analyzed using both descriptive and inferential statistics.

Results: result indicates that majority 70% of respondent had high level of stress, 25% of respondent had moderate level of stress and 5% of respondent had mild level of stress. The overall mean level of stress score was found to be 28.74% with SD as 3.31 %. Chi-square test was calculated to assess the association between socio demographic variables and levels of stress among infertile women. There is no significant association found between levels of stress among infertile women with their socio demographic variables such as Age in years, Types of family, Religion, Duration of marriage in year, Educational Qualification, Occupation, Monthly income of family, Family support, Source of information regarding health, weeks of gestation, PIH in previous pregnancy

Conclusion: Thousands of women and babies die or get very sick from a dangerous condition called pregnancy induced hypertension. The present study was conducted to assess the stress regarding PIH, Study concluded that Most of mother having high level of stress and moderate level of stress.

Key Words: PIH (pregnancy induced hypertension) mothers, Stress levels, Cohen's perceived stress scale, Socio demographic variables.

INTRODUCTION

Pregnancy induced hypertension is a major contributor to maternal and perinatal morbidity and mortality. Severe hypertension increases the mother's risk of cardiac failure, heart attack, renal failure and cerebral vascular accidents. In addition, the fetus is at increased risk from complications like poor placental transfer of oxygen, growth restriction, preterm birth, placental abruption, stillbirth and neonatal death.¹

Blood pressure decreases somewhat during a normal pregnancy, and an elevated blood pressure is always considered abnormal. Hypertension during pregnancy is a condition that leads to a marked increase in both maternal and fetal morbidity and mortality. "Hypertensive disorders of pregnancy" includes both pregnancy-induced hypertension (PIH) and chronic hypertension that persists into the puerperium. Although the classic triad of preeclampsia includes hypertension, proteinuria and edema²

Preeclampsia is a dangerous, multisystem complication of human pregnancy and a leading cause of fetal and maternal morbidity and mortality worldwide. This hypertensive disorder of pregnancy is characterized by sustained *de novo* hypertension and proteinuria after 20 weeks of gestation. The maternal syndrome is associated with pitting edema, particularly of the hands, face, and feet, abnormal clotting, and endothelial abnormalities, as well as liver and renal dysfunction. With progression of preeclampsia to eclampsia or occurrence of HELLP (Hemolysis, Elevated Liver enzymes, Low Platelets) syndrome, the risk of maternal death increases. The fetal syndrome can be manifested as preterm delivery, growth restriction, placental abruption, fetal distress, and in some cases, death, especially with onset of preeclampsia before 34 weeks of gestation.³

The cross-sectional study was conducted over a period of one year in Gynaecology and Obstetrics Department, district hospital, Churu. Diagnosed patients as hypertensive

disorder of pregnancy were evaluated and data were collected. Total 2105 pregnant women visited the OBG department, out of which 194 patients were diagnosed with hypertension. The overall prevalence of pregnancy induced hypertension was 9.2%. The mean maternal age was 24.7 years during the hospital admission. The percentage of gestational hypertension, Preeclampsia-eclampsia, Preeclampsia superimposed on chronic hypertension and chronic hypertension were 48.97 %, 19.07%, 18.04%, and 13.92 % respectively. Highest incidence of hypertension was occurred in age group of 23-27 years (35.57%) and primigravidae patients (55.67%). The study concluded that, the incidence of hypertensive disorders in pregnancy was high. Early diagnosis and treatment through regular antenatal check-up are a key factor to prevent hypertensive disorders of pregnancy and its complications.⁴

The research approach for the first phase of study was co-relational and the subjects were selected by convenience sampling technique and for the second phase qualitative using phenomenology to study the lived experiences. The study comprised of 65 women with PIH, in the Phase I and 6 women with PIH in the Phase II, who were admitted in antenatal wards of KLES Hospital and Medical Research Centre and District Hospital Belgaum. The data on coping strategies was collected using a standardized tool, the Jalowiec coping scale and data on quality of life of women with PIH was collected using another standardized tool – the World Health Organization Quality of Life scale (WHOQOL-BREF). The qualitative data was collected using a SEM structured interview schedule and the audio taping of the verbatim of lived experiences. Results shows that, In the Phase I it was found that majority (64.61%) of women had moderate stress levels. The finding indicated that there was no correlation between levels of stress and use and effectiveness of coping strategies. ($r_1(65) = 0.1226$, $P > 0.05$, $r_2(65) = 0.1805$, P

> 0.01). The association between levels of stress and quality of life of women with PIH showed that quality of life was independent of levels of stress. The chi-square value (λ^2 effect =12.137) between age and effectiveness of coping strategies was significant which showed that effectiveness of coping strategies was dependent on the age of the women with PIH. In the Phase II based on the analysis of data four themes emerged from the women's perspective of the phenomenon under study.⁵

Objectives

1. To assess the level of stress among PIH mother.
2. To find out association of level of stress among PIH mothers with their socio demographic variable.

METHODOLOGY

Research approach: quantitative approach.

Research design: descriptive research design.

Setting of study: The present study was conducted at selected hospital of Bagalkot.

Target population: The target population for the study is PIH MOTHERS who are admitted at HSK hospitals, Bagalkot.

Accessible population: The accessible population for the study is the PIH mothers admitted selected hospitals at Bagalkot.

Sampling technique: The convenient sampling technique was used.

Sample size: Total sample size 100.

Development of tool: The final tool consists of following two parts:

Part-1: Socio demographic variables: This part consists of 9 items for obtaining personal information like; Age in years, Types of family, Religion, Duration of marriage in year, Educational Qualification, Occupation, Monthly income of family, Family support, Source of information regarding health, weeks of gestation, PIH in previous pregnancy.

Part -2: Cohen's perceived stress scale to assess the level of stress among PIH mothers. The scale consists of 10 items.

- Individual scores on the PSS can range from 0 to 40 with higher scores indicating higher perceived stress.
- Scores ranging from 0-13 would be considered low stress.
- Scores ranging from 14-26 would be considered moderate stress.
- Scores ranging from 27-40 would be considered high perceived stress.

Reliability of tool: Reliability was computed by splint half methods.

Plan for data analysis: The analysis of data was done in accordance with the objectives of the study. The data was analyzed by using descriptive statistics (frequency and percentage distribution SD graphs)and inferential statistics (chi-square).The p value 0.05 for significance was selected for the study.

RESULTS

Percentage wise distribution of PIH Mothers, according to levels of stress. (Table: 1)

Level of stress	No. of respondents	Percentage (%)
Low stress levels(0-13)	05	5%
Moderate stress levels(14-26)	25	25%
High perceived stress levels(27-40)	70	70%
Total	100	100%

Association between stress levels of PIH mothers with their socio- demographic variables.

Sl. No	Socio-demographic variables	DF	Chi-square value	Table value	P-value	Association
1	Age in years	1	2.49	1.98	0.11	Not significant
2	Type of family	1	3.24	1.98	0.071	Not significant
3	Education status of mother	1	0.01	1.98	0.91	Not significant
4	Occupation of mother	1	0.64	1.98	0.4213	Not significant
5	Source of information	1	3.37	1.98	0.066	Not significant
6	Monthly Income	1	2.12	1.98	0.144	Not significant
7	Family support	1	0.04	1.98	0.83	Not significant
8	PIH in previous pregnancy	1	0.01	1.98	0.91	Not significant
9	Weeks of gestation	1	3.24	1.98	0.07	Not significant

DISCUSSION

The findings of present study have been discussed accordance with the objectives of the study and previous review of literature journal, book.

The present study was conducted to assess the prevalence of levels of stress among PIH mothers at selected hospital at Bagalkot. The sample was selected by convenient sampling technique.

The sample comprised 100 PIH mothers, selected hospital at Bagalkot and the data were collected through Cohen's perceived stress scale. Result indicates that majority 70% of respondent had high level of stress, 25% of respondent had moderate level of stress and 5% of respondent had low level of stress. The overall mean level of stress score was found to be 28.74% with SD as 3.31%. Chi-square test was calculated to assess the association between socio demographic variables and levels of stress among PIH mothers. There is no significant association found between levels of stress among PIH mothers with their socio demographic variables such as Age in years, Types of family, Religion, Duration of marriage in year, Educational Qualification, Occupation, Monthly income of family, Family support, Source of information regarding health, weeks of gestation, PIH in previous pregnancy.

CONCLUSION

PIH prevalence was high. Women with PIH were higher risk of adverse pregnancy outcomes, Poor knowledge of management of PIH & inadequate resources are a threat to the proper management of PIH.

Acknowledgement: None

Conflict of Interest: None

Source of Funding: None

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How to cite this article: Anjana Chavadappanavar, Kavya, Manjula et al. A study to assess the prevalence of levels of stress among pregnancy induced hypertension mothers attending OBG OPD at selected Hospitals of Bagalkot, Karnataka. *Galore International Journal of Applied Sciences & Humanities*. 2022; 6(3): 41-44.
DOI: <https://doi.org/10.52403/gijash.20220706>
