Scholars Journal of Applied Medical Sciences
Abbreviated Key Title: Sch J App Med Sci
ISSN 2347-954X (Print) | ISSN 2320-6691 (Online)
Journal homepage: https://saspublishers.com

OPEN ACCESS

Nursing sciences

A Descriptive Study to Assess the Level of Stress and Anxiety among Pregnancy Induced Hypertension Mothers Attending OBG OPD of HSK Hospital, Bagalkot

Ms. Nivedita S M[1], Ms. Athira Anil[1], Ms. Yashodha C Y[1], Ms. Priyanka L Y[1], Ms. Rajeshwari S[1], Mr. Dandeppa G[1], Miss. Anjana. C[2*], Dr. Deelip S. Natekar[2]

[1]BVVS Sajjalashree Institute of Nursing Sciences, Navanagar, Bagalkot-587103
[2]Principal, BVVS Sajjalashree Institute of Nursing Sciences, Navanagar, Bagalkot-587103

DOI: https://doi.org/10.36347/sjams.2025.v13i03.033 | **Received:** 17.02.2025 | **Accepted:** 21.03.2025 | **Published:** 25.03.2025

***Corresponding author:** Mis Anjana. C
BVVS Sajjalashree Institute of Nursing sciences Navanagar, Bagalkot

Abstract **Original Research Article**

Background of the study: Pregnancy Induced Hypertension mother's is a life crisis affecting patients from all around the world. Pregnancy induced hypertension mother's experience a tremendous amount of emotional turmoil as the result of their diagnosis. The risk of stress and anxiety is high for pregnancy induced hypertension mother's. It has been hypothesized since biblical times that stress and anxiety can hamper pregnancy induced hypertension mother's. this raises one of the most compelling mind/body questions; Does pregnancy induced hypertension mother's cause stress and anxiety or does stress and anxiety cause pregnancy induced hypertension mother's. The answer thus far is not clear; The relationship between stress and anxiety of pregnancy induced hypertension mother's may not have a clear cause and effect direction. It is definitive that pregnancy induced hypertension mother's leads to significant stress and anxiety that psychological interventions are likely to be associated with decreases in stress and anxiety and increases in pregnancy rates. However the stress and anxiety on treatment outcome is less definitive. ***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 50 subjects. The tool used for data collection was Cohen's perceived stress scale and Generalized anxiety scale. Paper pencil technique was used for data collection and data obtained were analyzed using both descriptive and inferential statistics. ***Results:*** In test scores, Out of 50 pregnancy induced hypertension mother's. Highest percentage (50%) of women's had moderate level of anxiety, (48%) of women's had mild level of anxiety, (2%) of women's had minimal level of anxiety, 0% of women's had severe level of anxiety regarding pregnancy induced hypertension by using GAD scale. In test scores, Out of 50 pregnancy induced hypertension mother's. Highest percentage (50%) of women's had moderate level of stress, (48%) of women's had mild level of stress, (2%) of women's had minimal level of stress, 0% of women's had severe level of stress regarding pregnancy induced hypertension by using PSS scale. Chi-square test was calculated to assess the association between socio demographic variables and levels of stress and anxiety among pregnancy induced hypertension women. There is no significant association found between levels of stress and anxiety among pregnancy induced hypertension women with their socio demographic variables such as Age, Address, Religion, Education, Occupation, Type of family, Gravida, Hypertension, Abortion, Diabetic Mellitus, History of previous hypertension, Kidney disease, Cigarette smoking, Mental stress, Physical activity, sleeping pattern are the source of information regarding health. ***Conclusion:*** The finding of the study concluded that most of the pregnancy induced hypertension women having high level of stress and anxiety and moderate level of stress and anxiety.

Keywords: Pregnancy induced hypertension women, Cohen's perceived stress scale, Generalized anxiety scale, Socio demographic variables.

INTRODUCTION

Pregnancy is a period of transition with important physical and emotional changes. Even in uncomplicated pregnancies, these changes can affect the quality of life (QOL) of pregnant women, affecting both maternal and infant health. The objectives of this study were to describe the quality of life during uncomplicated pregnancy and to assess its associated socio-

demographic, physical and psychological factors in developed countries [1].

A normal pregnancy lasts about 40 weeks from the first day of your last menstrual period (LMP). Pregnancy is assumed to start 2 weeks after the first day of the LMP. So an extra 2 weeks is counted at the beginning of your pregnancy when you are not actually pregnant. The 40 weeks of pregnancy includes those extra 2 weeks. Pregnancy also can be divided into weeks and days. A pregnancy is 36 and 3/7 weeks means 36 weeks and 3 days of pregnancy. The 40 weeks of pregnancy are grouped into three trimesters [2].

Hypertension is one of the common complications met in pregnancy and it is one of the major causes of maternal morbidity and mortality leading to 10-15% of maternal deaths specially in developing world. World health organization estimate that at least one woman dies every seven minutes from complications of hypertensive disorders of pregnancy. Every minute, each day some where in the world, a woman dies as result of complications related to pregnancy and childbirth. Pregnancy Induced hypertension (PIH) affects about 5 % of Pregnant women and is a significant cause of maternal, fetal, and neonatal mortality and morbidity [3].

Hypertensive disorders of pregnant women are one of the important causes of maternal and perinatal morbidity and mortality. Evidence showed mental stress might be a risk factor of gestational hypertensive disorders [4].

Hypertension in pregnancy is a systolic blood pressure ≥ 140 mmHg or diastolic blood pressure ≥ 90 mmHg or both. Both systolic and diastolic blood pressure raises are important in the identification of Pregnancy induced hypertension (1). Pregnancy induced hypertension (PIH) is hypertension that occurs after 20 weeks of gestation in women with previously normal blood pressure [5].

Pregnancy induced hypertension is a major contributors to maternal and perinatal morbidity and mortality. In the United States, about 15% of maternal deaths are attributable to hypertension, making it the second leading cause of maternal 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. Hypertensive disorders represent the most common medical complications of pregnancy [6].

Hypertensive disorders of pregnancy, including chronic hypertension, with or without superimposed pre-eclampsia / eclampsia, gestational hypertension, HELLP syndrome, preeclampsia with or without severe features or eclampsia present a significant risk of morbidity to both mother and fetus. Although appropriate prenatal care with close observation to detect signs of pre-eclampsia and prompt delivery to reduce or avoid adverse effects have produced reduced morbidity and mortality, they still exist. While hypertension itself presents concerns during pregnancy, adverse effects from progression to pre-eclampsia / eclampsia present the primary concern [7].

Objectives:

1. To assess the level of stress and anxiety among the pregnancy induced hypertension mother.
2. To find out association between tests scores of level of stress and anxiety among pregnancy induced hypertension mother with their selected socio demographic variables.

METHODOLOGY

Research approach: Quantitative approach.

Research design: Descriptive research design.

Setting of study: The present study was conducted at OBG OPD HSK hospital of Bagalkot.

Target population: The target population for the study is Pregnancy induced hypertension women who are attending OBG OPD clinics.

Accessible population: The accessible population for the study is the Pregnancy induced hypertension women attending selected OBG OPD HSK hospital of Bagalkot.

Sampling technique: The convenient sampling technique was used.

Sample size: Total sample size 50.

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

Part-1: Socio demographic variables: This part consists of 16 items for obtaining personal information like; age, address, religion, education, occupation, family, gravida, hypertension, abortion, diabetic mellitus, previous history of hypertension, kidney disease, cigarette smoking, mental stress, physical activity, sleeping pattern.

Part -2: Cohen's perceived stress and Generalized anxiety scale to assess the level of stress and anxiety among Pregnancy induced hypertension women. The scale consists of 16 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.
- Individual scores on the GAS can range from 0 to 21 with higher scores indicating higher generalized anxiety.
- Scores ranging from 0-4 would be considered minimal anxiety.
- Scores ranging from 5-9 would be considered mild anxiety.
- Scores ranging from 10-14 would be considered moderate anxiety.
- Scores ranging from 15-21 would be considered severe anxiety.

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

1. Percentage wise distribution of pregnancy induced hypertension women's attending OBG OPD clinics according to levels of stress.

Table 1

LEVEL OF STRESS			
	Range of scores	**Frequency**	**Percentage**
Mild stress	0-13	16	32%
Moderate stress	14-26	31	62%
Severe stress	27-40	3	6%
Total		50	100%

2. Association between the prevalence of level of stress scores of pregnancy induced hypertension mothers and their socio-demographic variables.

Sl no	Socio-demographic variables	D f	Chi square value	Table value	P-value	Significance
1	Age	1	0.9804	0.01	0.322102	Not significant
2	Address	1	0.0049	0.01	0.944208	Not significant
3	Religion	1	1.3432	0.01	0.24647	Not significant
4	Education	1	5.1483	0.01	0.023269	Significant
5	Occupation	1	0.0431	0.01	0.835502	Not significant
6	Family type	1	0.6303	0.01	0.427263	Not significant
7	Gravida	1	3.3107	0.01	0.06883	Not significant
8	Previous history of hypertension	1	2.3172	0.01	0.127948	Not significant
9	Multiple pregnancy	1	2.4264	0.01	0.119304	Not significant
10	Previous history of DM	1	0.0295	0.01	0.863628	Not significant
11	Family history of hypertension	1	0.1947	0.01	0.659027	Not significant
12	Kidney disease	1	0.0295	0.01	0.863628	Not significant
13	Cigarette smoking	1	0.0891	0.01	0.765291	Not significant
14	Mental stress	1	0.1379	0.01	0.71041	Not significant
15	Physical exercise	1	0.4958	0.01	0.481361	Not significant
16	Sleeping pattern	1	2.8209	0.01	0.765291	Not significant

3. Percentage wise distribution of pregnancy induced hypertension women's attending OBG OPD clinics according to levels of anxiety.

Table 2

LEVEL OF ANXIETY			
	Range of scores	**Frequency**	**Percentage**
Minimal anxiety	0-4	12	24%
Mild anxiety	5-9	35	70%
Moderate anxiety	10-14	3	6%
Total		50	100%

4. Association between the prevalence of level of anxiety scores of pregnancy induced hypertension mothers and their socio-demographic variables.

Sl no	Socio-demographic variables	D f	Chi square value	Table value	P-value	Significance
1	Age	1	0.5952	0.01	0.440401	Not significant
2	Address	1	0.0153	0.01	0.901678	Not significant
3	Religion	1	0.0835	0.01	0.772553	Not significant
4	Education	1	2.1384	0.01	0.143651	Not significant
5	Occupation	1	1.5306	0.01	0.216021	Not significant
6	Family type	1	2.4385	0.01	0.118387	Not significant
7	Gravida	1	0.2442	0.01	0.621189	Not significant
8	Previous history of hypertension	1	6.1102	0.01	0.013441	Significant
9	Multiple pregnancy	1	0.0079	0.01	0.92913	Not significant
10	Previous history of DM	1	2.0432	0.01	0.152885	Not significant
11	Family history of hypertension	1	0.9732	0.01	0.323879	Not significant
12	Kidney disease	1	0.045	0.01	0.831949	Not significant
13	Cigarette smoking	1	0.7797	0.01	0.377225	Not significant
14	Mental stress	1	0.6607	0.01	0.416304	Not significant
15	Physical exercise	1	3.5714	0.01	0.058782	Not significant
16	Sleeping pattern	1	1.8468	0.01	0.17416	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.

This chapter deals in accordance with objectives of the study and hypothesis. The statement of the problem was "A study to assess the prevalence of level of stress and anxiety among pregnancy induced hypertension mothers attending OBG OPD at selected hospitals of Bagalkot".

The sample comprised 50 pregnancy induced hypertension mothers attending OBG OPD at selected hospitals of Bagalkot and the data were collected through Cohen's perceived stress scale and generalized anxiety scale. Result indicates that majority 50% of respondent had high level of stress and anxiety, 48% of respondent had moderate level of stress and anxiety, 2% of respondent had low level of stress and anxiety. The overall mean level of stress score was found to be 39.4% with SD as 6.48% and the overall mean level of anxiety score was found to be 34.28% with SD as 2.38%. Chi-square test was calculated to assess the association between socio demographic variables and levels of stress and anxiety among pregnancy induced hypertension women. There is no significant association found between levels of stress and anxiety among pregnancy induced hypertension women with their socio demographic variables such as, age, address, religion, education, occupation, family, gravida, hypertension, abortion, diabetic mellitus, previous history of hypertension, kidney disease, cigarette smoking, mental stress, physical activity, sleeping pattern, Source of information regarding health.

CONCLUSION

The findings of present study indicate that pregnancy induced hypertension women experienced higher levels of stress and anxiety. Hence, there is an urgent need to take measures Medication, Yoga, Exercises and Meditation such as creation of comfortable environment to reduce levels of stress and anxiety among pregnancy induced hypertension women.

REFERENCES

1. Nolwenn Lagadec, • Magali Steinecker, • Amar Kapassi, Anne Marie Magnier, • Julie Chastang• Sarah Robert• Nadia Gaouaou•& Gladys Ibanez *BMC Pregnancy and Childbirth* volume 18, Article number: 455 (2018) Cite this article 58k , Accesses,143 Citations 9 Altmetric Metrics
2. American College of Obstetricians and Gynecologists (ACOG). (2020). Patient education: How your fetus grows during pregnancy. Retrieved December 30, 2020, from https://www.acog.org/store/products/patient-education/pamphlets/pregnancy/how-your-fetus-grows-during-pregnancy
3. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2582416/ Rooks J. 1997. Midwifery & childbirth in America. Philadelphia: Temple University Press. [Google Scholar]
4. Salhan S Text Book of Obstetrics. 1st ed. New Delhi: Jaypee Brothers Medical Publishers (p) Ltd; 2007. P 27.
5. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2582416/

6. Rooks J. 1997. Midwifery & childbirth in America. Philadelphia: Temple University Press. [Google Scholar]
7. Kacica M, Dennison B, Aubrey R. *Hypertensive Disorders in Pregnancy guideline summary*. New York State Department of Health; 2013. https://www.health.ny.gov/professionals/protocols. [Google Scholar]
8. Ananth CV, Basso O. Impact of pregnancy-induced hypertension on stillbirth and neonatal mortality. Epidemiology. 2010 Jan 1;21(1):118-23.
9. Umesawa M, Kobashi G. Epidemiology of hypertensive disorders in pregnancy: prevalence, risk factors, predictors and prognosis. *Hypertensive Res*. 2017;40(3):213-220. [PubMed]