# A Study to Assess the Prevalence of Level of Stress among High Risk Pregnant Mother Attending the OBG OPD of HSK Hospital and Research Centre at Bagalkot

<sup>1</sup>Savita Angadi Lecturer Department of OBG Nursing B V V S Sajjalashree Institute of Nursing Sciences Navanagar, Bagalkot-587102 <sup>2</sup>Dr. Deelip S. Natekar Principal and H.O.D Community Health Nursing Department B V V S Sajjalashree Institute of Nursing Sciences Navanagar, Bagalkot-587102

<sup>3</sup>Bhuvaneshwari S. B, <sup>4</sup>Yasmin L. K, <sup>5</sup>Anjaneykumar S, <sup>6</sup>Shital P, <sup>7</sup>Raghuveer, <sup>8</sup>Dharmappa, <sup>9</sup>Bahubali

#### Abstract:-

#### Background of the Study

Stress is a complex genetically determined pattern of response of the human physiology to a demanding situation. The element of perception indicates that human stress responses reflect differences in personality as well as differences in physical strength or general health. A women's experience of pregnancy and child birth is most likely affecting her role as a mother. Any stress & emotional changes during pregnancy can have long-term adverse effect on herself & her child & it may interfere other mother-infant attachment & child development

- > Objectives of the Study
- To assess the level of stress among the high risk pregnant mother.
- To find out association between tests scores of level of stress among high risk pregnant mother with their selected socio demographic variables.

# > Hypothesis

• H<sub>1</sub>: There is a significant association between test scores of level of stress among high risk pregnant mother with their selected socio demographic variables.

# > Methodology

A survey approach with a descriptive study design was used in the present study. The data from 50 staff nurses, selected using the method of convenient sampling technique. The tool consisted of 2 parts. Part1demographic characteristics with 9 items. Part 2consists of level of stress related to five dimensions comprising of 10 items. Data were analyzed by using descriptive and inferential statistics in terms of frequency distribution, percentage, mean, mean percentage, Standard Deviation and Chi-square test

# > Results

The findings of the study concluded that level of stress among high risk pregnant mother's shows that highest (76%) respondents had moderate level of stress and 14 percent respondents had mild level of stress. There was no significant association between stress levels with the selected socio demographic variables.

# > Interpretation and Conclusion

Overall finding showed that, high risk pregnant mothers had mild and moderate level of stress. So the present study is helps to identify level of stress among high risk pregnant mother attending the OBG OPD at HSK Hospital and research center, Bagalkot.

# I. INTRODUCTION

A high risk pregnancy is one that threatens the health or life of the mother or her fetus. It often requires specialized care from specially trained providers and deliveries without complications. Some pregnancies become high risk as they progress, while some women are at increased risk for complications even before they get pregnant for a variety of reasons. Early and regular prenatal care helps many women have healthy pregnancies.

Stress is a complex genetically determined pattern of response of the human physiology to a demanding situation. The element of perception indicates that human stress responses reflect differences in personality as well as differences in physical strength or general health. A women's experience of pregnancy and child birth is most likely affecting her role as a mother. Any stress & emotional changes during pregnancy can have long-term adverse effect on herself & her child & it may interfere other mother-infant attachment & child development. The maternal stress during antenatal period can have specific effect on cognitive and brain development outcome of the fetal.

#### ISSN No:-2456-2165

A high risk pregnancy is one in which the woman has a problem or condition, physiologic, social or emotional, that threatens maternal or fetal health and produces an increased chance of morbidity or mortality. It imposes many restrictions on the pregnant woman, including changes in her eating habits, sleeping pattern, home making, child rearing, sexuality, social and recreational activities as well as disruptions to work related activities or career plans.

# II. RESEARCH METHODOLOGY

The study is aimed to assess the prevalence of level stress among high risk pregnant mother attending the OBG OPD of HSK hospital and Research Centre Bagalkot. **Research approach:** In view of the nature of the problem under study and to accomplish objectives of the study descriptive survey approach which is exploratory in nature was considered appropriate to describe perceived stress among high risk pregnant mother. Research design: This study is adapted descriptive survey design with objective of describing the level of stress among high risk pregnant mother. Research setting: Study will be conducted in OBG OPD at HSK Hospital and Research Centre Bagalkot. Population: Population of the present study comprises of all high risk pregnant mothers who all are attending OBG OPD at HSK hospital and research center, Bagalkot. Sample: It is subset of the population select for the study comprising of high risk pregnant mothers who are attending OBG OPD at HSK Hospital and research center, Bagalkot. Sample size: The sample size of present study consists of 50 high risk pregnant mothers. Sampling technique: Purposive sampling technique was adopted to select the samples for the present study based on inclusion criteria. Development and discription of the tool: Data collection tools are the procedures or instruments used by the researcher to observe or measure key variables in the research problem (Robert 1989) standardised scales were used by the researcher to assess the stress level among high risk pregnant mothers i.e. Cohen perceived stress scale for assessing the stress level among high risk pregnant mother. The tools were selected on basis of objectives of the study. Reliability of the tool: Reliability of research instrument is defined as the extent to which the instrument yields the results on repeated measures. This is done by critically evaluating questions based on Karl Pearson correlation coefficient. Reliability co-efficient was calculated by Split Half method. The calculated r'value = 0.81 suggesting the developed tool was highly reliable. Data collection: After obtaining the prior permission from the principal of Sajjalashree Institute of Nursing Sciences, Bagalkot and formal permission from the Dean, H.S.K hospital and research center Bagalkot the main study was conducted. The main study was conducted from 21-02-2019 to 02 -03-2019 among 50 high risk pregnant mother; the subject was selected by purposive sampling technique. The investigator given self introduction explained the purpose of the study, subject's willingness to participate in the study was ascertained. The subjects are assured anonymity and confidentiality of the information provided by them and written informed consent was obtained. The assessment of level of stress among high risk pregnant mother conducted by administering the Cohen Perceived Stress scale, each subject took 30 minutes to answer the perceived stress scale. The data collection process was terminated after thanking the subjects for their participation and cooperation. The data was then complied for data analysis.

# III. RESULTS

This chapter deals with analysis and interpretation of the data collected through self administered stress scale from the study population. The study was intended to identify the stress level of high risk pregnant mother and association of level of stress with selected demographic variables. The analysis and interpretation of data for the present study is based on data collected through standard scales from 50 high risk pregnant mother attending OBG OPD at HSK hospital and research centre, Bagalkot. The data was analyzed by using descriptive and inferential statistics based on the objectives of the study.

# A. Organisational of Findings:

# Part I: Description of socio-demographic characteristics of high risk pregnant mother.

# Part II: Description of assessment of test scores of stress level among high risk pregnant mother

**Section A-** Assessment of prevalence of stress level among the high risk pregnant mother

Section B- Assessment of mean, SD and mean percentage of Stress level among high risk pregnant mother.

Part III: Association between test scores of prevalence of stress level among high risk pregnant mother and their selected socio demographic variables.

Part I: Description of Socio-Demographic Characteristics of High Risk Pregnant Mother.

Socio demographic variables	Category	Respondents			
		Number	Percent		
Age groups (years)	18-23	14	28%		
	23-28	24	48%		
	28-32	8	16%		
	32-40	4	8%		
Religion	Hindu	37	74%		
	Muslims	9	18%		
	Christian	1	2%		
	Others	3	6%		
Education	Illiteracy	7	14%		
	Primary	19	38%		
	Secondary	17	34%		
	PUC	5	10%		
	Degree & above	2	4%		
Occupation	House wife	34	68%		
	Cooli	9	18%		
	Govt job	2	4%		
	Private job	3	6%		
	Agriculture	4	4%		
Income	3000-6000	33	66%		
	6000-9000	12	24%		
	9000-12000	3	6%		
	12000-15000	1	2%		
Number of children	1	12	24%		
	2	25	50%		
	3	12	24%		
	Above 3	1	2%		
Number of pregnancy	1	12	24%		
	2	25	50%		
Γ	3	12	24%		
	Above 3	1	2%		

Table 1:- Frequency and Percentage Distribution of Socio-Demographic Characteristics of High Risk Pregnant Mother



Fig 1:- Percentage Wise Distribution of Respondents by their Age



Fig 2:- Percentage Wise Distribution of Respondents by their Religion



Fig 3:- Percentage Wise Distribution of Respondents by their Income



Fig 4:- Percentage Wise Distribution of Respondents by Educational Status



Fig 5:- Percentage Wise Distribution of Respondents by Occupation



Fig 6:- Percentage Wise Distribution of Respondents by Number of Children



Fig 7:- Percentage Wise Distribution of Respondents by Number of Pregnancy

- > Part II: Description of Assessment of Test Scores of Stress Level among High Risk Pregnant Mother
- Section A-Assessment of Prevalence of Stress Level among the High Risk Pregnant Mother

Level of stress				
	Range of scores	Frequency	Percentage	
Mild stress	0-13	7	14%	
Moderate stress	14-26	38	76%	
Severe stress	27-40	5	10%	

Table 2:-	Assessment of Lev	el of Stress amor	ng High Risk I	Pregnant Mother
raore 2.	The second secon	or or ourebb unior	is instruction i	i i ognant i i i otnor

Findings related to assessment of level of stress among high risk pregnant mother shows that highest percent (76%) of high risk pregnant mother were moderate level of stress, 14 percent were mild level of stress and 10 percent of them were mild level of stress.

Hence the above stated results clearly suggest that majority of the high risk pregnant mothers have moderate level of stress

• Section B- Assessment of Mean, SD and Mean Percentage of Stress Level among High Risk Pregnant Mother

	MEAN	SD	MEAN
Stress			PERCENTAGE
level	19.28	5.21	48.2

 Table 3:- Mean, SD and Mean Percentage of Stress Level

 among High Risk Pregnant Mother

Findings about the assessment of mean, SD and mean percentage of prevalence of stress level scores of high risk pregnant mother reveals that, the total mean percentage of stress level scores was 48.2 With mean and SD 19.28+5.21.

Part III: Association between the Prevalence of Level of Stress Scores and Socio-Demographic Variables of High Risk Pregnant Mother

To find out the association between prevalence of level of stress scores of high risk pregnant mother with their socio-demographic variables, a research hypothesis was formulated.

SL.NO	Socio-demographic variables	D f	Chi square value	Table value	P, value	Level of Significance
1	Age	1		0.01	3.347	P>0.05,NS
2	Religion	1		0.01	0.1438	P>0.05,NS
3	Educational status	1	6.442	0.01		P>0.05,NS
4	Occupation	1		0.01	0.03	P<0.05,S
5	Family monthly income	1		0.01	0.398	P>0.05,NS
6	Number of children	1	0.994	0.01		P>0.05,NS
7	Number of pregnancy	1	0.994	0.01		P>0.05,NS

Table 4:- Association between the Prevalence of Level of Stress Scores of High Risk Pregnant Mother and their Socio-

Demographic Variables

Df - Degree of freedom, NS- Nothing significance

ISSN No:-2456-2165

Findings related to the association between levels of stress scores of high risk pregnant mother with their selected socio-demographic variables reveals that, there was no significant association was found between stress level scores of high risk pregnant mother in the group with their selected socio-demographic variables. Hence  $H_1$  stated is rejected.

#### IV. SUMMARY

This chapter deals with the analysis and interpretation of the findings of the study. The data gathered were summarized in the master sheet and descriptive statistics were used for analysis .Finding reveals that the prevalence level of stress with the association has no significant association.

#### REFERENCES

- Ham B, Joseph M. American College of Obstetricians and Gynaecologists. (2012). HIV and pregnancy. Available from URL: FAQ113.RetrievedMay31,2016,fromhttp://www.acog. org/~/media/For%20Patients/faq113.pdf?dmc=1&ts= 20120730T1640322605 (PDF – 329 KB)
- [2]. American College of Obstetricians and Gynaecologists. (2015). ACOG Practice Bulletin No. 156: Obesity in pregnancy. Obstetrics and Gynaecology, 126(6), 112–126. PMID: 26595582.
- [3]. Nutan H. Risk of newborn heart defects increases with maternal obesity [news release]. Retrieved July 30, 2012. Available from URL: http://www.nih.gov/news/health/apr2010/nichd-07.htm
- [4]. Hamilton, B. E., Martin, J. A., Osterman, M. J. K., Curtin, S. C., & Mathews, T. J. (2015). Births: Final data for 2014. National Vital Statistics Reports, 64(12). Retrieved May 31, 2016. Available from URL:

http://www.cdc.gov/nchs/data/nvsr/nvsr64/nvsr64\_12. pdf (PDF - 2.95 MB).

[5]. Aron M, Susy B. Medical Encyclopedia: Adolescent pregnancy. Retrieved May 31, 2016. Available from URL: https://medlineplus.gov/ency/patientinstructions/0006

07.ht.
[6]. David FG, Fed H. Medical Encyclopedia: preeclampsia. Retrieved May 31, 2016. Available

- from URL: from https://medlineplus.gov/ency/article/000898.htm.
- [7]. Sethre-Hofstad L, Stansbury K, Rice MA. Attunement of maternal and child adrenocortical response to child challenge. Psychoneuroendocrinology. 2002;27(6):731-47.
- [8]. Muller-Nix C, Forcada-Guex M, Pierrehumbert B, Jaunin L, Borghini A, Ansermet F. Prematurity, maternal stress and mother-child interactions. Early Hum Dev. 2004;79(2):14558.

- [9]. Pickler RH, McGrath JM, Reyna BA, McCain N, Lewis M, Cone S, et al. A model of neurodevelopmental risk and protection for preterm infants. J Perinat Neonatal Nurs. 2010;24(4):356-65.
- [10]. Ruiz RJ, Avant KC. Effects of maternal prenatal stress on infant outcomes: A synthesis of the literature. Adv Nur Sci. 2005; 28(4):345-55.