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KNOWLEDGE AND PRACTICES REGARDING GESTATIONAL HYPERTENSION AMONG ANTENATAL MOTHERS

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Abstract

Pregnancy is a kind of miracle by the God and a mother's joy begins when new life is stirring inside and a tiny heartbeat is heard for the very first time. Pregnancy is a unique and exciting time in a woman's life, as it highlights the woman's amazing creative and nurturing powers while providing a bridge to the future.

The present study was to assess the knowledge and practices regarding Gestational Hypertension disease among antenatal mothers attending MCH centre, Tirupati, Chittoor (dist), A.P. Non experimental descriptive research approach was adopted. A total of 100 subjects were selected by purposive sampling technique. A structured questionnaire and check list were developed and standardized to collect the data. The results revealed that 78 per cent of antenatal mothers had inadequate knowledge, 16 per cent of antenatal mothers had moderate adequate knowledge and 6 per cent of antenatal mothers had adequate knowledge. Regarding practices 14 per cent of antenatal mothers had inadequate practices, 74 per cent of antenatal mothers had moderate adequate practices and 7 per cent of antenatal mothers had adequate practices.

Significant association was found between level of knowledge and area of living, Religion of the mother, Education of the mother and Education of the father found significantly associated with practices.

Keywords: Gestational Hypertension, Knowledge, Practices,

Introduction

Hypertensive disorders in pregnancy are among the major causes of maternal and perinatal mortality and morbidity. It is one of the commonest medical disorders diagnosed by obstetricians in clinical practice. Approximately 1,00,000 women die worldwide per annum because of pregnancy induced hypertension. It is said that preeclampsia and eclampsia contribute to death of a woman every 3 minutes worldwide. The global maternal mortality rate is estimated to be 400 per 1,00,000 live births due to pregnancy or childbirth (Stevens 2000) Birkhead, Callister and Vega quote “ It's just my way of thinking that pregnant women have one foot in life and one foot in death .And that's why if you don't care for yourself ,you can die”. The most common causes of maternal death worldwide are haemorrhage, infection, unsafe abortion, pregnancy induced hypertension and obstructed labour. It is estimated that approximately 25% of maternal deaths are caused by haemorrhage ,15% by infections ,13% by unsafe abortion ,12% by pregnancy induced hypertension ,8% by obstructed labour and 8% by other direct causes and 20% are due to indirect causes including malaria, heart disease and iron deficiency anaemia..

Gestational hypertension is defined per ACOG guidelines as blood pressure greater than or equal to 140 mmHg systolic or 90 mmHg diastolic on two separate occasions at least four hours apart after 20 weeks of pregnancy when previous blood pressure was normal.

Gestational Hypertension is a condition in which a woman without hypertension develops high blood pressure levels during pregnancy. Gestational Hypertension generally results in few symptoms. However, it does increase the risk of Pre eclampsia, Depression and requiring C-section. If left untreated, it can also result in still birth long term children's are at higher risk of being overweight and developing hypertension.

Antenatal mother refers to expectant mother from the time of conception is confirmed until the beginning of labour. Antenatal means relating to the medical care given to women who are going to have a baby or expecting a baby. Antenatal care is also known as prenatal care is a type of preventive health care.

Its goal is to provide regular checkups that all doctors or midwives to treat and prevent potential health problems throughout the course of the pregnancy and to promote healthy lifestyles that benefit both mother and child.

Knowledge is a familiarity, awareness, or understanding of someone or something, such as facts, information, descriptions, or skills, which is acquired through experience or education by perceiving, discovering, or learning. Knowledge can refer to a theoretical or practical understanding of a subject. Knowledge is also the information gained through education. In this study, it refers to the level of understanding and verbal responses of the antenatal mother regarding Gestational Hypertension which is measured by interview schedule.

Practice means doing something regularly in order to be able to do it better. A practice is one of these periods of doing something. It means the way of doing something. In this study it refers to the practices in terms of verbal responses of the antenatal mother regarding Gestational Hypertension which is measured by structured interview schedule.

Knowledge about Gestational Hypertension among women will translate into adoption of healthy life style, better health seeking behaviour, better self-care and thus prevention and early diagnosis of the disease. The Blood Pressure $> 140/90$ mm of hg may be associated with an increase in the risk of intrauterine fetal death during the last 4–8 weeks of gestation. Gestational Hypertension of any severity increases the risk of fetal still birth. Neonatal hypoglycemia, jaundice, polycythemia, and hypocalcemia may complicate Gestational Hypertension (GH) as well.

Thus, this study was conducted to assess the knowledge and practices about Gestational Hypertension among antenatal mother who attend Maternity Child Health centre, Tirupati, Chittoor (Dist), Andhra Pradesh, India.

Objectives

- ❖ To assess the knowledge regarding Gestational Hypertension among antenatal mothers.
- ❖ To assess the practices regarding Gestational Hypertension among antenatal mothers.
- ❖ To determine the association between the knowledge and practices regarding Gestational Hypertension among antenatal mothers with their selected variables (age, parity, education of mother and father, religion, occupation of mother and father, family income, source of information, diet, area of living and type of family).

Method: Based on review of research, non-research literature, opinion and suggestion from experts the following research tool was developed. The tool for the study consisted of 3 sections. Section-I Self Structured questionnaire for general information (selected variables) consisting of 12 items. Section-II Self Structured questionnaire for knowledge regarding Gestational Hypertension and Section III Self Structured Check List for practices related to Gestational Hypertension. Content validity of tool was done by experts in the field. Reliability was done by using Karl Pearson Correlation Coefficient, split half method.

Section II: (self-structured questionnaire for knowledge related Gestational Hypertension)

reliability score was 0.887.

Section III: (self structured check list for practices related to Gestational Hypertension) reliability score was 0.85.

A formal written permission was obtained from Municipal Health officer of MCH center of Tirupati. A total of 100 subjects were selected by purposive sampling technique. The data was collected from mothers. Data was obtained on the knowledge and practices regarding Gestational Hypertension among antenatal mothers attending MCH centre, Tirupati through structured questionnaire and check list. The demographic variables were coded and analyzed. Item analysis and interpretation was done with the help of descriptive and inferential statistics to meet the objectives of the study.

Major findings

General information of the sample

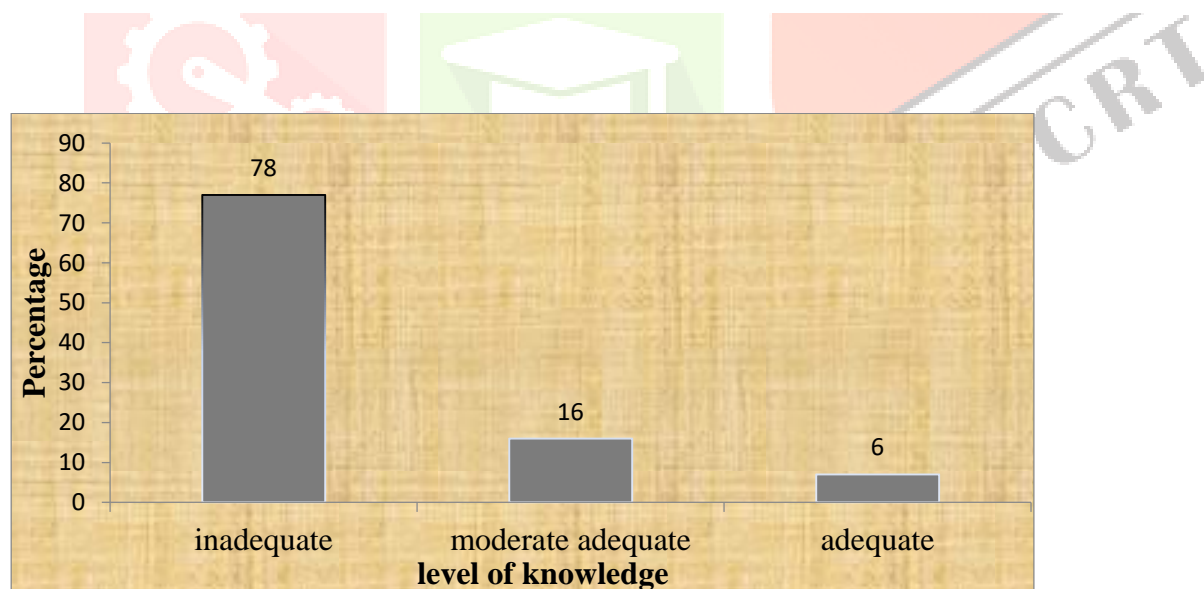
Maximum antenatal mothers 51 per cent belongs to the age group of 21 – 25 years and majority of them 44 per cent were primipara. As far religion concern 70 per cent were Hindus. Majority 56 per cent had primary education and 49 per cent were falling under the income group below Rs 3000.

Table –1 Level of Knowledge among Antenatal Mothers Regarding Gestational Hypertension.

S no	Level of knowledge	In adequate		Moderate		Adequate	
		No	%	No	%	No	%
1	General information on Gestational Hypertension	50	50	42	42	8	8
2	Causes of Gestational Hypertension	57	57	38	38	5	5
3	Symptoms of Gestational Hypertension	80	80	0	0	20	20
4	Signs of Gestational Hypertension	56	56	0	0	44	44
5	Diagnosis of Gestational Hypertension	86	86	2	2	12	12
6	Treatment of Gestational Hypertension	34	34	0	0	66	66
7	Complications of Gestational Hypertension	73	73	27	27	0	0

8	Prevention of Gestational Hypertension	67	67	26	26	7	7
9	Total knowledge on Gestational Hypertension	78	78	16	16	6	6

Table-1 shows majority of antenatal mothers had inadequate knowledge in Diagnosis of Gestational Hypertension that is Eighty six percent. Moderate level of Knowledge in General Information on Gestational Hypertension that is forty two per cent and sixty six per cent of antenatal mothers had adequate knowledge in treatment of Gestational Hypertension. Oral Glucose Tolerance Test is diagnostic blood test for Gestational Hypertension which is new method for antenatal mothers due to their educational status that may be the reason for inadequate knowledge in diagnosis of the disease. These findings were supported by Chitra et.al., (2018). Sixty eight percent of antenatal mothers were having average knowledge, 25% of them were having good knowledge, and only 7% were having poor knowledge regarding prevention of Gestational Hypertension.



Percentage distribution of level of knowledge among antenatal mothers

Table –2 Level of Practices among Antenatal Mothers Regarding Gestational Hypertension

S no	Level of practices	In adequate		Moderate		Adequate	
		No	%	No	%	No	%
1	General awareness related to Gestational Hypertension	22	22	72	72	6	6
2	Dietary Practices related to Gestational Hypertension	42	42	45	45	13	13
3	Physical activity Practices related to Gestational Hypertension	47	47	32	32	21	21
4	Total Practices regarding Gestational Hypertension	14	14	74	74	12	12

Table 2 shows forty seven per cent antenatal mothers had inadequate practices related to physical activity. Majority of antenatal mothers that is seventy two per cent had moderate General Practices related to Gestational Hypertension. Pregnancy is the period where mothers usually decrease physical activity fear of losing the fetus due to inadequate knowledge related to the importance of diet and physical activity which in turn leads to maternal morbidity like Gestational Hypertension and Gestational Diabetes Mellitus. That may be the reason Antenatal mothers with poor practice of physical activity.

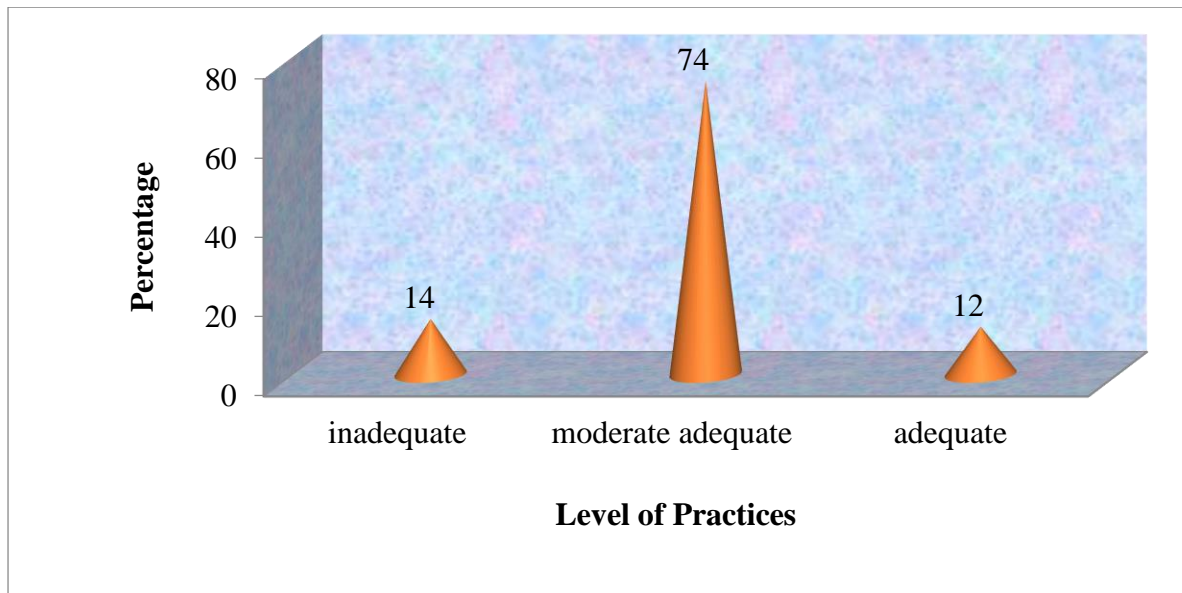


Table 3: Mean and S.D. Values of Level of Knowledge on Gestational Hypertension among Antenatal Mothers

S no	Level of knowledge	Mean	S.D.
1	General information on Gestational Hypertension	2.36	0.894
2	Causes of Gestational Hypertension	1.38	0.749
3	Symptoms of Gestational Hypertension	0.96	0.680
4	Signs of Gestational Hypertension	0.45	0.500
5	Diagnosis of Gestational Hypertension	0.82	0.626
6	Treatment of Gestational Hypertension	0.66	0.476
7	Complications of Gestational Hypertension	0.98	0.738
8	Prevention of Gestational Hypertension	5.04	1.922

Table 3 shows the mean and S.D. values of level of knowledge regarding prevention Gestational Hypertension was high. Knowledge related to signs and treatment about Gestational Hypertension was low. They are also indicating average level of knowledge in general information, symptoms and diagnosis regarding Gestational Diabetes.

Table 4: Mean and S.D. values of Practices on Gestational Hypertension among Antenatal Mothers

S no	Practices	Mean	S.D
1	General awareness related to Gestational Hypertension	7.40	1.421
2	Dietary Practices related to Gestational Hypertension	2.55	0.914
3	Physical activity Practices related to Gestational Hypertension	2.62	0.972
4	Total Practices regarding Gestational Hypertension	12.58	2.147

Table 4 shows high level of General Practices regarding Gestational Hypertension among antenatal mothers and they show moderate level of practices related to dietary and physical activity. Selected sample of antenatal women were majority had only secondary educational status so may be unaware of the type of diet and physical activity required in pregnancy period that may be the reason to show moderate level of practices related to dietary and physical activity. Jovana (2018) revealed that diets resembling MedDiet/DASH diet as well as higher Physical activity levels before or in early pregnancy were associated with lower risks or odds of Gestational Hypertension.

Table 5: Association between selected variables with Level of Knowledge Gestational Hypertension among Antenatal Mothers

S. no.	Selected variables	In adequate		Moderate adequate		Adequate		Chi square Value
		No	%	No	%	No	%	
1	Age of the mother (in years)							
	a) Below 20	16	16	3	3	1	1	2.001
	b) 21 – 25	37	37	7	7	5	5	
	c) 26 – 30	19	19	5	5	1	1	
	d) Above 30	5	5	1	1	0	0	
2	Parity of the mother							
	a) Primipara	35	35	7	7	3	3	2.678
	b) Multipara	30	30	8	8	4	4	
c) Grand multipara	12	12	1	1	0	0		
3	Religion							
	a) Hindu	52	52	13	13	4	4	4.258
	b) Muslim	17	17	3	3	3	3	
	c) Christian	6	6	0	0	0	0	
	d) Others	2	2	0	0	0	0	
4	Education of the mother							

	a) No formal education	15	15	1	1	0	0	5.595
	b) Primary education	41	41	8	8	5	5	
	c) Secondary education	13	13	4	4	2	2	
	d) Collegiate education	8	8	3	3	0	0	
5	Education of the father							
	a) No formal education	15	15	2	2	2	2	4.576
	b) Primary education	37	37	5	5	2	2	
	c) Secondary education	12	12	5	5	2	2	
	d) Collegiate education	13	13	4	4	1	1	
6	Occupation of the mother							
	a) Home maker	45	45	13	13	6	6	5.433
	b) Employee	9	9	1	1	0	0	
	c) Laborer	16	16	2	2	1	1	
	d) Other	7	7	0	0	0	0	
7	Occupation of the father							
	a) Business	10	10	2	2	1	1	0.210
	b) Employee	10	10	2	2	1	1	

	c) Laborer	23	23	4	4	2	2	
	d) Other	23	23	5	5	2	2	
8	Family income							
	a) Below 3000	10	10	3	3	13	13	9.048
	b) 3001 – 6000	36	36	9	9	2	2	
	c) 6001 – 9000	20	20	3	3	5	5	
	d) Above 9000	11	11	1	1	0	0	
9	Type of family							
	a) Nuclear	42	42	9	9	3	3	2.648
	b) Joint	29	29	7	7	4	4	
	c) Extended	6	6	0	0	0	0	
10	Area of living							
	a) Rural	19	19	0	0	0	0	10.495*
	b) Urban	51	51	16	16	7	7	
	c) Urban slum	7	7	0	0	0	0	
11	Diet							
	a) Vegetarian	3	3	1	1	1	1	1.521
	b) Non vegetarian	74	74	15	15	6	6	
12	Source of information							
	a) Mass media	16	16	4	4	1	1	

b) Family	24	24	2	2	0	0	8.147
c) Friends	10	10	3	3	1	1	
d) Health personnel	3	3	2	2	1	1	
e) None	24	24	5	5	4	4	

*Significance at 0.05 level

Table 5 represents that there is significance association between the areas of living antenatal mothers with knowledge at 0.05 level. Antenatal mothers who lived in urban area due to media or other source of information lead to more awareness related to Gestational Hypertension.

Table 6: Association between selected Variables with Level of Practices Gestational Hypertension among Antenatal Mothers

S. no.	Selected variables	In adequate		Moderate adequate		Adequate		Chi square
		No	%	No	%	No	%	Value
1	Age of the mother (in years)							
	a) Below 20	3	3	12	12	5	5	6.988
	b) 21 – 25	5	5	39	39	5	5	
	c) 26 – 30	4	4	19	19	2	2	
	d) Above 30	4	4	19	19	2	2	
2	Parity of the mother							
	a) Primipara	6	6	32	32	7	7	

	b) Multipara	4	4	33	33	5	5	5.470
	c) Grand multipara	4	4	9	9	0	0	
3	Religion							
	a) Hindu	8	8	55	55	6	6	30.852**
	b) Muslim	2	2	17	17	4	4	
	c) Christian	4	4	2	2	0	0	
	d) Others	0	0	0	0	2	2	
4	Education of the mother							
	a) No formal education	6	6	10	10	16	16	12.977*
	b) Primary education	7	7	40	40	7	7	
	c) Secondary education	1	1	14	14	4	4	
	d) Collegiate education	0	0	10	10	1	1	
5	Education of the father							
	a) No formal education	8	8	3	3	9	9	18.723*
	b) Primary education	4	4	35	35	5	5	
	c) Secondary education	2	2	16	16	1	1	
	d) Collegiate education	0	0	15	15	3	3	

6	Occupation of the mother							9.870
	a) Home maker	8	8	51	51	5	5	
	b) Employee	0	0	7	7	3	3	
	c) Laborer	4	4	13	13	2	2	
	d) Other	2	2	3	3	7	7	
7	Occupation of the father							2.077
	a) Business	2	2	10	10	1	1	
	b) Employee	3	3	21	21	5	5	
	c) Laborer	5	5	21	21	4	4	
	d) Other	4	4	22	22	2	2	
8	Family income							8.948
	a) Below 3000	4	4	6	6	3	3	
	b) 3001 – 6000	7	7	36	36	4	4	
	c) 6001 – 9000	1	1	24	24	3	3	
	d) Above 9000	2	2	8	8	2	2	
9	Type of family							7.947
	a) Nuclear	7	7	39	39	8	8	
	b) Joint	4	4	32	32	4	4	
	c) Extended	3	3	3	3	0	0	
10	Area of living							

	a) Rural	0	0	17	17	2	2	8.819
	b) Urban	11	11	53	53	10	10	
	c) Urban slum	3	3	4	4	0	0	
11	Diet							
	a) Vegetarian	0	0	5	5	0	0	1.849
	b) Non vegetarian	14	14	69	69	12	12	
12	Source of information							
	a) Mass media	4	4	15	15	2	2	11.156
	b) Family	2	2	21	21	3	3	
	c) Friends	0	0	13	13	1	1	
	d) Health personnel	0	0	6	6	0	0	
	e) None	8	8	19	19	6	6	

*Significance at 0.05 level

**Significance at 0.01 level

Table 6 represents that there is significance association between the religion of the antenatal mothers at 0.01 level and education of the mother and Education of the father with practices at 0.05 level. Education will always make a change educated antenatal mothers will have more knowledge compare to illiterate mothers.

Conclusion

The maximum of antenatal mothers had inadequate knowledge and practices on Gestational Hypertension. So the investigator prepared the information booklet on Gestational Hypertension consist of meaning of Gestational Hypertension, causes like consanguinity, maternal age more than 35yrs etc, signs and symptoms like excess thirst, polyhydrominas, polyuria etc how to confirm the condition, how to manage and what are the preventive measure antenatal mothers can take to protect themselves from the disease and provided to mothers to enhance the awareness. Hence, antenatal mothers need to be made to understand the importance of knowledge and Practices of Gestational Hypertension.

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