Original Research Article

An Exploratory Study to Assess the Knowledge and Attitude on Pregnancy Induced Hypertension among Antenatal Mothers Attending Antenatal OPD of PGIMS, Rohtak with a View of Develop Informational Pamphlets

Jailalita[1], K. Sunita[2], S. Divya[3], K. Jyoti[4]

[1]M.Sc. Nursing Student, [2]Professor, [3]M.Sc. Nursing Student, [4]M.Sc. Nursing Student
Department of Obstetrical and Gynaecological Nursing,
Pt. B.D. Sharma University of Health sciences Rohtak, Haryana, India

Corresponding Author: S. Divya, K. Jyoti

ABSTRACT

Introduction: Pregnancy induced hypertension is a condition specific to pregnancy, is a syndrome of hypertension with or without proteinuria, with the clinical manifestation usually occurring during the 20th week of gestation or late in pregnancy and regressing after delivery. [1]
Aim:
- To assess the knowledge and attitude of antenatal mothers on pregnancy induced hypertension.
- To associate the knowledge and attitude of antenatal mothers. with selected demographic variables. To find out the correlation between knowledge and attitude of antenatal mothers on pregnancy induced hypertension.
Material and methods: A quantitative approach and Non-experimental research design was used for the study. The study was conducted among 60 antenatal mothers attending antenatal OPD of PGIMS, Rohtak. The subjects were selected by Non-probability purposive sampling method.
Result: The data was analysed using descriptive and inferential statistics. Result revealed that mean value of knowledge and attitude score was 18.33 and 93.8. The study findings show that, there was association between the knowledge score and Family income of mother (6.4) (p<0.05). There was an association between the attitude score and Age of mother (6.6), family income of mother (8.08), diagnosis of PIH (16.3)., there was significant correlation between knowledge and attitude among antenatal mothers regarding pregnancy induced hypertension (r =.404 P< 0.05).
Conclusion: Majority of antenatal mothers 49 (81.66%) had adequate knowledge regarding pregnancy induced hypertension. Majority of antenatal mothers 51(85%) had favourable attitude regarding pregnancy induced hypertension.

Keywords: Antenatal care, Pre-eclampsia, Eclampsia, Gestational hypertension and Pregnancy induced hypertension.

INTRODUCTION

Pregnancy is a long and very special journey for a woman. It can be thrilling and wonderful part of women's life. Mother entire pregnancy with the expectation that their pregnancy and delivery will not be associated with any complicating condition, only give happiness. [2]

Antenatal period is an important period for systematic supervision of a woman during pregnancy and identify threat to mother and unborn baby. PIH is the commonest high-risk pregnancy from all the high-risk cases which will complicate the pregnancy and childbirth. [3]

Pregnancy induced hypertension is a condition specific to pregnancy, is a

syndrome of hypertension with or without proteinuria, with the clinical manifestation usually occurring during the 20th week of gestation or late in pregnancy and regressing after delivery. This includes gestational hypertension, pre-eclampsia and eclampsia. It occurs in about 5-8% of all pregnancy worldwide and more often in women with pre-existing kidney problem, diabetic women and those who had a previous pregnancy induced hypertension. It is said to be common in women younger than 20 years and older than 40 years, young women with the first pregnancy and women with the twin's pregnancies.[1]

Hypertensive disorders affect 6 to 10% of pregnancies worldwide and contribute to maternal mortality, stillbirths, and newborn deaths D'Anna R BG (2006).[4] The incidence of Pregnancy induced hypertension (PIH) in India ranges from 515%. The incidence of PIH in primigravidae is 16% and 7% in multigravida. Primary pre-eclampsia occurs in 70% of PIH cases and secondary pre-eclampsia occurs in 30% in all PIH cases.[5] Pregnancy induced hypertension (PIH) occurs more frequently in young prime gravid. It is more common in the mothers over 35years of age and multiple pregnancies with diabetes and obese mothers. It is equally common in women, from low socio-economic group who are not likely to have received adequate antenatal care.[6]

PIH is categorized into three common stages, Gestational hypertension is usually defined as having blood pressure higher than 140-90 mm of Hg without the presence of proteins in urine and diagnosed after 20th week of gestation. Pre-eclampsia is gestational hypertension (blood pressure higher than 140-90 mm of Hg) plus proteinuria (> 300 mg of protein in a 24-hr urine sample). Severe pre-eclampsia involves a blood pressure higher than 160-110 mm of hg, with additional medical signs and symptoms. It is referred to eclampsia when tonic clonic seizures appear in pregnant women with high blood pressure and proteinuria.[7]

Placental abruption, preterm delivery, perinatal death, small for gestational age infants, and neonatal respiratory distress syndrome have all been reported to occur more commonly among women who develop sever gestational hypertension without proteinuria than among women who develop proteinuria without severe hypertension.[8] Foetal complications of preeclampsia and eclampsia include the risk of preterm delivery, oligohydramnios (low fluid volume within the uterus), and sub-optimal foetal growth. Maternal complications of preeclampsia and eclampsia include bleeding and clotting disorders, and HELLP syndrome McGraw-Hill Professional (2014).[9]

Many complications occur due to pregnancy induced hypertension. So early diagnosis is very important. There is no single to predict or diagnose PIH. It can be done by diagnosing the case history, physical examination, urine examination and proper antenatal check-up Annamma Jacob (2008).[10]

MATERIALS AND METHODS

Quantitative Research Approach was used for the study. A total of 60 samples that fulfilled the inclusive criteria were selected by Non probability purposive sampling technique from antenatal OPD of PGIMS, Rohtak, Haryana. Target population was antenatal mothers with pregnancy induced hypertension. Tool used contain 3 sections one section consists of demographic variables and second section consists of structured knowledge questionnaire of 33 items including BP related, pregnancy induced hypertension (PIH), risk factors of PIH, Sign and Symptoms of PIH, Prevention of PIH, Complication of PIH, Management of PIH. Inclusion criteria for the study were antenatal mothers with PIH of 20-36 weeks of gestational age, mothers who were available at the time of data collection and

antenatal mothers who were willing to participate in the study. Mothers those who were not available at the time of data collection, those who were not willing to participate in the research study and those antenatal mothers whose gestational age below 4 months were the exclusion criteria of study. Data collection was done after taking permission from the authorities by using tool. Pilot study was conducted from 11-16 February 2019. Final data collection was done from 22 February to 30 March 2019. Data analysis was done by descriptive and inferential statistics.

RESULTS

PART: Description of demographic variables.

Table 1 shows the distribution of demographic data of antenatal mothers participated in the study.

Table 1 shows the following findings:

Age

Out of 60 study subjects, majority 53.33% were in age group of 18-25years, followed by 38.33% and 8.33% in age group of 26-33 years and 34-40 years respectively.

Gravida

Out of 60 study participants, majority 51.66% were primigravida mothers followed by 48.33% were multigravida respectively.

Parity

In the study samples, majority 51.66% were primipara mothers followed by 48.33% were multipara respectively.

Educational of the mother

Out of 60 study subjects, majority 45% study subject were belonged to secondary education, followed by 11.66%, 26.66%, 16.66% belonged to illiterate, primary and graduate above respectively.

Gestational age

Out of 60 study participants, majority 58.33% mothers were 25-30weeks of gestational age, followed by 8.33%, 13.33%, 20% were 20-25weeks, 30-

35weeks and above 35weeks of gestational age of mothers respectively

Table 1: Frequency and percentage distribution of antenatal mothers according to demographic variables N=60

S. No	Characteristics of variables	Frequency	Percentage
1	**Age of mother**		
	18-25yrs	32	53.33%
	26-33yrs	23	38.33%
	34-40yrs	05	8.33%
	Above40yrs	00	0
2	**Gravida of mother**		
	Primigravida	31	51.66%
	Multigravida	29	48.33%
3	**Parity of mother**		
	Primipara	31	51.66%
	Multipara	29	48.33%
4	**Education of mother**		
	Illiterate	07	11.66%
	Primary	16	26.66%
	Secondary	27	45%
	Graduate and above	10	16.66%
5	**Gestational age of mother**		
	20-25wks	05	8.33%
	25-30wks	35	58.33%
	30-35wks	08	13.33%
	Above35wks	12	13.33%
6	**Occupation of mother**		
	Housewife	44	73.33%
	Govt. job	01	1.666%
	Private. Job	15	25%
7	**Family income**		
	Below 5,000	13	21.66%
	Between 5,000-7,000	18	30%
	Between 7,000-9,000	24	40%
	Above 10,000	05	8.33%
8	**Hospitals visit done by mother**		
	3-5 visits	41	68.33%
	6-8 visits	12	20%
	9 visits	02	3.33%
	More than 9 visits	05	8.33%
9	**Diagnosis of PIH**		
	Between 20-22wks	25	41.66%
	Between 22-24wks	19	31.66%
	Between 24-26wks	04	6.66%
	After 26wks	12	20%
10	**Family history of PIH**		
	Yes	09	15%
	No	51	85%
11	**MCP card**		
	Yes	60	100%
	No	00	0

Occupation of mother

Out of 60 study participants, majority 73.33% mothers were housewife, followed by 1.666% and 25% were in govt. job and in private job.

Family income

Out of 60 study subjects, majority 21.66% study subject's income belonged to below 5,000Rs, followed by 30%,40% and 8.33% belonged to 5,000-7,000Rs, 7,000-9,000Rs and above 10,000 respectively

Hospitals visit done by mother

Out of 60 study participants majority 68.33% mothers had 3-5 hospital visits followed by 20%, 3.33%and 8.33% belonged to 6-8 visits, 9 visits and more than 9 visits.

Diagnosis of PIH

Out of 60 study participants, majority 41.66% study subjects were diagnosed of PIH in between 20-25 weeks followed by 31.66%, 6.66% and 20% belonged to between 22-24 weeks, between 24-26 weeks and after 26 weeks.

Family history of PIH

Out of 60 study subjects, that majority 85% study subjects do not have family history of PIH followed 15% had family history of PIH

Part 2

This part deals with the description of antenatal mother's knowledge and attitude regarding pregnancy induced hypertension.

Table 2: Frequency and percentage of knowledge scores N=60

Knowledge level	Frequency	Percentage
Inadequate knowledge	11	18.33%
Adequate knowledge	49	81.66%
Excellent knowledge	0	0%

This table showing percentage distribution of samples according to the knowledge score categorization. Represents that majority of antenatal mothers 49 (81.66%) had adequate knowledge, 11(18.33%) had inadequate knowledge whereas no one had excellent knowledge.

Table 3: Frequency and percentage of attitude scores N=60

Attitude level	Frequency	Percentage
Unfavourable attitude	0	0%
Moderate favourable attitude	9	15%
Favourable attitude	51	85%

Showing criteria of attitude according to Likert scale. This table shows that 51 (85%) of antenatal mothers had favourable attitude and 9 (15%) had moderate favourable attitude and no one had unfavourable attitude

Part 3

Table 4: Mean and standard deviation of knowledge and attitude of antenatal mothers N=60

	Mean	S. D
Knowledge level	18.33	1.77
Attitude level	93.83	4.05

This table shows that, mean and S.D. of knowledge and attitude. Represent mean value of knowledge is 18.33 and standard deviation is 1.77. Mean value of attitude is 93.8 and standard deviation is 4.05.

Part 4

This part deals with the association between knowledge and attitude regarding pregnancy induced hypertension among antenatal mothers with selected demographic variables.

Table 5: Association between knowledge with demographic variables   N=60

Sample characteristics	F	Inadequate	Adequate	Excel-lent	X^2	df	P value
Age of mother							
18-25 year	32	7	25	0			
26-33 year	23	2	21	0	3.2	2	.196[NS]
34-40 year	5	2	3	0			
Above 40 year	0	0	0	0			
Gravida of mother							
Primigravida	31	4	27	0	1.2	1	.261[NS]
Multi gravida	29	7	22	0			
Parity of mother							
Primipara	31	4	27	0	1.2	1	.261[NS]
Multipara	29	**7**	22	0			
Education of mother							
Illiterate	7	2	5	0			
Primary	16	3	13	0	.734	3	.865[NS]
Secondary	27	4	23	0			
Graduate or above	10	2	8	0			
Gestational age of mother							
20-25 weeks	5	1	4	0			
15-33 weeks	35	5	30	0	**.986**	3	.805[NS]
30-35 weeks	8	2	6	0			
More than 35 weeks	12	3	9	0			

Table no.5 continued.....							
Occupation of mother							
Housewife	44	10	34	0			
Govt. job	1	0	1	0	2.1	2	.340^{NS}
Private job	15	1	14	0			
Family income							
Below 5,000	13	**5**	8	0			
5,000-7,000	18	4	14	0	6.4	3	.093^{**}
7,000-9,000	24	**2**	22	0			
Above 10,000	5	0	5	0			
Hospital visits							
3-5 visits	41	7	34	0			
6-8 visits	12	4	8	0	3.4	3	.332^{NS}
9 visits	2	0	2	0			
More than 9 visits	5	0	5	0			
Diagnosis of PIH							
Between 20-22 weeks	25	4	21	0			
Between 22-24 weeks	19	2	17	0	2.7	3	.426^{NS}
Between 24-26 weeks	4	1	3	0			
After 26 weeks	12	4	8	0			
Family history of PIH							
Yes	9	3	6	0	1.5	1	.207^{NS}
No	51	8	43	0			

**= Significant   NS= Non significant

Table 6: Association between attitude with demographic variables   N=60

Sample characteristics	F	Unfavourable	Moderate	Favourable	X^2	df	P value
Age of mother							
18-25 year	32	0	8	24			
26-33 year	23	0	0	23	6.6	2	.036^{**}
34-40 year	5	0	1	4			
Above 40 year	0	0	0	0			
Gravida of mother							
Primigravida	31	0	3	28	1.42	1	.233^{NS}
Multi gravida	29	0	6	23			
Parity of mother							
Primipara	31	0	3	28	1.42	1	.233^{NS}
Multipara	29	0	6	23			
Education of mother							
Illiterate	7	0	1	6			
Primary	16	0	2	14	2.95	3	.399^{NS}
Secondary	27	0	6	21			
Graduate or above	10	0	0	10			
Gestational age of mother							
20-25 weeks	5	0	0	5			
15-33 weeks	35	0	3	32	5.8	3	.121^{NS}
30-35 weeks	8	0	2	6			
More than 35 weeks	12	0	4	8			
Occupation of mother							
Housewife	44	0	8	36			
Govt. job	1	0	0	1	1.34	2	.511^{NS}
Private job	15	0	1	14			
Family income							
Below 5,000	13	0	3	10			
5,000-7,000	18	0	4	14	8.08	3	.049**
7,000-9,000	24	0	0	24			
Above 10,000	5	0	2	3			
Hospital visits							
3-5 visits	41	0	4	37			
6-8 visits	12	0	3	9	4.62	3	.201^{NS}
9 visits	2	0	0	2			
More than 9 visits	5	0	2	3			
Diagnosis of PIH							
Between 20-22 weeks	25	0	2	23			
Between 22-24 weeks	19	0	0	19	16.1	3	.001^{**}
Between 24-26 weeks	4	0	1	3			
After 26 weeks	12	0	6	6			
Family history of PIH							
Yes	9	0	1	8	1.26	1	.723^{NS}
No	51	0	8	43			

**=Significant   NS= Non-significant.

Part 5

The part deals to find out the correlation between knowledge and attitude among antenatal mothers regarding pregnancy induced hypertension.

Table 7: Correlation between knowledge and attitude

Variables	Mean	S. D	Co-relation
Knowledge	18.33	1.77	r = .404***
Attitude	93.83	4.05	

***Significant

This table shows a Karl Pearson's method was used to find out the correlation between knowledge and attitude among antenatal mothers regarding pregnancy induced hypertension. (r=.404 P<0.05) so, there was found to be correlation between knowledge and attitude at the significant level.

DISCUSSION

Out of 60 samples majority of antenatal mothers 49 (81.66%) had adequate knowledge, 11(18.33%) had inadequate knowledge whereas no one had excellent knowledge. In 60 samples 51 (85%) of antenatal mothers had favourable attitude and 9 (15%) had moderate favourable attitude and no one had unfavourable attitude. The mean value of knowledge is 18.33 and standard deviation is 1.77.Mean value of attitude is 93.8 and standard deviation is 4.05. The correlation between knowledge and attitude among antenatal mothers regarding pregnancy induced hypertension. (r=.404 P<0.05) so, there was found to be correlation between knowledge and attitude at the significant level.

A similar study had been conducted at RIMS hospital, Kadapa, which was to assess the level of knowledge of antenatal mother regarding prevention of pregnancy induced hypertension. The research design used for the study was Non-Experimental design. The study conducted among 30 antenatal mothers affected with pregnancy induced hypertension, using a structured interview schedule found that among 30 adults only 3(10%) were having moderately adequate knowledge, 27(90%) were having inadequate knowledge and 0 there was no one with adequate knowledge.

CONCLUSION

Majority of antenatal mothers 49 (81.66%) had adequate knowledge regarding pregnancy induced hypertension**.** Majority of antenatal mothers 51(85%) had favourable attitude regarding pregnancy induced hypertension. The written prepared material by the investigator in the form of pamphlets helped the mothers to improve their knowledge and attitude. Among PIH cases severe cases were more. The incidence of PIH was higher among teenage pregnancy, primigravida, those having history of PIH in previous pregnancy, family history of PIH. So, the finding of the study may help to bring awareness among mothers regarding PIH.

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