

A SURVEY OF KNOWLEDGE, ATTITUDE AND BELIEF TOWARDS PREGNANCY INDUCED HYPERTENSION AMONG PREGNANT WOMEN ATTENDING SIR SUNDERLAL HOSPITAL, BHU, VARANASI

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ABSTRACT

Introduction: The primary aim of this study was to find out the knowledge, attitude and belief towards Pregnancy Induced Hypertension (PIH) among pregnant women attending Sir Sunderlal Hospital, BHU, Varanasi. **Material and Method:** A sample of 100 pregnant women was used for the study. The research was made using the questions: What is the level of pregnant women's knowledge regarding antenatal blood pressure check-up and awareness about PIH? What is the level of pregnant women's knowledge regarding association of PIH with other conditions in pregnancy? What are the pregnant women's attitude and belief regarding features of PIH? Their

answers were analysed using descriptive statistics. **Results:** The study showed that 40% women in the study group did not have knowledge regarding antenatal BP checkup and 82% had not heard about PIH. Knowledge regarding association of PIH with Gestational DM, Renal disease, Multiple pregnancy and obesity was absent in 90%, 87%, 95% and 88% of the women in the study group respectively. Majority of the women would seek medical care on developing symptoms of PIH. Ninety percent of the respondents would visit the hospital if they notice swollen legs, 95% if they develop constant headache, 87% if they develop upper abdominal pain, 98% if they developed blurring of vision and all of them if they developed breathlessness and palpitations. 6% of the women believed that bad spirits may be involved in the development of seizures in pregnancy. **Conclusion:** In conclusion, Preeclampsia is a significant maternal health problem in India. To decrease the maternal and peri-natal morbidity and mortality associated with this condition we have to improve our existing health

care facilities. At the same time, we have to increase the awareness about this life threatening condition in the public so that they avail the existing health care facility. The health workers and the Government should make efforts in this direction.

KEYWORDS: Pregnancy induced Hypertension, Knowledge, Attitude, Belief, Awareness.

INTRODUCTION

Hypertensive disorders during pregnancy can be included into four main groups: 1) Gestational hypertension 2) Preeclampsia-eclampsia, 3) Preeclampsia superimposed on chronic hypertension, and 4) Chronic hypertension (essential/ secondary).^[1] In a multicenter study, 70% of the cases were diagnosed as gestational hypertension/preeclampsia and 30% were due to chronic hypertension.^[2]

Preeclampsia is new onset hypertension (BP \geq 140/90 mmHg) developing after 20 weeks of gestation, during labour, or in the first 24 hours post-partum a condition that typically starts after 20th week of pregnancy associated with proteinuria (urinary albumin protein \geq 300 mg/24 h).^[3] Convulsion occurring in a patient with pre-eclampsia is known as eclampsia. Ante-partum eclampsia occurs in 38%, intra-partum in 18% and post-natal in 44%.^[4]

Hypertensive disorders complicates nearly 12-22% of all pregnancies^[5] with pre-eclampsia remaining the leading cause seen in up to 10% of the pregnancies.^[6] The incidence of PIH varies among different hospitals and within states and countries. In India it contributes nearly 7-10% of all antenatal admissions^[7] and about 14% of maternal deaths.^[8] The prevalence of this disorder increases with advancing age.^[9] Health professionals face the challenge in caring for the PIH patients. Adequate antenatal care, prompt diagnosis and patient counseling can prevent the complications of PIH as well the morbidity and mortality arising from it.^[10] In India factors such as poverty, illiteracy and poor health infrastructure play an important role for such high incidence of maternal deaths due to PIH.

Pre-eclampsia is one of the major causes of maternal and perinatal morbidity and mortality worldwide.^[6] This is due to the various complications associated with pre-eclampsia and eclampsia such as preterm labor, IUGR, IUD, accidental hemorrhage, hepatic rupture, pulmonary edema, cardiac failure, HELLP syndrome (3%), disseminated intravascular coagulation (3%), renal failure (4%), adult respiratory distress syndrome (3%) and cerebral

hemorrhage (1.2%).^[11] Overall perinatal mortality is increased five-fold in patients of pre-eclampsia with iatrogenic prematurity being the main culprit.^[12]

Risk factors for preeclampsia are: multiple gestation, chronic hypertension, diabetes, kidney disease or organ transplant, first pregnancy, obesity, age more than 40 or under 18 years, family or past history of preeclampsia, polycystic ovarian syndrome, autoimmune disorders such as SLE, rheumatoid arthritis, sarcoidosis and multiple sclerosis, In-vitro fertilization, hydatidiform mole^[13] etc. A few out of these are modifiable. Defective placentation remains the major etiology behind preeclampsia.

Lack of adequate knowledge regarding this life threatening disorder in the public due to illiteracy, false beliefs, lack of awareness campaigns, poverty, poor health infrastructure etc. are responsible for the maternal and perinatal deaths worldwide due to PIH. If women acquire sufficient knowledge of the signs and symptoms of PIH through awareness campaigns, conferences and workshops majority of them will immediately go to the hospital without delay for prompt treatment. The government authorities, researchers and health professionals need to work together to provide the information to that section of the society who needs it the most.

MATERIALS AND METHODS

Study

This is a descriptive study carried out on the knowledge, attitude and belief of pregnant women attending Sir Sunderlal Hospital, BHU, Varanasi towards pregnancy induced hypertension. A sample size of 100 women was taken.

Method

A questionnaire was presented to the women in the study. To bring out their answers, values such as yes and no; and choose from options were used.

Data analysis

Data obtained was collected and transferred on an excel-sheet. The information was then analyzed using percentages.

RESULTS**Table-1: Socio-demographic variables of the women**

Socio-demographic variables	Number of women n=100
Age in years	
14-19	10
20-29	62
30-39	28
Educational qualification	
Illiterate	5
Matriculation	10
Intermediate	35
Graduation	50
Residence	
Rural area	36
Urban area	64
Occupation	
Housewife	76
Vendor	2
Farmer	12
Teacher	10
Socio-economic status	
Low	38
Middle	56
High	6

Majority of the women in the study were between 20-29 years. By occupation majority were housewives. Fifty women had completed graduation and only 5 were illiterate. Sixty four women belonged to urban areas and 36 were from rural areas. Majority of the women belonged to the middle socio-economic class.

Table: 2 Level of knowledge about blood pressure check-up in pregnancy and awareness about PIH. n=100

Questions	Number of women answered yes	Number of women answered no
Is blood pressure check-up required during pregnancy?	60	40
Have you heard about rise in BP during pregnancy?	18	82

Forty percent women in the study group did not have knowledge regarding antenatal BP checkup and 82% had not heard about PIH.

Table: 3 Knowledge about association of PIH with other conditions in pregnancy. n=100

Question: Have you heard about rise in BP during pregnancy associated with	Number of women answered Yes	Number of women answered No
Gestational DM	10	90
Renal disease	13	87
Multiple pregnancy	5	95
Obesity	12	88

Knowledge regarding association of PIH with Gestational DM, Renal disease, Multiple pregnancy and obesity was absent in 90%, 87%, 95% and 88% of the women in the study group respectively.

Table: 4 Attitude of women on developing features of PIH. n=100

Questions	Number of women who answered		
What would you do if you develop the following symptoms in pregnancy?	Do nothing	Seek Medical care	Rest at home
Edema of legs	5	90	5
Constant headache	0	95	5
Upper abdominal pain	0	87	13
Breathlessness	0	100	0
Palpitations	0	100	0
Blurring of vision	0	98	2

Ninety percent of the respondents would visit the hospital when they notice swollen legs, while 5% would prefer rest at home and another 5% would do nothing about it. Ninety five percent of the respondents would seek medical care if they develop constant headache, while 5% would prefer rest at home. Eighty seven percent of the respondents would seek medical care if they developed upper abdominal pain while 13% would prefer rest at home. All the respondents would visit the hospital if they developed breathlessness or palpitations. Ninety eight percent of the respondents would seek medical care on developing blurring of vision and 2% would prefer rest at home.

Table: 5 Belief on development of seizures in pregnancy. n=100

Question	Number of women who answered Yes	Number of women who answered No
Can bad spirits be involved in the development of seizures in pregnancy?	6	94

Six percent women in the study group believed that bad spirits may be involved in the development of seizures in pregnancy.

DISCUSSION

Pregnant women's knowledge about pregnancy induced hypertension

Results on the knowledge of pregnant women about PIH indicate that 82% have never heard about PIH and 40% were not aware of the importance of BP check-up in pregnancy. Knowledge regarding association of PIH with Gestational DM, Renal disease, Multiple pregnancy and obesity was absent in 90%, 87%, 95% and 88% of the women in the study group respectively. In a similar study by Oyira et al conducted in Nigeria, 82% of the women had a formal lecture on pregnancy induced hypertension, majority at a hospital, hence these women had knowledge on PIH.^[14]

Pregnant women's attitudes about features of pregnancy induced hypertension

The results indicate that majority of the women would seek medical care on developing symptoms of PIH. Ninety percent of the respondents would visit the hospital when they notice swollen legs, 95% if they develop constant headache, 87% if they develop upper abdominal pain, 98% if they developed blurring of vision and all if they developed breathlessness and palpitations. In the study by Oyira et al 80% of the women would visit the hospital on noticing swollen legs.^[14]

Pregnant women's belief about features of pregnancy induced hypertension:

The results indicate that 6% believed that bad spirits may be involved in the development of seizures and PIH in pregnancy.

Based on these findings the following conclusions were arrived at:

Most of the women who attended the hospital did not have the knowledge regarding PIH; however majority of them would seek medical care if they develop symptoms of PIH.

RECOMMENDATIONS

Based on this study, the following recommendations may be proposed:

- i) Health care professionals should strive to create knowledge among pregnant women by conducting workshops and camps to create awareness. Distribution of booklets, pamphlets, charts, regularly to all out patients of hospitals and health clinics in rural and urban areas can also help.

- ii) More health centers should be established in the rural areas so that pregnant women can have access to them health preventing them from seeking delayed medical care.

CONCLUSION

In conclusion, Preeclampsia is a significant maternal health problem in India, but still pregnant women lack awareness regarding this condition and also the need for regular antenatal BP check-ups. Although it is not completely preventable, modifiable risk factors exist. Thus knowledge and awareness among the pregnant women regarding PIH; and availability of easily accessible and affordable health care services will encourage them for early antenatal check-ups and can help to reduce the maternal and neonatal morbidity and mortality associated with it.

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