

## **Knowledge, Attitude and Preventive Practices Towards Pregnancy Induced Hypertension among Pregnant Women in General Hospital Calabar, Cross River State, Nigeria**

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**Abstract:** The primary aim of this study, was to find out the knowledge, attitude and preventive practices towards pregnancy induced hypertension among pregnant women in General Hospital Calabar, Cross River State, Nigeria. The research was made based on the following research questions: what is the level of pregnant women's knowledge about pregnancy induced hypertension? What are the pregnant women's attitude and believes about pregnancy induced hypertension? The population involved a total of 200 pregnant women and a sample of 100 pregnant women were used for the study. The research instrument used in data collection was a questionnaire which was administered to 100 pregnant women. Their responses were analysed using descriptive statistics. The study showed that, about 82% of the women had formal lecture on pregnancy induced hypertension, hence have knowledge of pregnancy induced hypertension. Eighty percent of the women visit the hospital on noticing that they have swollen legs, 84% of the women believes that pregnancy induced hypertension could be prevented through regular antenatal care. Therefore, the study showed a positive correlation between adequate knowledge and positive attitude as the condition could be prevented.

**Key words:** Knowledge, attitude, preventive practices, pregnancy induced hypertension

### **INTRODUCTION**

Pregnancy induces hypertensive disorders are the most common medical complications of pregnancy in Nigeria with a reported incidence ranging between 70-80%. The incidence varies among different hospitals, clinics, health centres, communities and countries. In Nigeria, the incidence of preeclampsia is reported to be 9-10% of the pregnancies. Pregnancy induce hypertension strikes mostly the primigravidae after 20th to 24 weeks of gestation and frequent occurrences are often seen at term (Jones, 1992).

Recent figures indicate that globally, 629,000 women die in pregnancy induce hypertension each year. The effect of maternal death on household income, household productivity and household disintegration has been widely described.

Moreso, maternal deaths cause one million children to become motherless annually. Therefore, concern for the significant mortality and morbidity associated with pregnancy induced hypertension is prominent on global health agendas (Ojo and Briggs, 1992).

Recent evidence suggests that part of the problem that is not showing reductions in maternal mortality is as

a result of inadequate knowledge, negative attitude and lack of preventive practice on the part of the patients believing so much on juju. Studies have demonstrated that health system factors include service delivery, equipments and inter-personal aspects of care also play an important part. Beliefs and negative attitude may also be related to the issues of pregnancy induce hypertension. Maternal deaths could be prevented if women were able to have adequate knowledge and positive attitude towards attending antenatal clinic living their practices of juju and then, utilize good quality services, especially when complications arise (Calder and Dunlop, 1993).

However, in reality, most women experience serious barriers to services or even if they do reach them, the services themselves are often of insufficient quality on the part of health personnel. Health personnel is now widely advocated as the single most crucial intervention to reduce maternal mortality owing to pregnancy induce hypertension. The rationale is based upon the potential for trained health workers to manage cases appropriately and prevent complications.

Usually, there are three primary characteristics of this condition, including the following high blood pressure a

blood pressure reading higher than 140/90 mm Hg, or a significant increase in one or both pressures, protein in the urine and edema (swelling).

It is also, known to be associated with hydatidiform mole, multiple pregnancy and maternal condition where, there is greater mass of placental tissue (Bennett and Brown, 1999).

With the above evidences if women should have a good knowledge of the sign and symptoms of the pregnancy induce hypertension through antenatal health talk, conferences and workshops a good number of them will immediately go to the hospital without delay for prompt attention. Therefore, this will improve the women's attitude toward antenatal clinic and their beliefs will also be changed towards pregnancy induce hypertension.

This study was undertaken, with the objective of investigating women's knowledge, attitude and preventive practice towards pregnancy induce hypertension in General Hospital Calabar Cross River State, Nigeria.

According to Bennett and Brown (1999), the primary event causing pregnancy induced hypertension is not known but evidence accumulated over the past few years indicate that abnormal placentation may be one of the initial event in the disease process.

Calder and Dunlop (1993) holds that pregnancy induced hypertension can be diagnosed in women who are normotensive in the first 20 weeks of pregnancy and who then develop hypertension in the second half of pregnancy. When this occurs without proteinuria, it is classed as mild/moderate pregnancy induced hypertension, if it occurs in association with significant proteinuria, is not a constant feature of severe disease, persistent elevation of diastolic blood pressure to >110 mm Hg should also be considered as severe pregnancy induced hypertension.

Pregnancy induced hypertension has evoke tremendous negative and fearful attitudes since its global emergence.

According to Quixley and Cameron (1979) pregnancy induced hypertension is becoming less as the general health of the population has improved and antenatal supervision has been universally accepted. Pregnant women usually have negative attitude about pregnancy induced hypertension especially when they become aware that their blood pressure has increased from the normal range. This is because of the foetal mortality that is at about 45% and also mothers health which is at stake.

Calder and Dunlop (1993) assert that pregnancy induced hypertension has traditionally been regarded as a disease of primigravidae, showing that the risk of severe disease was 15 times greater in a first than in a second pregnancy. This study suggested that a previous

pregnancy was protective with regard to the development of proteinuric pre-eclampsia. Milder forms of the disease are also more common in primigravidae. Again an association exists between maternal age and pregnancy induced hypertension with the incidence rising sharply after age 35. Another group of women with negative attitude concerning pregnancy induced hypertension are women with twin pregnancy and the knowledge usually inflicts fear.

Although, it is doubtful if pregnancy induced hypertension can be prevented, the incidence appears to be reduced if the patient restricts her weight gain to about 0.5 kg/week in the second half of pregnancy, if she limits her intake of excessive salty foods and if she regularly attends for antenatal examinations, when the blood pressure is estimated and the urine examined for the presence of protein. If the patient persistently continues to gain >0.5 kg per week, she should be given dietary instruction and should limit her carbohydrate intake. But provided her salt intake is not excessive, salt intake need not be limited. Oedema in a pregnant woman, with no associated hypertension or proteinuria, is of no consequence, unless she has the oedema on waking. Diuretics should only be given if the oedema is causing marked discomfort. If diuretics are used, the patient should be seen after an interval of 3 days as persisting oedema requires further investigation. The diuretics should not be used for periods exceeding 5 days (Jones, 1992).

Jones (1992) also, pointed out other nursing responsibilities towards the prevention of pregnancy induced hypertension. He pointed out that a significant rise in blood pressure, or excessive weight gain, should be reported. Other preventive nursing responsibilities includes, regular observation of the patients condition, bed rest, urine testing for protein and acetone.

Rose (2005) reviewed and revised why your blood pressure is measured at almost every prenatal visit. And why your urine is checked for protein. Your practitioner is watching for a condition of pregnancy known as pregnancy induced hypertension. It is also, called toxemia or pre-eclampsia. Blood pressure changes throughout pregnancy. Most expectant mothers experience a decrease in blood pressure in the second trimester. Later, in the pregnancy, blood pressure usually returns to normal, but about 7% will overshoot the mark pressure of 140/90 mm Hg or above is typically considered to be elevated. Some women have blood pressure in the range even when not pregnant. For them, a high blood pressure during pregnancy may be less of a concern, since they always run high. On the other hand, if a woman's blood pressure usually runs low, a rise in blood pressure during pregnancy (even if the pressure stays below 140/90 mm Hg) might still be considered elevated.

**MATERIALS AND METHODS**

**Research method/design:** This is a descriptive study carried out on the knowledge, attitude and preventive practices of pregnancy induced hypertension on women who attended antenatal clinic at General Hospital, Calabar.

**Research setting:** The setting of the study, is the General Hospital, Calabar. It is the secondary health institution located in the Calabar Municipality of Cross River State. It was founded in 1991 as a full flesh hospital.

In front of the hospital is the Mary Slessor way, on the west is the Psychiatry school and College of Health Technology, on the east, is the Cross River State Institute of Management, while on the south is bounded by Amika Layout. The staff strength of its nursing staff amounts 198 though some are on study leave and the hospital is healed by the chief executive physician.

**Scope of the study:** The study will be carried out in the antenatal section of General Hospital, Calabar and on women of childbearing age, between the ages of 14 and 49 years.

**Research population:** The target population used includes all pregnant women who attended antenatal clinic at General Hospital, Calabar. Totaling 200, when the study was done.

**Sample and sampling technique:** A sample size of 100 was considered.

**Sampling technique:** Using balloting technique among 200 population, 100 picked yes while others picked no.

**Instrumentation:** A close ended questionnaire was presented using values such as yes and no, choose from options. This is to bring answers to the researchers questions and objections.

**Administration of instrument:** The questionnaires were administered to the women personally through face-to-face contact. These were collected from the women the same day, but after some hours. Respondents were assured of anonymity and confidentiality to ensure honest response.

The items were presented on a good paper with clean computer print, which made it clearer and demanded less time to complete.

**Procedure for data analysis:** Data obtained was collected and transferred to a spreadsheet for analysis. The information was then analyzed using percentages.

**RESULTS AND DISCUSSION**

This chapter is focused on the general description of data research question by research question presentation of results and discussion of the results.

**General description of data:** The sample size for the research was made up of 100 respondents, all pregnant women who attended antenatal clinic at the General Hospital, Calabar.

Their age distribution showed that 12 of them were aged 14-19, 22 were aged 20-29, 44 were 30-39 years and 22 were aged 40-40 years. Eighty one of them were Christians, 14 were Muslims and 5 had no religion. Twenty two of them were civil servants, 15 were farmers, 28 were teachers, 15 were traders and 20 were house wives.

On their educational qualification, 26 of them had elementary education, 38 of them had secondary education and 36 of them had tertiary education.

**Research question by research:** Question presentation of results.

**Research question 1:** What is the level of pregnant women’s knowledge about pregnancy induced hypertension?

This research question shall be answered using the data in Table 1 and 2.

Results in Table 1 indicates that 82 (82%) of the pregnant women have had a formal lecture on pregnancy induced hypertension while only 18 (18%) said they have never had any formal lecture on pregnancy induced hypertension.

Responses in Table 2 indicate that 60 (60%) of the respondents had their first lecture on pregnancy induced hypertension at the hospital, 10 (10%) had it at village gatherings and 12 (12%) had it at the market place.

Table 1: Responses on whether pregnant women had knowledge about pregnancy induced hypertension

Question	Responses			
	Yes	(%)	No	(%)
Have you had any formal lecture on pregnancy induced hypertension?	82	82	18	18

Table 2: Responses on where lecture on pregnancy induced hypertension were held

The place where lecture held	Respondents	(%)
Hospital	60	60
Village gathering	10	10
Market place	12	12
Have not had the lecture	18	18
Total	100	100

**Table 3: Responses on pregnant women's action when they notice that they have swollen legs**

What pregnant women do when they have swollen legs	Respondents	(%)
Visit the hospital	80	80
Visit juju priest	5	5
Visit traditional birth attendants	15	15
Total	100	100

**Table 4: Responses on the attachments of swollen legs to juju effect**

Question	Responses			
	Yes	(%)	No	(%)
In your community, do you attach swollen legs to juju?	60	60	40	40

However, 18 (18%) said they have not any lecture on pregnancy induced hypertension.

From these results, the question of whether pregnant women have a knowledge of pregnancy induced hypertension can be said to be answered by saying yes because from the results 82% of the women said they have had formal lecture on pregnancy induced hypertension and that is a good percentage for generalization.

**Research question 2:** What are the pregnant women's attitude and believes about pregnancy induced hypertension?

This research question shall be answered using the data in Table 3 and 4.

Results in Table 3 indicate that 80 (80%) of the respondents visit the hospital when they notice that their legs are swollen 5 (5%) visit juju priest and 15 (15%) visit traditional birth attendants.

In Table 4, 60 (60%) of the respondents said in their community swollen legs are attached to juju effect, while 40 (40%) said they do not.

Responses in the Table 2 show that majority of the respondents react to swollen legs by visiting the hospital, however, there are still some who do not see the hospital as a solution and will rather prefer to go to juju priest and traditional birth attendants. In the case of believes, even though most of them go to hospitals for treatment about 60% still believe that swollen legs have to do with juju effect.

**Research question 3:** Do pregnant women make conscious effort or take preventive measures against pregnancy induced hypertension?

This research question shall be answered using the data presented in Table 5 and 6.

Responses in Table 5 indicate that 84 (84%) of the respondents believe that pregnancy induced hypertension can be prevented while 16 (16%) believe that it can not be prevented.

**Table 5: Responses on if pregnancy induced hypertension can be prevented**

Question	Responses			
	Yes	(%)	No	(%)
Do you think pregnancy induced hypertension can be prevented?	84	84	16	16

**Table 6: Ways of preventing pregnancy induced hypertension**

Ways of prevention	Respondent	(%)
Antenatal care	62	62
Rest	12	12
Avoiding stress	14	14
Avoiding intake of excess salt	12	12
Total	100	100

On the issue of ways of preventing pregnancy induced hypertension Table 6 indicate that 62 (62%) of the respondents said they use antenatal care 12 (12%) said through rest, 14 (14%) said this can be done by avoiding stress and 12 (12%) said it can be done by avoiding intake of excess salt.

These responses can answer the research question by saying that pregnant women make conscious effort or take preventive measure against pregnancy induced hypertension.

## CONCLUSION

**Pregnant women's knowledge about pregnancy induced hypertension:** Results on the knowledge of pregnant women about pregnancy induced hypertension indicate that most of the pregnant women were aware. This result is supported by Calder and Dunlop (1993) as they said that women's knowledge about pregnancy induced hypertension is often substantial even before medical intervention because of their regular attendance at antenatal clinic. According to them, it can be diagnosed in women who are normotensive in the first two weeks of pregnancy.

**Pregnant women's attitude and believes about pregnancy induced hypertension:** Results on pregnant women attitude and believes about pregnancy induced hypertension indicate that 80% of the women visit the hospital when they notice that their legs are swollen and on believe about 60% believe that swollen legs has to do with juju i.e., superstition. This is supported by Quixley and Cameron (1979) when they observed that pregnancy induced hypertension was becoming less as the general health of the population has improved, they attributed this to regular visits to hospitals by those affected. Calder and Dunlop (1993) also support this result by saying that pregnancy induced hypertension has traditionally be regarded as a disease of primigravidae.

### **Preventive measures against pregnancy induced hypertension:**

Results on preventive measure taken by pregnant women to guard against pregnancy induced hypertension indicate that 62% use antenatal care, 12% do it by resting 14% by avoiding stress and 12% by avoiding intake of excess sugar. This result is supported by Jones (1992) when he pointed out that nurses should ensure that pregnant women's blood pressure and excessive weight gain should be checked on a regular basis. He also advised pregnant women to always ensure that they observe bed rest, urine test for protein and acetone. Rose (2005) also supports this result by stating why blood pressure is measured at almost every prenatal visit and why urine is also checked for protein to be as a check to find out if there is any condition that can lead to pregnancy induced hypertension so as to control it before it gets bad.

Based on these findings the following conclusions were arrived at:

Most of the women, who attend antenatal clinic at the General Hospital, Calabar have a knowledge of pregnancy induced hypertension and this can help in its control if they are properly guided.

The women prefer to visit the hospital when they notice any symptom of pregnancy induced hypertension. This is a good idea because if most of them do this others who do not have that knowledge will learn from them.

Since, about 84% of the women believe that pregnancy induced hypertension can be prevented and also know some of the ways that can be used in preventing it, it is believed that in no length of time pregnancy induced hypertension will be controlled and it will be a thing of the past.

### **RECOMMENDATIONS**

Considering the findings obtained in the study some recommendations have been made which may have some implications. They include the following:

- Health workers should embark on a more intensive education of pregnant women on the symptoms of pregnancy induced hypertension
- Government should establish more health centres in the rural areas so that pregnant women will have access to health facilities which will discourage them from going to traditional birth attendants for their treatment

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