

PREVALENCE OF PREGNANCY INDUCED HYPERTENSION AMONG PREGNANT WOMEN ATTENDING ANTENATAL IN SELECTED TERTIARY HEALTH INSTITUTIONS IN IMO STATE

Stella C. Ndugbu¹, C. C. N. Vincent¹, Nkiru Okoroafor¹, Adanma Nwagwu Solomon¹, Anthonia Emesowum¹, Josephine Egbuchelem¹, Clementina Ezenwuba¹ and Emmanuel Ifeanyi Obeagu^{2*}

¹Department of Nursing Science, Imo State University, Owerri, Imo State, Nigeria.

²Department of Biomedical and Laboratory Science, Africa University, Zimbabwe.



*Corresponding Author: Emmanuel Ifeanyi Obeagu

Department of Biomedical and Laboratory Science, Africa University, Zimbabwe.

Article Received on 10/02/2025

Article Revised on 02/03/2025

Article Accepted on 21/03/2025

ABSTRACT

This study ascertained the prevalence of pregnancy induced Hypertension and associated factors among pregnant women attending antenatal in selected tertiary health institutions in Imo State. Guided by five research questions and three corresponding hypothesis, the study adopted a retrospective survey design. The population of the study comprised 1760 pregnant women visited antenatal clinic in three selected tertiary hospitals from 2021-2023. There was no sampling technique used, pregnant women records of the three tertiary institutions, was used to ascertain the prevalence, highest age group, personal factors, socio economic factors, cultural and environmental factors associated with pregnancy induced hypertension was used in the study. Data was entered and analyzed using statistical software SPSS for windows V 26.0. The result showed that the prevalence rate of pregnancy induced hypertension most of the study subjects were 11.50%. Conclusively majority of pregnant women suffer from pregnancy induced hypertension. In pregnancy, this complication has a dual danger as both life of the mother and that of fetus is highly at risk.

KEYWORDS: *prevalence, pregnancy, hypertension.*

INTRODUCTION

Hypertensive disorder in pregnancy affects up to 2% -8% of pregnancies and is among the leading cause of maternal and neonatal morbidity and mortality worldwide, particularly in developing countries and Nigeria.^[1-4] Recent report from the World Health Organization^[5] estimates that pregnancy- induced hypertension is directly responsible for 70,000 maternal deaths annually worldwide. Pregnancy- induced hypertension is not an attempt but a condition at pregnancy where there is an increase in blood pressure (maternal blood pressure) above normal range (100-120/80mmHg) in the normal pulse rate of 72 beats/minutes. Pregnancy induced hypertension is a major contributor to maternal and prenatal morbidity and mortality. In sub-Saharan Africa, about 15% of maternal deaths are attributable to hypertension, making it the second leading cause of maternal mortality.^[6]

According to WHO^[7], the commonest cause of Pregnancy induced hypertension are multiple pregnancies, history of chronic hypertension, gestational diabetes, fetal malformation, obesity, extreme maternal age (less than 20 or over 40 years), history of Pregnancy

induced hypertension in previous pregnancies and chronic diseases like renal disease, diabetes mellitus, cardiac disease, unrecognized chronic hypertension, positive family history of Pregnancy induced hypertension which shows genetic susceptibility, psychological stress, alcohol use, rheumatic arthritis, extreme underweight and overweight, asthma and low level of socioeconomic status.

Early identification of pregnancy- induced hypertension (and if possible prevention) is a core tenet of adequate management. Prevention of pregnancy induced hypertension may be primary, secondary, or tertiary.^[8] Primary prevention involves avoiding pregnancy in women at high risk for PE, modifying lifestyles or improving nutrients intake in whole population in order to decrease the incidence of the disease. Therefore, probably the majority of cases of PE are unpreventable.^[9] Secondary prevention is based on interruption of known pathophysiological mechanisms of the disease before its establishment. Recent efforts have focused on the selection of high risk women and have proposed an effective intervention, as early as it is possible, in order to avoid the disease or its severe complications.^[10]

Tertiary prevention relies on using treatment to avoid PE complications. Magnesium sulfate, for example, is the drug of choice for reducing the rate of eclampsia, but at least 71 women would need to be treated to prevent one case of eclampsia. Therefore, tertiary prevention can be difficult to achieve without exposing many to possibly unnecessary risks.^[9] Given the above, the purpose of this paper is to review this recent evidence on the primary and secondary prevention of pregnancy induced hypertension.^[11]

RESEARCH METHOD

Research Design

The study adopted a retrospective design.

Study Area

The study was carried out in selected tertiary hospital in Owerri Zone in Imo state.

Target population

The population studied on this research work is one thousand, seven hundred and sixty (1,760) pregnant women who visited antenatal clinics in three different selected tertiary hospitals from 2021-2023 (Hospital Administration, 2023).

Sample size / Sampling techniques

Due to the nature of the study which is retrospective in nature, the researcher employed census sampling whereby the entire pregnant women medical folder from 2021 to 2023 in tertiary clinics in Imo state were

included as the sample size. In other words, the entire population of 1760 pregnant women from 2021 to 2023 was used for the study.

Method of Data Collection

The researchers, with the due permission of the management of the various hospitals retrieved the records of pregnant women who attended antenatal clinics in the tertiary hospitals in Imo State from 2021 to 2023.

Method of Data Analysis

The responses on the pregnant women's hospital records were arranged sequentially. The data collected were organized and analyzed using tables, frequencies and percentages. The odds ratio from logistic regression analysis was used to determine the significant relationship between the variables.

Ethical Consideration

A letter of introduction was collected from the Head, Nursing science Department of Imo State University (Orlu Campus). The consent of the hospital management was sought for retrieval of the records of pregnant women from 2021 to 2023. The researcher ensured absolute confidentiality of all private information of the subjects. In order to conform to the ethical and legal standards of a scientific investigation, the relevant authorities of the specialty hospital scrutinized the proposal before granting permission for records retrieval.

RESULTS

Table 1: Demographic data of respondents.

Variable	Category	Frequency =1760	Percentage (%)
Age bracket (in years)	20-25	468	26.60
	26-29	194	11.00
	30-35	709	40.30
	36 and above	389	22.1
Marital status	Single	181	10.30
	Married	1475	83.80
	Widowed	0	0
	Divorced	104	5.90
Level of education	None	0	0
	Primary	0	0
	Secondary	910	51.70
	Tertiary	850	48.30
Gravida	Primi	546	31.00
	Multi	1214	69.00
Gestation week at time of registration	0-11 weeks	126	7.20
	12-29 weeks	231	13.10
	30-40 weeks	1403	79.70

Data on table 1 show the demographic characteristics of the respondents. From the data, it is seen that the highest age bracket in this study is 30-35 years (40.30%). Majority of the respondents are married (83.80%). More of the respondents are secondary school leavers

(51.70%). 31.00% of the respondents are having their first babies while 69% are multiparous. Majority of the respondents are in their 30-40 weeks of gestation (79.70%).

Table 2: Prevalence rate of pregnancy induced hypertension among pregnant women attending antenatal in tertiary health institutions from (105).

Year	Frequency of pregnant women who attended antenatal clinic	Frequency of pregnant women diagnosed with PIH	Percentage
2021	620	76	12.30
2022	540	52	9.60
2023	600	74	12.30
Total	1760	202	11.50

Data on table 2 show the prevalence of pregnancy induced hypertension among women attending antenatal clinic in three tertiary hospitals in Imo State from 2021-2023. The data show that a total number of 1760 pregnant women attended antenatal clinics from 2021 to 2023. The data further show that out of the 1760 women attending antenatal, 202 were diagnosed with pregnancy induced hypertension. The percentage prevalence is calculated as 11.50%. This implies that the prevalence of pregnancy induced hypertension among women attending antenatal in tertiary health clinics in Imo state is 11.50%.

DISCUSSION

The findings from research question one reveals the prevalence rate of pregnancy induced hypertension among pregnant women attending antenatal clinic in Imo state. The findings reveal that the prevalence rate of pregnancy induced hypertension in Imo state from 2021-2023 is 11.50%. This is because there are many cases of women who are predisposed to factors which put them at risk of developing pregnancy induced hypertension even without their information. It is in line with the findings are that of Carson^[12], who recorded a pregnancy induced hypertension prevalence rate of 13.3% among pregnant women in the United states in 2016.

CONCLUSIONS

Hypertension is serious medical condition that is life threatening irrespective of age, race, tribe, religion, class or gender as many people of all ages suffer from it. In pregnancy, this complication has a dual danger as both life of the mother and that of fetus is highly at risk. Hypertension in pregnancy with it attending high mortality rate is common among pregnant mothers with diabetes mellitus.

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