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Research Article

**OCCURRENCE RATE OF HYPERTENSION DURING  
PREGNANCY: A CROSS SECTIONAL SURVEY**Dr Imran Khan<sup>1</sup>, Dr Huma Tariq<sup>2</sup>, Dr Salma Ghauri<sup>3</sup><sup>1</sup>Islamabad Medical and Dental College, Islamabad<sup>2</sup>Sahiwal Medical College, Sahiwal<sup>3</sup>Sargodha Medical College, Sargodha**Article Received:** November 2019 **Accepted:** December 2019 **Published:** January 2020**Abstract:*****Objective:** To determine the prevalence of hypertension in pregnant ladies throughout the pregnancy period.****Study Design:** Cross sectional study****Place and Duration of Study:** This study was conducted at the Services hospital, Lahore for the duration of one year from May, 2018 to April, 2019.****Materials and Methods:** 100 pregnant women with gestational age from 20 weeks ahead were contained. Gestational age was determined by ultrasound and from the concluding menstrual period. Pregnancy-induced hypertension was determined by measuring the blood pressure and based on clinical examination. The data was registered in a pre-designed table, entered and analyzed by using SPSS 20.****Results:** Our study found that 57% of pregnant women who visited the hospital clinic were found with hypertension. The average age of the respondents was  $\pm 31.54$  and Standard Deviation of 3.18. Most of the respondents about (64.5%) were form the middle-aged group (26-35 years old), the highest age of childbearing.****Conclusion:** Pregnancy is associated with a complex threat of pregnancy-induced hypertension. The mothers experience most of the complications during pregnancy and childbirth. Early booking, good care throughout pregnancy and childbirth and the rational use of contraceptive services can prevent complications from occurring.****Key Words:** Pregnancy; Complications; Hypertension.***Corresponding author:****Dr. Imran Khan,**

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**INTRODUCTION:**

Pregnancy induced hypertension are the term used to describe the different stages of the same syndrome [1]. Preeclampsia is pregnancy-induced hypertension alongside involvement of renal system and proteinuria [2]. Preeclampsia progresses to Eclampsia when seizures appear along with above symptoms. Arterial hypertension is a problem in about 8 to 10% of pregnant women and is one of the causes for the increased risk of prenatal complications, which include maternal or child mortality [3]. Among different varieties of pregnancy - induced hypertension, pre-eclampsia and eclampsia are responsible for most of the increased blood pressure in pregnant women [4].

Pregnancy-induced hypertension remains a major cause of maternal prenatal disease and death [5]. US Congressional obstetricians and gynecologists define it as a continuous blood pressure of 140 mmHg or a higher and diastolic 90 mmHg or more [6]. Signs and Symptoms of PIH is usually after 20 weeks of gestation. Hypertension in pregnancy is associated with CVS disorders later in life [7,8]. It has been suggested that blood pressure monitoring in women who have experienced high blood pressure early in pregnancy after puerperium helps in detection and prevention of various CVS disorders. It may hang on the relative hyper and organic status and additional modifications in vascular endothelial function, carbohydrate and lipid metabolism, which have been shown to correlate with previous history of hypertension or otherwise to healthy women [9]. Per the National Heart, Lung and Blood Institute of Pregnancy; many possible reasons of high blood pressure include overweight or failing to remain active, smoking, drinking, high maternal age during the first pregnancy that is more than 35 years, and manifold fetuses [10].

The pathogenesis is determined by the interface between the surface endothelial cells in the uterine placental circulation, motherly platelets and hostile action by these tissues producing eicosanoids [11]. Our country is comparable to about 75% of other evolving countries where local co-ordination is lacking in basic health services and the concept of prenatal care is obscure [12]. Consensus on the "causes and frequency of pregnancy-induced hypertension" is not fully agreed and immune factors to see trigger

placental disease genetic arrangements leading to maternal vulnerability [13]. In Bangladesh, the study led to various complications like eclampsia, dystocia, postpartum hemorrhage and other labor complications associated to PIH [14].

**MATERIALS AND METHODS:**

This cross-sectional study of descriptive crossover was performed at the Medical Clinic Services hospital, Lahore for the duration of one year from May, 2018 to April, 2019. 100 pregnant women with gestational age from 20 weeks ahead were contained. Sampling was performed using a non-probabilistic sampling technique.

Inclusion criteria was as 100 pregnant women with gestational age from 20 weeks ahead were contained. Gestational age was determined by ultrasound and from the concluding menstrual period and age of 15 to 40 years. Exclusion criteria was as patients with history of DM, RA factor were not included. Data was collected from all study variables by using open and closed ended questions of self-administered questionnaires. Accessed and analyzed the complete data on SPSS version 20.

**RESULTS:**

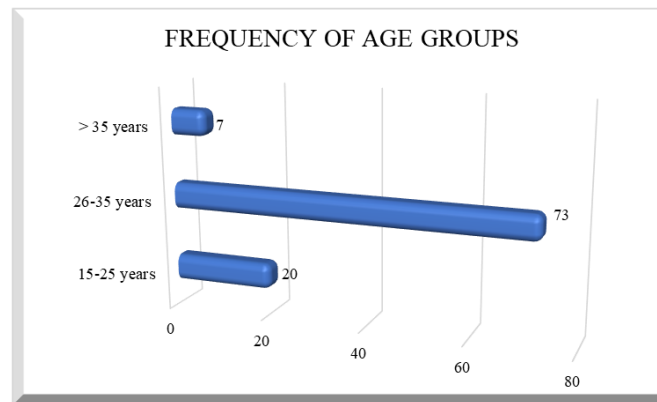
Our study found that 57% of pregnant women who visited the hospital clinic were found with hypertension. The average age of the respondents was  $\pm 31.54$  and Standard Deviation of 3.18. Most of the respondents about (64.5%) were form the middle-aged group (26-35 years old), the highest age of childbearing.

There were significant differences in the time of the different gestational ages and in the diagnosis of hypertension. High blood pressure was diagnosed more in the 2nd and 3rd trimester.

Many Conflicts found in believes that antenatal checkups help in early diagnosis and management of prenatal hypertension. In the presence of two groups of pregnant women one having antenatal visits and other not, no significant difference was found in between them. An important question rises here whether prenatal checkups are miscarried to determine high blood pressure or they do not consider it significant to determine and treat the hypertension.

**Table No 01: Respondents with Age Groups**

AGE GROUPS	FREQUENCY	%AGE
15-25 YEARS	20	20
26-35 YEARS	73	73
> 35 YEARS	7	7
<b>TOTAL</b>	<b>100</b>	<b>100</b>

**DISCUSSION:**

In this study the prevalence of PIH was seen in 57. Our result compared with studies, such as per an assessment made in Bangladesh, more than 50% of mothers suffer from pregnancy-induced hypertension, eclampsia, dystocia, postpartum hemorrhage and delayed delivery leading to death [14] where, PIH is found to be 20% complicating the pregnancy [15], and in an intercontinental and was found 18% in the native study [16]. In some other studies the population of teenage mothers with PIH found with frequency of 30% and 32% [17,18].

Same magnitude of disease where only group of 70 mothers were involved surprisingly showed the frequency of hypertensive disorders even up to 37% which is lower from our figures [19].

**CONCLUSION:**

The findings of this study elaborate that pregnant women with hypertension are recognized at the end of their gestation with a significant limitation of their proper management. More pregnant women who are opting pregnancies after long duration of their marriage are more sufferers of hypertension. Late diagnosis of Efforts must focus on the strict enforcement of the rules prohibiting marriage in our country. Access to the recognized health services should be recognized.

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