

Preeclampsia and its associated Factors among Pregnant Women

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ABSTRACT

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We aimed to study preeclampsia and its effect on the pregnant woman and the fetus. In this research, we dealt with the definition of the problem of preeclampsia, its symptoms, complications, and the causes that lead to its occurrence, and we found that it is one of the serious diseases that affect the health of the pregnant woman and the fetus. The research consisted of women who visited the obstetrics and gynecology clinic at Alsarayah International Hospital, at Alkhomus city amounting to (80) cases during the period from June to July 2024. As for the research sample, it included all women who had preeclampsia out of the total number of the research community of (50) cases, and the descriptive approach was used to track this phenomenon and know its causes and how to treat it. Targeted pregnant women in a simple random way. One of the most important symptoms of preeclampsia in pregnant women was swelling of the legs and feet, significant weight gain and high albuminuria. The most common pregnancy period in which preeclampsia occurs is the seventh to ninth month. Premature birth is better treatment to end preeclampsia. The most age group in which preeclampsia occurs is between 25 to 35 years. There is a relationship between the genetic factor and the occurrence of preeclampsia for a pregnant woman.

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Introduction

Preeclampsia is a complication of pregnancy. With preeclampsia, you might have high blood pressure, high levels of protein in urine that indicate kidney damage (proteinuria), or other signs of organ damage [1]. Preeclampsia usually begins after 20 weeks of pregnancy in women whose blood pressure had previously been in the standard range [2]. Left untreated, preeclampsia can lead to serious — even fatal — complications for both the mother and baby [3].

Early delivery of the baby is often recommended. The timing of delivery depends on how severe the preeclampsia is and how many weeks pregnant you are. Before delivery, preeclampsia treatment includes careful monitoring and medications to lower blood pressure and manage complications [4].

Preeclampsia may develop after delivery of a baby, a condition known as postpartum preeclampsia. High blood pressure during pregnancy, which is called pre-eclamps, is defined as a sudden rise in blood pressure accompanied by the appearance of edema protein [5]. It is a multisystemic disorder that affects several organs in the body such as the liver, kidney, brain, placenta, and the inner membranes of cells. This common pathological condition occurs in all developed and developing countries, and symptoms usually begin to appear in the last stage of pregnancy when a woman with normal blood pressure before pregnancy [6].

The study was aimed to shed light on the most important symptoms, causes and methods of diagnosis of preeclampsia. Awareness of pregnant women about the danger of high blood pressure and its effect on the fetus.

Methods

Study design

The descriptive approach was chosen for its relevance to the nature of this study, as it helped us track the problem of high blood pressure during pregnancy and its effect on the pregnant woman and the fetus.

It also made it easier for us to identify the reasons behind this problem through the tools used in the research.

Study sample

The research sample included pregnant women who had preeclampsia and who attended Alsarayah International Hospital, at Alkhomus city, Libya.

Samples was chosen in a simple random way, and the sample size was (50) cases out of the total number of the research community.

Data collection

A questionnaire was adopted as a research tool to collect data and information about the research sample, as it is the best research tool according to the opinion of the

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researchers in such cases. Data was analyzed using descriptive statistics.

Results

Where the study was carried out on (50) cases of pregnant women with preeclampsia, and we recorded their ages and weights, and the month of pregnancy in which the pregnant woman was infected, and it was clarified as follows:

Table 1. Explains the relationship between the months of pregnancy and the rate

Date of pregnancy	Number of infected women	N%
The first to third month	3	6%
The fourth to sixth month	9	18%
Seventh to ninth month	38	78%
Total	50	100%

Through these statistics, it is clear to us that the most common period of pregnancy in which preeclampsia occurs is the period between the seventh and ninth month, due to the increase in the size of the fetus and its increased need for nutrients, which leads to an increase in high blood pressure for the pregnant woman, which poses a great danger to the life of the mother and fetus.

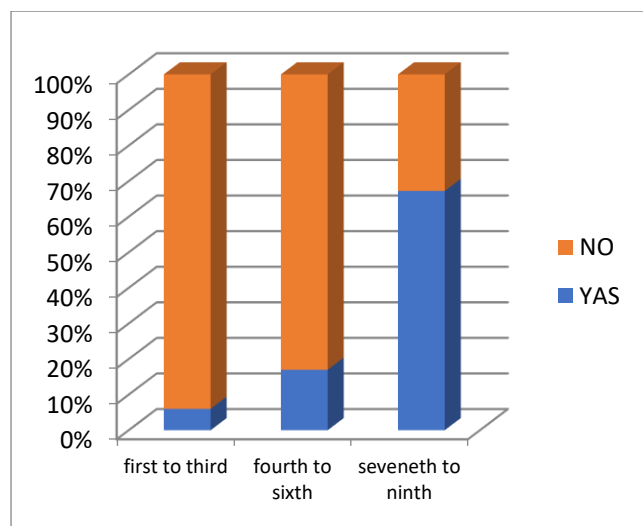


Figure 1. Explains the relationship between the months of pregnancy and the rate

Discussion

Preeclampsia is pregnancy induced hypertension with significant proteinuria. It is one of the major causes of maternal mortality worldwide [8]. It is a multisystemic disorder that affects several organs in the body such as the liver, kidney, brain, placenta, and the inner membranes of cells. This common pathological condition occurs in all developed and developing countries, and symptoms [9].

The current study reported that the most common period of pregnancy in which preeclampsia occurs is the period between the seventh and ninth month, due to the increase in the size of the fetus and its increased need for nutrients, which leads to an increase in high blood pressure for the pregnant woman, which poses a great danger to the life of the mother and fetus.

The association of maternal age and development of preeclampsia was declared in studies conducted at Finland [10] and Iran [11]. With this regard, the current study showed the presence of higher odds of developing preeclampsia in older women. Those pregnant women who were 35 or above had four times more odds of developing preeclampsia than those 25–29 years old. Likewise, those women aged 30–34 years were about three times more odds of developing preeclampsia than those 25–29 years old. This could be explained as woman gets older, she is more likely to have cardiovascular problems. This would particularly happen due to the gradual loss of compliance of the cardiovascular vessels that is mainly associated with ageing of uterine blood vessels and arterial stiffness. In addition, when woman gets older, the haemodynamic adaptation during pregnancy become more difficult [12].

Conclusion

One of the symptoms of preeclampsia in pregnant women is swelling of the legs and feet, noticeable weight gain, and a high percentage of albumin in the urine. The most common period of pregnancy in which preeclampsia occurs is from the seventh to the ninth month. Premature delivery is the best treatment to end preeclampsia. Furthermore, there is a relationship between the genetic factor and the occurrence of preeclampsia for pregnant women.

References

1. WHO, UNICEF, UNFPA, The World Bank, UN Population Division. Trends in maternal mortality:1990 to 2013. In: WHO, UNICEF, UNFPA, The World Bank, UN Population Division;2013.http://apps.who.int/iris/bitstream/10665/112682/2/9789241507226_eng.pdf?ua=1
2. WHO. Fact sheet maternal mortality. Geneva, Switzerland: World Health Organization; 2008.
3. Osungbade KO, Ige OK. Public health perspectives of preeclampsia in developing countries: implication for health system strengthening. *J Pregnancy*. 2011;2011:481095.
4. Khan K, Wojdyla D, Say L, Gülmezoglu M, Van Look P. WHO analysis of causes of maternal death, a systematic review. *Lancet*. 2006;367:1066–74.
5. Steegers E, Dadelszen P, Duvekot JJ, Pijnenborg R. Preeclampsia. *Lancet*. 2010;376:631–41.
6. Asamoah BO, Moussa KM, Stafström M, Musinguzi G. Distribution of causes of maternal mortality among different socio-demographic groups in Ghana; a descriptive study. *BMC Public Health*. 2011;11:159.

7. Garomssa HD, Dwivedi A. Maternal mortality in Ambo Hospital: a five year retrospective review. *Ethiopian J Reprod Health*. 2008;2:2-13.
8. Gaym A, Bailey P, BLuwei P, Admasu K, Gebrehiwot Y. Disease burden due to pre-eclampsia/eclampsia and the Ethiopian health system's response. *Int J Gynecol Obstet*. 2011;115:112-6.
9. Abdella A. Maternal mortality trend in Ethiopia. *Ethiop J Health Dev*. 2010;24(1):115-22.
10. Reeta L, Katri V, Mika G, Seppo H. Preeclampsia complicated by advanced maternal age: a registry-based study on primiparous women in Finland 1997-2008. *BIO MED central*. 2012;12(47):1471-2393.
11. Kashanian M, Baradaran HR, Bahasadri SRA. Risk factors for pre-eclampsia: a study in Tehran, Iran. *Arch Iran Med*. 2011;14(6):412-5.
12. Katwijk CV, Peeters LH. Clinical aspects of pregnancy after the age of 35 years: a review of the literature. *Hum Reprod Update*. 1998;4(2):185-94.