Research Article

KNOWLEDGE ABOUT PREECLAMPSY IN PEOPLE

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A R T I C L E   I N F O

A B S T R A C T

Objective Identify the level of knowledge about preeclampsia that pregnant women have. **Methodology** The design was cross-sectional because it looks for important characteristics of the phenomenon to be studied and because data was collected only once, in a given time. (Burns & Grove, 2012) The population consisted of pregnant women from the Veracruz-Boca del Rio area. The sample consisted of 30 pregnant women who were identified through non-probabilistic sampling at convenience. **Results** the information that pregnant women receive during their pregnancy or before about preeclampsia is important to influence the presence of this or its possible complications, in our study we found that 60% have a high level of knowledge which indicates that there is A good teaching on this subject in the area under investigation. 23.4% of the sample turned out to have a low level of knowledge while 16.6% obtained a medium level of knowledge. **Conclusions** The level of knowledge about preeclampsia in pregnant Veracruz women was high, which corresponded to 60% with more than 20 correct answers, 16.6% medium level with 16 to 20 correct answers and 23.4% low level with less than 16 correct answers. He found that the risk factors that pregnant women know best are age over 35 years, age under 20 years, first pregnancy, obesity, history of hypertension in previous pregnancies and Diabetes Mellitus.

INTRODUCTION

Maternal mortality is unacceptably high, about 830 women die every day from complications related to pregnancy or childbirth. In 2015, some 303,000 deaths of women were estimated during or after pregnancy and childbirth. Virtually all of these deaths occur in low-income countries and most of them could have been avoided (WHO, 2018).

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According to the Clinical Practice Guide for the Detection and Diagnosis of Pregnancy Hypertensive Diseases, hypertensive diseases of pregnancy are classified as: Chronic hypertension, preeclampsia added to chronic hypertension, preeclampsia and gestational hypertension.

Preeclampsia is a serious form of gestational hypertension that without treatment can cause maternal and even fetal death; In the baby, it restricts the flow of blood to the limbs and vital organs and decreases oxygenation to the brain and heart. In case the pregnancy reaches term, it is usually premature and

exposes the baby to an increased risk of suffering cerebral palsy, epilepsy, blindness or deafness (INEGI, 2017).

Some factors that influence preeclampsia are maternal age of 35 years or more, maternal overweight at the beginning of pregnancy, nulliparity and family history of a mother or sister with preeclampsia (Hernández &Magel, 2014).

The first symptoms are: Hypertension (high blood pressure), edema, sudden weight gain, nausea and vomiting, epigastric pain, headache, changes in vision, rapid pulse, vaginal bleeding and ringing in the ears (secretaria de salud, 2010); However, many women fail to recognize these symptoms early.

(Mosquera, 2010) It maintains that the complications of preeclampsia affect the mother-child binomial, therefore it divides them into: 1) maternal complications; Among which we find: placental abruption, Hellp syndrome, acute renal failure due to tubular necrosis, neurological deficit, pulmonary edema and cerebral hemorrhage and 2) fetal complications, of which we can mention: uterine growth restriction, preterm birth, fetal death, Oligohydramnios, caesarean section and Prematurity.

Since preeclampsia is the cause of numerous serious complications during pregnancy, and of mortality in the mother and child binomial, an investigation was conducted to determine the level of knowledge about preeclampsia in pregnant women, in order to determine this level and thus contribute to the corresponding health personnel take health education actions and thereby prevent the occurrence of this condition.

METHODOLOGY

The design was cross-sectional because it looks for important characteristics of the phenomenon to be studied and because data was collected only once, at a certain time. (Burns & Grove, 2012)

The population consisted of pregnant women from the Veracruz-Boca del Rio area. The sample consisted of 30 pregnant women who were identified through non-probabilistic sampling at convenience.

Instrument: The questionnaire is structured in four parts: the first part contains sociodemographic data of pregnant women; the second contains obstetric characteristics; the third contains the sources of information and the fourth measures the level of knowledge about the definition (3 questions), the warning signs and symptoms (7 questions), the risk factors (10 questions) and the prenatal care (7 questions) of preeclampsia. For the purpose of the study, we only worked with the first and fourth part of the questionnaire, omitting the second and third part. Each question was assessed using a type of dichotomous answer, that is, yes or no, giving it the value 1 when the selected answer expresses that the answer of the question is correct, and the value of 0 when the answer is incorrect.

The questionnaire was validated by means of a pilot test and an expert judgment, obtaining a strong reliability (coeficiente de Kuder-Richardson: 0.726).

To find the level of knowledge, the scores awarded to each of the prepositions were added, obtaining the minimum score of 0

and the maximum of 27 points, the scores were calculated using the Estanones scale, where Gauss's bell was used, the arithmetic mean (x), the standard deviation (s) and a constant of 0.75, obtaining scores that allowed determining if the pregnant woman has a level of knowledge: High (greater than 20), medium (from 16 to 20) or low (less than 16). Procedure The study was approved by the Research Commission and the Ethics Committee of the Faculty of Nursing of the Veracruzana University, Veracruz Region. Informed consent was used for the participants. Once this was done, the database was integrated through the SPSS version 20 program, the presentation of results was carried out through descriptive statistics.

Ethical considerations

The study was carried out taking into account the principles of beneficence and non-maleficence thus avoiding any physical or psychological damage, in addition it will be governed under justice and privacy of the information obtained (ConsejoInternacional de Enfermeras, 2017).

RESULTS

The distribution according to age corresponds in greater percentage (40%) to pregnant women who are in the age of 19 to 24 years, 26.6% corresponds to those of 15 to 29 years, 23.4% in ages from 30 to 34 years and only 9.9% are in the age of 35 to 39 years.

Table 1 Age of pregnant women in the conurbation zone Veracruz, Boca del Río

Años	Fr	%
19-24	12	40
25-29	8	26.6
30-34	7	23.4
35-39	3	9.9

Fuente: directa; Inst. NCFIP. n=30

30% of the sample said they had a complete high school, 23.3% are university graduates while 20% are non-university. 13.3% correspond to pregnant women who said they had incomplete secondary school while the other 13.3% said they had incomplete primary school.

Table 2 Degree of instruction of pregnant women in the conurbation zone Veracruz, Boca del Río

	Fr	%
IncompletePrimary	4	13.3
IncompleteSecondary	4	13.3
Completa Secondary	9	30
Non-university superior	6	20
University superior	7	23.3

Source: direct; Inst.NCFIPn=30

The information that pregnant women receive during their pregnancy or before about preeclampsia is important to influence the presence of this or its possible complications, in our study we found that 60% have a high level of knowledge which indicates that there is a good teaching regarding this topic in the area under investigation. 23.4% of the sample turned out to have a low level of knowledge while 16.6% obtained a medium level of knowledge.

Table 3 Level of knowledge of pregnant women in the conurbation zone Veracruz, Boca del Río.

	Fr	%
Lowlevel	7	23.4
Medium level	5	16.6
High level	18	60

Source: direct; Inst. NCFIP n=30

Regarding the knowledge about preeclampsia, the majority of pregnant women correctly stated that preeclampsia only occurs in pregnancy (73.3%) and that it occurs when blood pressure is high (80%) while in terms of whether the presence of protein in urine is an indicator of preeclampsia, 56.7% said yes and 43.3% said it is not.

Table 4 Knowledge of the definition of preeclampsia

		Fr	%
Preeclampsia only occurs in pregnancy	Yes	22	73.3
	No	8	26.7
Preeclampsia occurs when blood pressure is high.	Yes	24	80.0
	No	6	20.0
Presence of protein in urine is an indicator of preeclampsia	Yes	17	56.7
	No	13	43.3

Source: direct; Inst. NCFIP n=30

Regarding the signs and symptoms of preeclampsia alarm, pregnant women stated that headache (86.7%), ringing in the ears (80.0%), swelling of hands and face (66.7%) nausea and vomiting (53.3%) and vaginal bleeding (73.3%) are signs and symptoms of preeclampsia alarm, however 56.7% stated that pain and burning in the pit of the stomach is not an alarm symptom and 63.3% also stated that swelling over the Knee is not an alarm sign.

Table 5 Signs and symptoms of preeclampsia

		Fr	%
Headache is an alarm symptom	Yes	26	86.7
	No	4	13.3
Pain and burning in the pit of the stomach is a symptom of alarm	Yes	13	43.3
	No	17	56.7
Ringing in the ears is an alarm symptom	Yes	24	80.0
	No	6	20.0
Swelling of the face and hands is an alarm sign	Yes	20	66.7
	No	10	33.3
Swelling above the knee is an alarm sign.	Yes	11	36.7
	No	19	63.3
Nausea and vomiting during pregnancy after 22 weeks of gestation is an alarm symptom.	Yes	16	53.3
	No	14	46.7
Vaginal bleeding during pregnancy is a warning sign.	Yes	22	73.3
	No	8	26.7

Source: direct; Inst. NCFIP n=30

In the risk factors of preeclampsia, the pregnant women stated that the age over 35 years (86.7%), under 20 years (66.7%) the first pregnancy (66.7%), obesity (73.3%), the history of hypertension arterial in previous pregnancies (73.3%), twin pregnancy (53.3%), diabetes mellitus (73.3%) and renal failure (61.4%) are risk factors for preeclampsia, while 63.3% reported that the black race and the first pregnancy with a new partner (56.7 %) do not constitute risk factor.

Regarding prenatal care to avoid preeclampsia, pregnant women stated that prenatal controls should be initiated early (93.3%), daily control of blood pressure during pregnancy (83.3%), weight monitoring and edema (73.3%), salt consumption (73.3%), the consumption of foods rich in calcium (56.7%) and the consumption of aspirin before 16 weeks of gestation (63.3%) are prenatal care to avoid preeclampsia while 56.7% stated that the request for ultrasound in pregnancy is not a prenatal care to prevent preeclampsia.

Table 6 Risk factors for preeclampsia

		Fr	%
Age over 35 years is a risk factor.	Yes	24	86.7
	No	4	13.3
Age under 20 years is a risk sign.	Yes	20	66.7
	No	10	33.3
Black women have a higher risk of preeclampsia.	Yes	11	36.7
	No	19	63.3
First pregnancy in a woman increases the risk of preeclampsia.	Yes	21	70
	No	9	30
First pregnancy with a new partner is a risk of preeclampsia.	Yes	13	43.3
	No	17	56.7
Obesity risk factor for preeclampsia.	Yes	22	73.3
	No	8	26.7
History of hypertension in previous pregnancies is a risk factor.	Yes	22	73.3
	No	8	26.7
Women with twin pregnancy have a higher risk of presenting preeclampsia.	Yes	16	53.3
	No	14	46.7
Diabetes mellitus is a risk factor.	Yes	22	73.3
	No	8	26.7
Kidney failure is a risk factor.	Yes	17	56.7
	No	13	43.3

Source: direct; Inst.NCFIP n=30

Table 7 Prenatal controls in preeclampsia

		Fr	%
Prenatal check-ups should be started early and be assisted regularly.	Yes	28	93.3
	No	2	6.7
Request for a pregnancy ultrasound is necessary to prevent preeclampsia.	Yes	13	43.3
	No	17	56.7
Daily control of blood pressure during pregnancy helps prevent preeclampsia.	Yes	25	83.3
	No	5	16.7
Weight and edema monitoring is a way to prevent preeclampsia.	Yes	22	73.3
	No	8	26.7
Salt consumption should be monitored.	Yes	22	73.3
	No	8	26.7
Eating calcium-rich foods helps prevent preeclampsia.	Yes	17	56.7
	No	13	43.3
Women at risk of preeclampsia should consume aspirin before 16 weeks of gestation.	Yes	19	63.3
	No	11	36.7

Source: direct; Inst. NCFIP n=30

DISCUSSION

The study involved 30 pregnant women from the Veracruz-Boca del Rio area, with an age range of 19 to 39 years. 53.4% were from Veracruz while 46.6% from Boca del Rio. The highest percentage of pregnant women has a complete high school degree (30%), university degree (23.3%), non-university degree (20%) , incomplete secondary (13.3%) and incomplete primary (13.3%). Unlike with the study by Morales Alcántara (2014) in its results, the highest percentage of schooling was 55% who had incomplete high school and the lowest rank with 9% who had incomplete primary school.

Regarding the level of knowledge in this study, the pregnant women obtained a high level of knowledge (60%) different from the study of Morales Alcántara, (2014) since in their investigation 45% did not receive information which indicated that there was a deficit of information by health personnel so that pregnant women could have the necessary tools to prevent this disease.

While 55% reported that they received information about this condition, 100% of their sample received the information from the doctor in the consultation in the form of counseling.

In our research, pregnant women with preeclampsia mentioned that factors such as age over 35 years (86.7%), age under 20 years (66.7%), black women (36.7%), first pregnancy (70%), first pregnancy with a new partner (43.35), obesity (73.3%), the history of hypertension in previous pregnancies (73.3%), twin pregnancy (53.3%), Diabetes Mellitus (73.3%), Renal impairment (56.7%) increase the risk of suffering from preeclampsia; These results show a higher frequency than reported by (Hernández &Magel, 2014), where in their investigation the patients reported that the most significant risk factors were first pregnancy 20.8% in the study group and 24.2% in the control group and Maternal age over 35 years 26.6% in the study group and 7.8% in the control group.

On the other hand (Guzmán Juárez, Ávila Esparza, Levario Carrillo, & Contreras Solís, 2014) in their investigation, they stated that women with a history of gestational hypertension in a previous pregnancy are 27.7% likely to suffer from gestational hypertension in a new pregnancy and a 64.16% chance of having preeclampsia.

Regarding prenatal care, it was found that 93.3% stated that prenatal controls should be initiated early and be attended regularly, 83.3% said that daily control of blood pressure during pregnancy helps to alert the presence of preeclampsia and 73.3% He said that weight gain and edema should be monitored to prevent preeclampsia.

CONCLUSIONS

The level of knowledge about preeclampsia in pregnant women in Veracruz was high, which corresponded to 60% with more than 20 correct answers, 16.6% medium level with 16 to 20 correct answers and 23.4% low level with less than 16 correct answers, It was found that the risk factors that pregnant women know best are age over 35 years, age under 20 years, first pregnancy, obesity, history of hypertension in previous pregnancies and Diabetes Mellitus.

With these results, we consider that the nursing staff is correctly performing their role as educator, implementing and developing in the pregnant women an appropriate knowledge regarding this condition that currently together with the care of perinatal maternal health is one of the main objectives due to high rates of maternal mortality.

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