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RESEARCH PAPER

Assessment of Nurses' Knowledge for the Treatment and Prevention of Pregnancy related Hypertension in Punjab, Pakistan

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ABSTRACT

The aim is to assess nurses' knowledge regarding the treatment and prevention of pregnancy-related hypertension and find out the association between knowledge of nurses and demographic characteristics. Pregnancy-related hypertension is a medical disorder characterized by vasospasm in the body's small and major arteries during pregnancy. It affects between 5% to 8% of pregnancies overall. A quantitative descriptive correlation research design was employed in the investigation. 52 nurses employed by Sir Ganga Ram Hospital were selected as a convenience non-probability sample, and they were asked to self-administer a questionnaire. Descriptive and inferential statistical data analysis techniques were used to examine the data. The results indicate that 75% of the study group, which consisted of individuals aged 20 to 29. Female nurses outnumbered male nurses (69.2%) in the study sample. 53.8% of survey participants held a Bachelor in nursing as their highest degree of schooling. Of the nurses in the study group, 53.8% had one to five years of experience. In conclusion, the results indicate that a greater proportion of the participants in the research group (82.7%) lack training-related courses. It is recommended that seminars, workshops and refresher training are needed to enhance the knowledge among nurses.

KEYWORDS Descriptive Study, Nurses' Knowledge, Pregnancy-Induced Hypertension

Introduction

Worldwide, hypertension problems associated with pregnancy are a common cause of maternal mortality. Approximately 10% of pregnant women globally are impacted by it. This medical condition includes preeclampsia, superimposed preeclampsia, eclampsia, chronic hypertension, and pregnant hypertension. A woman may have chronic hypertension before becoming pregnant or before the 20th week of the pregnancy. Preeclampsia, which occurs after the 20th week of pregnancy, is defined as a systemic condition marked by proteinuria and hypertension, while eclampsia is defined as the occurrence of seizures. Severe hypertension is defined as a systolic blood pressure of 160 mm Hg or a diastolic blood pressure of 110 mm Hg (Tadele, et al., 2020).

Hypertension brought on by pregnancy is typical in young prim gravid women. It is more prevalent in Primi women over 35, in those with diabetes, in those with numerous pregnancies, and in moms who are obese. According to Abdalmajed et al. (2018), it is more prevalent in low-income moms who are less likely to obtain standard prenatal care. It is important to recognize that women who exhibit any of the following traits may be more susceptible to hypertension disorders: Risk factors include null parity, age 40, pregnancy intervals longer than ten years, multiple pregnancies, a family history of pre-eclampsia, a body max index of 35 kg/m2 or higher, gestational age of 32 weeks at diagnosis, a history of gestational hypertension or pre-eclampsia in the past, pre-existing vascular disease, and pre-existing kidney disease (Sinkey, et al., 2020).

Literature Review

Antihypertensive medicine is advised for pregnant women with chronic hypertension, gestational hypertension, or preeclampsia if their average Systolic blood pressure is 140 mm Hg or their dystolic blood pressure is 90 mm Hg. The first line of treatment for hypertension should be monotherapy with oral labetalol, oral methyldopa, long-acting oral nifedipine, or other oral -blockers (acebutolol, metoprolol, pindolol, and propranolol) (Butalia, et al., 2018).

During the initial appointment, nurses can help identify preeclampsia risk factors and risk groups by asking pregnant women about their personal history and their entire medical and family medical history. In the second trimester of pregnancy and the postpartum period, nurses are crucial in informing expectant mothers about the risks of preeclampsia, which can cause headaches, nausea, vomiting, epigastric pain, dizziness, visual disturbances, dyspnea, and edema in the hands and face (Committee on Obstetric Practice, 2017).

Undiagnosed and untreated hypertension can lead to negative outcomes for the mother and her child, including a higher risk of stroke during pregnancy, a lower birth weight, and a higher likelihood that the child would need neonatal critical care (Webster, et al., 2019).

The risk of dying from complications related to preeclampsia is seven times higher in women who do not receive good prenatal care than in those who do. Preeclampsia-related mortality can be decreased even though it is not always preventable because it can be prevented in many cases. Adequate prenatal care need to be provided to all women. Reducing the death rate from preeclampsia requires careful observation, early detection, and treatment (Sabry, et al., 2021).

Material and Methods

The purpose of this descriptive study was to evaluate the knowledge of nurses in Sir Ganga Ram health care institution regarding pregnancy-induced hypertension. The nurses employed in maternal health care units made up the study's target population. The study used convenient as well as deliberate sampling strategies. Fifty-two nurses took part in the research. Random selections were made from the patients in the maternity care unit to choose the participants.

The questionnaire used for the sampling process had multiple-choice questions. The tool was split into two parts in order to gather data from study participants: Demographic information, including age, gender, years of experience, education level, and training session participation, makes up part one. Section 2: comprehensive understanding of managing and avoiding pregnancy-related hypertension. A detailed evaluation of relevant research and existing literature was used to develop nurses' knowledge of pregnancy-induced hypertension.

The questionnaire was given to thirteen experts in different domains in order to strengthen its validity. Regarding each study questionnaire item's language appropriateness, correlation with the assigned study variable dimension, and appropriateness for the study population context, experts were consulted for comments and recommendations. Ensuring that the results of a study instrument are nearly identical when administered to the same subjects multiple times at different points in time is referred to as instrument reliability. Alpha Cronbach sample coefficient is used to calculate the reliability coefficient.

Before collecting the data from the participants, ethical considerations was assured in terms of participant's privacy, consent and confidentiality.

Results and Discussion

Table 1
Demographic Characteristics of the Respondents

Variable		Study Group	
		F.	%
Age	20-24	20	38.5
	25-29	19	36.5
	30-34	4	7.7
	35 and >	9	17.3
	Total	52	100.0
Gender	Male	16	30.8
	Female	36	69.2
	Total	52	100.0
Level of education	Diploma in Nursing	15	28.8
	Bachelor in nursing	28	53.8
	Master in nursing	9	17.3
	Total	52	100.0
Years of Experience	1-5	28	53.8
	6-10	14	26.9
	11 and >	10	19.2
	Total	52	100.0
Training Courses	Yes	9	17.3
	No	43	82.7
	Total	52	100.0

F=Frequency, %= percent, >=greater than

Table (1) reveals that the majority of the samples were aged 20–29 years old in the study group (75%). In terms of gender, female nurses outnumbered male nurses in the study sample (69.2%). In terms of level of education; the study participants expressed a Bachelor in nursing (53.8%). In terms of years of experience, the majority of nurses in the study sample (53.8%) had 1–5 years of experience. finally, regarding the training courses; the study results reveal that more subjects in the study group don't have training related courses with a percentage (82.7%).

Table 2
Knowledge Regarding Pregnancy Related Hypertension among Nurses

Level of knowledge	F.	%	Mean	SD.
Poor	39	75.0	1.25	.473
Fair	13	25.0		
Total	52	100.0		

F. =Frequency; %= percentage; SD. = standard Deviation ;(poor=1-1.4; Fair= 1.5- 1.7; Good 1.8-2)

Table (2): Results illustrated that the (75%) of nurses expressed a poor level of knowledge at the studies sample (mean= 1.25; SD= 0.473) with regard pregnancy induced hypertension.

Discussion

A review of the demographic features shown in table (1) indicates that 75% of the study sample's nurses were between the ages of 20 and 29. This result is in line with that of Ayed and Ibrahim (2021), who found that most research (73.3%) included participants between the ages of 21 and 30. The study's gender results indicate that there were more female nurses in the study samples than male nurses (69.2%). These results align with those reported by Olaoye et al. (2019). Who found that women made up 70.9% of the study sample? (Angelina, et al., 2020) found that women made up 84.3% of the study nurses. Education level (53.8%) percent of study participants held a Bachelor in Nursing. These findings are consistent with the findings of (EL Sebaey Soliman, et al., 2021) reported that (61.7) percent of the study nurses had a diploma or had graduated from an institute. According to the study findings, a higher percentage of nurses in the study and control groups had 1–5 years of experience, with percentages of (53.8%).These findings are consistent with (Shaheen, 2020), finding that 51.3 percent of the nurses studied had less than five years of experience. Finally, in terms of training courses, the study results show that more subjects in the study samples (82.7%) did not have training courses. These findings support the findings of (Abdelhakm, 2017), who found that the majority (87.5 percent) of participants did not have a training related course.

The results showed how the study sample responses were evaluated with regard to knowledge of pregnancy-induced hypertension in table (2). The findings show that the nurses' knowledge is lacking. The results demonstrate that a low degree of measurement knowledge regarding pregnancy-induced hypertension was indicated by 75% of nurses. Stellenberg and Ngwekazi (2016) corroborate this finding, demonstrating that there were significant gaps in midwives' understanding of HDPs, including assessment, diagnosis, and treatment.

The current study's findings, which compare nurses' knowledge to demographic traits like gender, age, education level, and years of experience, indicate that there are no appreciable differences between the knowledge levels of nurses and these traits. The results of this study are consistent with those of EL-BAHY et al. (2013), which reported no statistically significant changes in mean knowledge scores for age, place of employment, and years of experience in the health area.

Conclusion

The study's conclusions demonstrate that nurses' understanding of treatment and prevention of pregnancy-induced hypertension is lacking. Additionally, the results demonstrate that there is no correlation between the knowledge of nurses and their demographic attributes, including age, gender, years of experience, education level, and training courses.

Recommendations

The study concluded that more research is needed to assess nurses' practices for treating and preventing pregnant women with gestational hypertension, as well as the need for ongoing educational programs to inform and train nurses and other healthcare professionals regarding pregnancy-induced hypertension.

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