



RESEARCH PAPER

Pregnancy-Induced Hypertension: A Descriptive Study Concerning Nurses' Knowledge at Lady Wallington, Lahore, Pakistan

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ABSTRACT

The objective of study is to assess nurses' knowledge concerning pregnancy-induced hypertension at Lady Wallington Hospital. Pregnancy-induced hypertension (PIH) is the most common pregnancy complication, the most common cause of maternal death, and a contributing factor to neonatal morbidity and mortality. A descriptive study was conducted in Lady Wallington Hospital, Lahore. There were one hundred nurses in a non-probability purposive sample. Nurses completed self-report, structured questionnaires in the Gynecology Ward including the emergency room and wards medical (using a purposive and non-probability sample). The results show that the bulk of the sample (80%) was between the ages of 31 and 39. The table also reveals that women make up the majority of study participants (56%) and that over half of them were single (56%). About 52% of the study sample had a college nursing degree, and 50% of the sample's total service years were between 11 and 20 years old. The examination of nurses' knowledge about gestational hypertension revealed a good degree of understanding. The study concluded that the knowledge of a good level of nurses about pregnancy-induced hypertension. It is recommended that on-the-job refresher courses are needed.

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

Introduction

The most prevalent pregnancy-related problem, pregnancy-induced hypertension (PIH), is linked to both newborn morbidity and mortality as well as being one of the primary causes of mother death. Approximately 10% of pregnant women worldwide are affected by it (Tadele et al., 2020).

Prenatal treatments may lead to better outcomes for mothers. By offering quality prenatal care, this strategy combines primary prevention, enhanced risk identification, and early detection of PIH at any stage. Initially treating patients or referring them to a professional can stop secondary progression. It is well known that the best medical care is that which is based on scientific evidence (Edward and Mills, 2013).

Pregnancy-induced hypertension is defined as blood pressure more than 140/90 mmHg on two separate occasions. Following a period of rest or more than 160/110 mmHg in a lady who had previously been normotensive on one occasion (Nissaisorakarn, Sharif and Jim, 2016).

High blood pressure is defined as a diastolic blood pressure (DBP) of more than 90 mmHg and a systolic blood pressure (SBP) of more than 140 mmHg. While SBP 140-149 and DBP 90-99 mmHg are mild, SBP 150-159 and DBP 100-109 mmHg are moderate, and SBP >160 and DBP >110 mmHg are severe, SBP >160 and DBP >110 mmHg are considered serious (Eze et al., 2018).

Prenatal hypertension, chronic hypertension, superimposed pre-eclampsia, eclampsia, and pre-eclampsia are associated with this condition. Before conception or before the 20th week of pregnancy, there was chronic hypertension. Both eclampsia, a debilitating disorder, and preeclampsia, a systemic illness including hypertension and proteinuria, occur after the 20th week of pregnancy (Catherine, 2013). Concerns about hypertension include eclampsia, superimposed preeclampsia, preeclampsia, persistent hypertension, and prenatal hypertension. Women might have an evaluation for persistent hypertension before becoming pregnant or during the twentieth week of pregnancy. Preeclampsia is different from eclampsia in that severe hypertension is defined as more than 160/110 mm Hg. Preeclampsia presents with hypertension and protein in the urine after 20 weeks of pregnancy. Preeclampsia, sometimes referred to as eclampsia, is a condition in which proteinuria and organ damage develop from elevated blood pressure after the 20th week of pregnancy. Preeclampsia in females suffering from hypertension or severe renal failure (Ebrahimi, Jobori and Safi, 2019).

It responds to 76,000 maternal deaths and 500,000 newborn deaths annually. Preeclampsia is seven times more likely to cause death in women who do not receive prenatal care than in those who do. Although majority of the deaths caused by preeclampsia are avoidable, it is not always preventable. To reduce deaths from preeclampsia, all pregnant women should receive comprehensive prenatal care (Hadian et al., 2018). Gestational hypertension (GH) and preeclampsia (PE) are hypertensive disorders that can affect pregnant women; preexisting hypertension may manifest or worsen during pregnancy (Roberts, Davis and Homer, 2017). Pregnancy hypertension, which affects 5% to 10% of pregnancies, is one of the most common medical disorders during pregnancy. Depending on the country, region, and hospital, the prevalence varies. Globally, hypertensive diseases are a leading source of morbidity and mortality in mothers and newborns (Jacob et al., 2018).

Literature Review

Jacob et al. (2022) stated that it is crucial to demonstrate the need for particular care measures for pregnant women via specialized and high-quality prenatal care given the high incidence of GHS, its extent and influence on perinatal outcomes, and the current care strategy for high-risk pregnant women.

Muti et al. (2015) revealed that in the world, 5% to 8% of pregnant women are estimated to be affected with gestational hypertension syndrome (GHS). In Brazil, GHS is the main factor contributing to maternal deaths as well as the sharp rise in perinatal deaths and low-probability births.

Pre-eclampsia and eclampsia are the main causes of mother and fetal death during pregnancy, and 10% of pregnancies worldwide are affected with hypertension. Given that some expectant mothers "lack" an understanding of hypertension syndromes, more professional involvement in preventive and health promotion is necessary, with an emphasis on potential issues and suitable treatment (Mol, Roberts and Thangaratinam, 2016).

It is crucial to show the necessity for particular care measures for pregnant women through specialized and high-quality prenatal care, given the high incidence of GHS, its scope and influence on perinatal outcomes, as well as the present treatment strategy for high-risk pregnant women (Antunes et al., 2017).

Thuler, Wall and Benedet (2018) described that it is necessary to extrapolate the disease's biological background as well as its particularities and singularities to account for them. To preserve each pregnant woman's uniqueness, nursing care must identify the signs

of GHS concerns as soon as possible and provide systematic care measures based on instruments that lead to significant actions.

Material and Methods

To meet the study's objectives, a descriptive analysis was performed on the nurses' knowledge of pregnancy-induced hypertension at the Gynecology Ward in Lady Wallington Hospital, Lahore. Purposive (non-probability) sampling consists of (100) nurses. By reviewing the literature, past studies, and prior information, a questionnaire structure was established and designed for the current study's objective study.

To analyze the instrument's dependability, the internal consistency approach and the Alpha Cronbach's test (Alpha Correlation Coefficient) were applied. The Alpha Correlation Coefficient was calculated in Version 24.0 of IBM SPSS, Statistical Package for Social Science 26.0.

Regarding ethical considerations, the researcher assured the nurses' consent, confidentiality and privacy . The objective of the research and use of obtained data were also explained plainly to the participants.

Results and Discussion

Table 1
Demographic Characteristics of the Respondents

Variables	Frequency	Percentage	Mean	St. Deviation
Age	22-30	2	28.46	6.834
	31-39	80		
	40-48	8		
	49-50	10		
Gender	Male	44	1.56	0.501
	Female	56		
Educational Level	Diploma in Nursing	16	2.36	0.749
	Bachelor in Nursing	52		
	Master in Nursing	32		
Marital Status	Single	42	1.46	0.542
	Married	56		
	Divorced	2		
Total Years of Service	1-10	34	6.54	7.399
	11-20	50		
	21-30	16		

Table 2
Pregnancy-Induced Knowledge among Nurses

Questions	Response				Means	Assessment
	True		false			
	F	%	F	%		
When does pregnancy-related high blood pressure happen?	34	34	66	66	1.66	Good
The best posture for a pregnant lady to take her blood pressure is on her left side.	8	8	92	92	1.92	Good
Chronic hypertension mean	50	50	50	50	1.50	Good
The following factors raise the chance of getting preeclampsia:	32	32	68	68	1.68	Good

What causes preeclampsia?	18	18	82	82	1.82	Good
What exactly is edema?	32	32	68	68	1.68	Good
What are the contributing reasons to elevated blood pressure?	76	76	24	24	1.24	Poor
What are some of the preeclampsia risk factors?	52	52	48	48	1.48	Poor
What is the effect of preeclampsia on the fetal outcome?	58	58	42	42	1.42	Poor
What is the outcome for the fetus when preeclampsia occurs?	40	40	60	60	1.60	Good

Table 3
Knowledge of Pregnancy-Induced Hypertension Treatment and Prevention among Nurses

Questions	Response				Means	Assessment
	True		false			
	F	%	F	%		
What is recommended as a general non-pharmacological course of treatment for pregnant women who have mild to moderate high blood pressure?	38	76	12	24	1.24	Poor
Why is bed rest recommended for expecting mothers who have preeclampsia?	28	56	22	44	1.44	Poor
What actions should the nurse take before giving (MgSo4)	28	56	22	44	1.44	Poor
How should pregnant women take magnesium sulfate MgSo4	16	32	34	68	1.68	Good
For severe pre-eclampsia, how is nursing care administered?	13	26	37	74	1.74	Good
What steps may be taken to avoid pregnancy-induced hypertension?	31	62	19	38	1.38	Poor
What measures are possible to prevent pregnancy-induced hypertension?	17	34	33	66	1.66	Good
What kind of medical care would you recommend for pre-eclampsia?	26	52	24	48	1.48	Poor
Severe pre-eclampsia nursing care includes:	20	40	30	60	1.60	Poor
The aim of antihypertensive treatment is to:	28	56	22	44	1.44	Poor

Table 4
Overall Knowledge of Pregnancy-Induced Hypertension among Nurses

Knowledge	Classification	F	%
Overall Knowledge of Pregnancy-Induced Hypertension among Nurses	Good	64	64
	Poor	36	36
	Total	100	100

Discussion

The age range of the sample (31 to 39) found in the current analysis supports the finding that most nurses in the research groups (80%) were under 30 years old. The results of Jaddoua et al. (2013), who stated that the majority of the study group (19%) were between the ages of 28 and 32, are not supported by the study (Table 1). The nurses' participation in research, which increased their motivation, engagement, and activity in these domains, explained this (Jaddoua, Mohammed and Abbas, 2013).

The current poll indicates that women make up 56% of nurses. This study verifies the findings of Gesmundo's (2016) survey, which found that women made up the majority of participants (92%), as does this study. The results of Teshager et al., (2022) who discovered that most participants (68.6%) were females were also supported by the study (Table 1) (Teshager et al, 2022).

The majority of nurses in the study groups (52%) had a Bachelor in Nursing, according to the current study. This is in line with research by Mong et al. (2022), who found that most nurses were 25-year-old nursing college graduates (Mong et al., 2022)

(56%) of the sample, according to the current study, was married. This is consistent with research by Algarni et al. (2019), which found that married nurses made up the bulk of study participants (59.2%) (Algarni, Sofar and Wazqar, 2019).

The study contradicts the findings of Jaddoua et al. (2013), who found that (6-10) years of service formed (22%) The age group of the current sample ranged from 31 to 39 years old (Jaddoua, Mohammed and Abbas, 2013). The majority of nurses (50%) had (11-20) years of experience, according to the report.

There was a satisfactory degree of pregnancy-induced hypertension. These results are in line with a study by Kadhim and Khairi (2020) in Al-Nasiriya, which found that the nurse's knowledge of pregnancy-induced hypertension was only fair to the poor during the pretest (Kadhim and Khairi, 2020).

Conclusion

Eighty percent of the individuals were between the ages of thirty and forty-nine, and fifty-six percent of the subjects were female. Of them, fewer than half were single, and less than half were married (42%). A good level of comprehension was found in the examination of nurses' knowledge regarding pregnancy-induced hypertension.

Recommendations

It is common practice to offer nurses education and training to enhance their comprehension of pregnancy-induced hypertension. Encourage nurses to revisit and update their knowledge of nursing care for pregnant women with hypertensive diseases, as well as to participate in continuing education seminars, conferences, and training sessions. To support nurses in promoting health awareness to maintain pregnancy and fetal health, educational lectures for nurses in hospitals and primary healthcare facilities should be held on a regular and updated basis.

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