

Knowledge of Staff Nurses Regarding Management of Pregnancy Induced Hypertension (PIH)

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ABSTRACT: All Human life in this planet is born of Women. The **Joy and ecstasy of Motherhood** cannot be expressed in words. In all cultures, being pregnant or to give birth to a child is considered as a vital and divine event. The formation of family is of central importance to most societies and indeed, to most of the people's emotional lives. A woman is associated with child birth and the child birth is a biological, emotional, spiritual and social function, which maintains the family continuum¹. Pre – Eclampsia or Eclampsia is an unpredictable multi organ disorder, unique to human pregnancy. It is associated with significant maternal and foetal morbidity and mortality. World-wide treatment of this disorder remains a challenge. Even to the most experienced obstetrician, mainly because of the exact etiology is not known. The objective of this paper is to assess the knowledge of staff nurses regarding management of Pregnancy Induced Hypertension (PIH) by knowledge score. The main findings are: the overall knowledge score of staff nurses on management of Pregnancy Induced Hypertension (PIH) is very high(74.4%), regarding independent score on various areas of analysis, nursing management has got highest score (89.1%). Health personnel especially the nurses midwife, play important role in early detection of high risk factors of PIH. Management of antenatal mother with PIH for which midwife require adequate knowledge¹.

KEYWORDS: Pregnancy, Hypertension, morbidity, mortality, nursing management.

I. INTRODUCTOIN

Pregnancy is being most precious period in every woman's life. It needs continuous care for safe confinement, early detection of difficulties and prompt treatment in an appropriate period. Women in general and also during pregnancy stage are vulnerable segment of the population. In India, 23 million births take place every Year. There would be about 24 million pregnancies in a year among them about 7 – 15 percentage of all pregnancies are complicated by hypertension¹. Changes such as increased sensitivity to vasopressors, reduced plasma volume, altered proximal tubular function and activation of coagulation system suggest that hypertension may not be central to the pathogenesis of pre-Eclampsia¹. Pregnancy induced hypertension (PIH) occurs more frequently in young prime gravid. It is more common in mothers over -35 years of age and multiple pregnancies with diabetics and obese mothers. It is equally common in women, from low socio-economic group who are not likely to have received adequate antenatal care. PIH is characterized by hypertensions and proteinuria accompanied by edema. It develops Only during pregnancy. Both mother and fetus are adversely affected by maternal hypertension. PIH is recognized as the death in which requires the united efforts of all members of the health care team in close collaboration with other than medical personal². One of the studies in the **Banaras University** Hospital in India revealed that every third eclamptic mother died. Pre-Eclampsia, eclampsia still account for 20 percentages of maternal deaths World-wide. The current annual World-wide mortality can be estimated to be about 1, 50,000 women. Sub- standard care also adds to the maternal mortality. **Farook** recorded a 20-24 percentage maternal mortality due to eclampsia, while Hashmi reported eclampsia mortality to be 9 percentages over a fine year period. **Bashir et al** reported a prevalence of Eclampsia of 1.2 percentages and maternal mortality from eclampsia to be 8.35 to 10.3 percentages during 1991- 93 in Faisalabad City³.

The incidence of pre-Eclampsia is commonly cited to be about 5 percentage, although remarkable variations are reported. The incidence is influenced by parity. It is related to racial, and thus, to genetic predisposition and environmental factors may also have a role. Incidence of Eclampsia is approximately 1 in 1500 pregnancies. Of this about 50 percentages occurs in the antenatal period, 30 percentages occurs during the intra partum period and 20 percentages takes place within the first few hours after delivery. Deaths due to eclampsia occur because of cerebral hemorrhage and adult respiratory distress syndrome. Maternal mortality due to eclampsia varies between 2-30 percentages and is much higher in rural areas⁴.

As per the British Eclampsia Survey (BES), 1.5 deaths per 1, 00,000 live-births due to pre-eclampsia or eclampsia were reported from USA. Mortality from Eclampsia was found to be approximately 2 percentages. However, Worldwide picture remains poor. In Europe in the early 20th century maternal mortality was over 20 percentages, similar to that of in Bangladesh ⁴

II. NEED FOR THE STUDY

Hypertensive disorders of pregnancy are leading cause of maternal and infant mortality and morbidity. World-wide, it has been estimated that approximately 50,000 women die every year from eclampsia. Hypertensive disorders of pregnancy affect 5-10% of all pregnancies, world-wide, and cause substational and perinatal mortality and morbidity. Women with pre-Eclampsia are 2 to 3 times more likely to have Caesarean delivery compared to normotensive women and have longer hospital stay. The combined prevalence, of various hypertensive disorders in pregnancy, is said to be of 6-8%, which are the leading causes of maternal and perinatal mortality and morbidity⁵. Interventions during pregnancy, may improve maternal outcomes. In this regard, the intervention includes primary prevention, detection of increased risk and early detection of any stage of PIH by antenatal adequate care. Secondary prevention of progression is by treatment at primary level or referral for expert care⁵. Caring of a primi gravida with ecalmpsia is a challenge to any midwife. The midwife's keen observation, prompt decision-making-ability to use life saving procedures and referral to the right place, at the right time, can save the mother and the baby. The mother requires intensive care with continuous monitoring and recording the baby also needs close observation and care, for the first 24-48 hours, in the neonatal intensive care unit ⁵.

III. OBJECTIVES OF THE STUDY

To assess the knowledge of staff nurses regarding management of Pregnancy induced hypertension (PIH) by knowledge score.

IV. REVIEW OF LITERATURE

Review of literature is a key step in the research process. It is an extensive exhaustive and systematic examination of research project. It involves the Identification, selection, critical analysis and reporting of existing information on the topic of interest. According to Poole, Judith H² (1997), the traditional method of teachings were effective in increasing the clinical reasoning ability scores of the nursing students on PIH ⁶. According to JUTIANALINNETHE D³ Sa (2002), "A study on Evaluation of a problem based learning package on pregnancy induced hypertension for B. Sc Nursing students on gain in knowledge, Self- instructional models have effected primarily on improving the cognitive ability of individuals⁷. According to JUANA (2002) ,both the traditional method and the problem based learning package approach were found to increase the clinical reasoning ability among nursing students⁸. According to SANTE, MAYI-TSONGAS, (2006),improvement in the quality and quantity of prenatal care should help in reducing the incidence of eclampsia ⁹. An experimental study by KUMARI (1992) revealed that the self instruction model on selected self care activities by nurses considerably enhanced the knowledge of primi gravid women with PIH to practice selected self care activities (SSCA). The practice of SSCA by primigravid women with PIH helped to attain favorable maternal out come ¹⁰

V. METHODS AND METERIALS

Research design: research design of the study was quantitative and descriptive survey design. research methodology involves a systematic procedure by which the research starts from the initial identification of the problem to its final conclusion. The present study is conducted "To assess the knowledge of staff nurses regarding management of pregnancy Induced Hypertension in selected Hospitals, kolar district, Karnataka".

Study area: The study was conducted in Sri Narasimharaja Govt Hospital and ETCM Hospital, in kolar district, Karnataka.

Study Period: The data were collected from 1/11/12 to 15/11/12

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ample size; 100 staff nurses

Sample unit:

The staff nurses (age group 21-45 years) of Narasimharaja Govt Hospital and ETCM Hospital, in kolar district, Karnataka. As per the above criteria the investigator collected the data from the selected two hospitals in the kolar. Among these two hospitals one govt hospital and one private hospital. Formal permission was obtained from the head of the Hospital of Govt SNR Hospital and ETCM Hospital kolar for conducting the study.

Sampling: Convenience sampling technique.

Study Tool:

The tool for data collection is structured interview schedule suggested by Quiche and Experts in the fields of obstetrics and gynecology. It was considered to be the most appropriate Instrument to elicit the response from subjects. is structured interview schedule includes 18 items for knowledge (52.9%), 9 items on Comprehension (26.92%) and 7 items (20.5%) on problem solving all aspects of management of pregnancy induced hypertension.

The structured Interview schedule consists of two parts :

The first Part –

Selected demographic variables such as age, religion, educational status, Income, Marital status, Total years of service, Total experience in maternity ward and expose to any in service education programme and the knowledge level of staff nurses regarding management of Pregnancy Induced Hypertension.

The second part-

Knowledge Questionnaire on management of Pregnancy Induced Hypertensions. This section consists of 34 items on selected aspects of Definitions and Risk factor of pregnancy Induced Hypertension (4 items), clinical manifestations (4items) effects of Pregnancy Induced Hypertension on mother and fetus (2 items), Diagnosis of Pregnancy Induced Hypertension (2 items) medical management (3 items) Dietary management (4 items) nursing management (11 items) complications and prevention (4 items).

Section-II

This section deals with distribution of knowledge score of staff nurses regarding management of pregnancy induced hypertension in terms mean, median, range, standard deviation and mean percentage.

Table-1

Area wise analysis of Knowledge score of staff nurses regarding management of PIH.

SL No	Areas	No of items	Maximum Score	Mean	Median	S.D	Mean Percentage%
1.	Definition and risk factor of PIH	4	4	3.36	3	0.71	84%
2.	Clinical Manifestations	4	4	3.39	4	1.11	84.75%
3.	Effects of PIH on months & fetus	2	2	1.52	2	0.42	76%
4.	Diagnosis of PIH	2	2	1.37	1	0.41	68.5%
5.	Medical management	3	2	2.23	2	0.88	74.33%
6.	Dietary management	4	4	2.17	2	1.14	54.25%
7.	Nursing management	11	11	8.10	8	2.57	89.1%
8.	Complication & Prevention	4	4	1.12	3	0.78	78%

Table-1: Indicated that staff nurses having more Knowledge 89.1% in the area of nursing management, definitions and risk factor and clinical manifestations, and less knowledge 54.25% in the area of dietary management and diagnosis of PIH.

Table-2 Over all analysis of knowledge score of staff nurses regarding management of PIH.

SL No	Total No of items	Maximum Score	Range of score	Mean score	Median score	S.D	Mean Percentage%
1	34	34	33-10	25.28	27	5.34	74.35%

Table represents the over all mean knowledge score obtained by the staff nurses was 25.28 and median score was 27 was standard deviation 5.34 and the mean percentage (74.35).so This indicator that staff nurses have more knowledge on selected aspects of management of Pregnancy induced hypertension.

HOW IT IS USE FUL TO SOCIETY

Hypertensive disorders of pregnancy are leading cause of maternal and infant mortality and morbidity. World-wide, it has been estimated that approximately 50,000 women die every year from eclampsia. Hypertensive disorders of pregnancy affect 5-10% of all pregnancies, world-wide, and cause substational and perinatal mortality and morbidity. Women with pre-Eclampsia are 2 to 3 times more likely to have Caesarean delivery compared to normotensive women and have longer hospital stay. The combined prevalence, of various hypertensive disorders in pregnancy, is said to be of 6-8%, which are the leading causes of maternal and perinatal mortality and morbidity. Interventions during pregnancy, may improve maternal outcomes. In this regard, the intervention includes primary prevention, detection of increased risk and early detection of any stage of PIH by antenatal adequate care. Secondary prevention of progression is by treatment at primary level or referral for expert care.

Zhang Zeisler and Berkowitz (1999), conducted an epidemiological investigation of PIHINA population of 3.7 million in China. The incidence of PIH was 9.4% that of mild moderate PIH, pre-eclampsia, Eclampsia 23%, chronic hypertension with PIH were 4.7, 2.6, 1.7, 0.2, and 0.2% respectively. The maternal and perinatal mortalities of PIH groups were significantly higher than that of the group without PIH. The result reveals that pathogenesis of PIH was positively related to age, prim parity, multiple pregnancy, labour, posture intensity, maternal education level, body status, hereditary and various complications during pregnancy. Maternal & child health programme is poorly utilized by pregnant women. Only 49.29% of the total pregnant women receive antenatal checkups from health professionals. Only two of the pregnant women were visited by the health workers. The world is progressing towards the attainment of health for all through primary care which is the current in health and related disciplines. As per the suggestions of the WHO at the international conference at Nairobi (1987) and international federation of Gynecology and obstetrics at Brazil (1988) the Universal focus is on the promotion of the safe- motherhood and child survival through the MCH at the primary level of intervention. Caring of a primi gravida with ecalmpsia is a challenge to any midwife. The midwife's keen observation, prompt decision-making-ability to use life saving procedures and referral to the right place, at the right time, can save the mother and the baby. The mother requires intensive care with continuous monitoring and recording the baby also needs close observation and care, for the first 24-48 hours, in the neonatal intensive care unit.

Ratnan et al (1992) found 10% occurrence of pregnancy induced hypertension. Out of all pregnancy is 5% develop eclampsia. M.K.sinha (1995) mentioned through her study, that toxemia is still a major cause of maternal death in Bihar and pointed out the lacunae prevailing over MCH care. During my clinical experience I found a case by name Mrs. Geetha, aged 33 years, primi gravida who was admitted at maternity unit, with history of 32 weeks amenorrhea and suddenly developed convulsions. History revealed that she had a regular antenatal check ups which diagnosed mild PIH. She could not take any test. Instead, she worked hard. She had joined in a coaching center for appearing examination and finally she had developed edema. Weight gain, severe head ache, blurring vision but she ignored these symptoms. As a consequence, suddenly she developed convulsions. She was treated, adequately labour induced and she delivered a male child weighing 12 kg with apgar score 4-6 the child died after 10 hours. She did not have knowledge regarding PIH and ement symptoms of pre-eclampsia. Having seen so many cases in my clinical experience, and with a determined conclusion, I have selected this study,

“To assess the knowledge of staff nurses regarding management of Pregnancy Induced Hypertension in Selected Hospitals, Kolar Dt, Karnataka”. In the light of the above facts and from experience of the Investigator, it was found essential to assess the knowledge of staff nurses regarding management of pregnancy induced hypertension. To prevent possible complications and there by reduce maternal mortality and morbidity. Women through their intervention thus promote safe child birth experience as a memorable and pleasant one, contributing to health mother and child to the society. At this point health personnel especially the nurses midwife, play importance role in early detection High risk factors of PIH, management of mother with PIH for which midwife require adequate knowledge. Hence the treatment planned to find out the knowledge level of the staff nurses on management of PIH

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