Nurses Knowledge Regarding the Management of Eclampsia at Small Healthcare Hospital in Jodhpur

By

Shruti Kanther

Dissertation submitted in partial fulfillment of the requirements of the degree

MBA Hospital and Health Management

Academic year, 2018-2020

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HLFPPT (Hindustan Latex Family Planning Promotion Trust)

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ABSTRACT

INTRODUCTION: Eclampsia affects 5 to 10% of all pregnancies and contributes to 10 to 15% of maternal deaths worldwide. Estimated case fatality rate due to eclampsia is 14 times higher in developing countries compared to developed countries. Eclampsia is a potentially fatal disorder of pregnant women that has been prevalent since the time of Hippocrates; it remains an important cause of maternal mortality throughout the world, accounting for about 50,000 deaths worldwide. This study aimed to assess the nurses knowledge regarding the management of eclampsia.

MATERIALS AND METHODS: A descriptive cross-sectional study was carried out from 3rd February 2020 to 30th April 2020 in 6 small health care organization in Jodhpur. A total sample of 50 nurses has been selected out of 150. Sampling done by non- probability convenience sampling technique during the period of this study.The data was collected using self administered questionnaire and the data has been analyzed by excel.

RESULT –This study shows that 77% of participants are not aware of pregnancy induced hypertension, 53% of nurses not able to answer what is eclampsia, 63% of nurses failed to tell the correct value of BP in eclampsia, 73% of nurses are not aware of the initial steps to manage eclampsia,77% of nurses failed to tell the maintenance dose of Magnesium Sulphate.

CONCLUSION-From the above result we can conclude that the response of nurses regarding management of eclampsia is not good and satisfactory as more than 50% of nurses has marked answered wrong. This shows that they are not well acquainted and skilled to manage eclampsia.To resolve this, proper training should be conducted for nurses theoriticaly and practically they should be teach regarding the proper management of eclampsia and maintenance dose of Magnesium Sulphate

ACKNOWLEDGEMENT

Dissertation is the period when one gets knowledge, wisdom and it's gradual progression when a management student gets the glimpse of industry and corporate world. This crucial period requires proper guidance and I feel very lucky to have got the best possible guidance. I would like to acknowledge the efforts of individuals who have guided this project to fruitarian.

First of all I would like to thanks **HLFPPT(Hindustan Latex Family Planning Promotion Trust)** for trusting in my capabilities and giving me such a wonderful opportunity to work with one of the most old and trusted organization.

I take immense pleasure in thanking my project guide **Dr. Nidhi Saraswat (Monitoring and Evaluation Officer) in HLFPPT** for her able guidance in spite of his busy schedule. Without her guidance and suggestions this project could not have been completed. I would like to thank my guide in organization **Dr. Sandesh Sharma** whom I found my greatest source of learning. They helped me a lot in fine tuning the final questionnaire and my perceptions about the actual field work.

I would like to thanks Director and all staff of Indian institute of health Management and Research ,Jaipur who helped me at all the phases I required. Last but not least I would like to thank all the surgeons and retailers I covered for their cooperation during this study.

TABLE OF CONTENT

INTRODUCTION

Eclampsia is the occurrence of convulsions in pregnant women in association with signs and symptoms of preeclampsia. The syndrome of pre-eclampsia normally affect all maternal organ systems, however it is usually detected by the presence of new hypertension, proteinuria, and edema in pregnancy. Primary symptoms of eclampsia are seizures or convulsions in a pregnant woman, woman in labour or within 42 days after delivery who does not have a history of epilepsy. Other symptoms of eclampsia include muscle aches and pain, agitation, loss of consciousness and stroke, coma and death can occur to a mother and foetus.

Eclampsia affects more than 5% of all pregnancies and contributes to almost 15% of maternal deaths worldwide. Approximated case fatality rate as a result of eclampsia is 14 times higher in developing countries compared to developed countries. In developing countries, the prevalence of eclampsia differs widely, from 1 in 100 to 1 in 1700.This problem has become a common problem in developing countries because of illiteracy, poverty, inadequate health awareness and education, lack of knowledge of nurses regarding the management of eclampsia and sometimes the superstitious beliefs prevent women from seeking medical advice during pregnancy.

With the high maternal mortality ratio (MMR) of approximately 445 per100,000 livebirth , the state of Rajasthan contributes significantly to India's burden of maternal death. Eclampsia is the third (16%) among the major cause of maternal death in India, preceded by haemorrhage and sepsis. In developed countries, deaths from haemorrhage and infection have almost vanished and eclampsia has become the prime killer, indicating that death from eclampsia is particularly tough to prevent . The postpartum haemorrhage and sepsis can be managed efficiently in the hospital (e.g., reversing shock due to postpartum haemorrhage) if patients can get there; because deaths from these conditions normally occur outside the hospital setting. Patients with eclampsia, nevertheless, develop complications gradually; by the time they reach the hospital, complications have become so severe that they cannot be reversed easily. The treatment of eclampsia follows well-defined guidelines

aiming at preventing low oxygen to mothers, controlling maternal blood pressure, preventing ongoing seizures and preparing to deliver the baby by the safest method possible .Supportive care for eclampsia include close monitoring, air way support, adequate oxygenation, anti convulsion therapy and blood pressure control. Placing the patient in left lateral position to decrease the risk of aspiration and helps to improve uterine blood flow by relieving obstruction of venacava by gravid uterus, protecting the patient against injury during the seizures, using a padded tongue blade between the teeth and suctioning the oral secretions as needed . This study was aimed to assess the level of nurse's knowledge regarding management of eclampsia.

METHODOLOGY-

A cross-sectional type of 90days study was conducted among all nurses working in Small Health Care Organization in Jodhpur District. The nurses working in the selected hospital those who were available and willing to participate in this study were included. However only gynaecology nurses has been included and non-gynae staff in the selected hospital were excluded. A total sample of 50 nurses has been selected out of 150. Sampling done by non-probability convenience sampling technique during the period of this study. A set of self-administered semi-structured questionnaire developed used to collect the data. The questionnaires were divided into two parts i.e. Socio-demographic Characteristics; which included variables such as age, sex, contact number, qualification, years of service experience etc. The other part of the questionnaire contained well-defined questions about the knowledge regarding management of eclampsia. Data was collected directly from the participants after taking their consent of participation. All the data collected were coded numerically and entered into the excel for analysis. The descriptive analysis of data was presented in form of pie chart.

OBSERVATION

Responses collected from the self administered semi structured questionnaire form. Here are the responses of participant in form of pie charts with interpretation .

Q1.What is pregnancy induced hypertension?

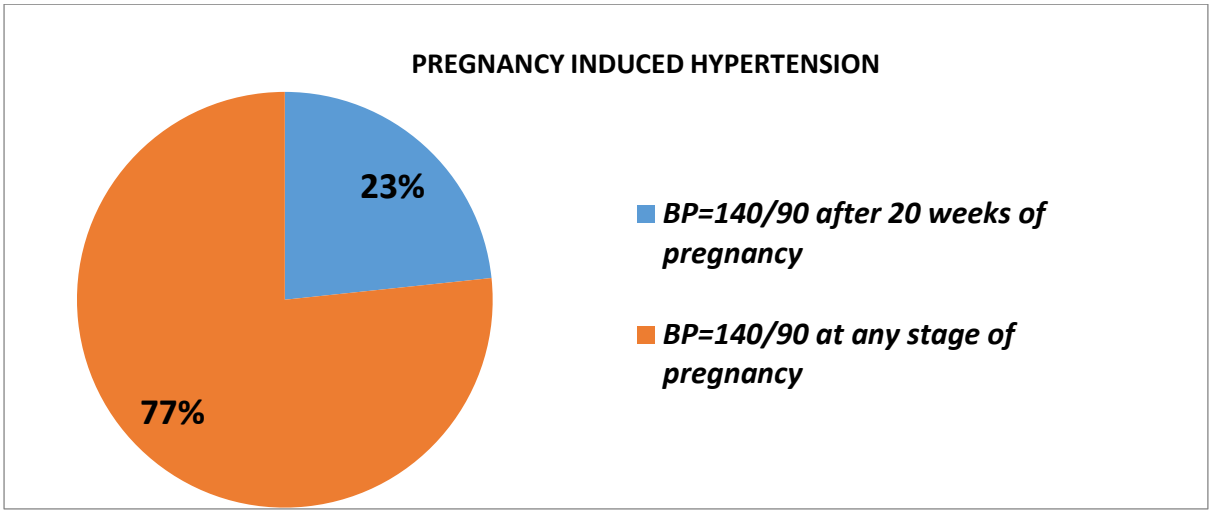


FIGURE 1

INTERPRETATION :

The correct answer of Q1. is Pregnancy Induced Hypertension is when BP is 140/90 after 20 weeks of pregnancy. Through the above graph we can see the response of nurses on Q1 is negative response. As 77% means 38 nurses out of 50 marked pregnancy induced hypertension is when BP is 140/90 at any stage of pregnancy which is wrong .Only 23 % means 11 nurses out 50 has marked this option which is right. This shows lack of knowledge in nurses regarding pregnancy induced hypertension.

CONSEQUENCES - Through the response we can see more than 50 % of nurses marked wrong answer, that means they don't know about pregnancy induced hypertension, which leads to delay in diagnosis of pre eclampsia and eclampsia ,which results cause complications like

- lack of oxygen to the placenta which can cause slow growth, low birth weight, or preterm birth of the baby or even stillbirth
- placental abruption, or the separation of the placenta from the uterus wall, which can cause severe bleeding and damage to the placenta

- HELLP syndrome, which causes loss of red blood cells, elevated liver enzymes, and low blood platelet count, resulting in organ damage
- eclampsia, which is preeclampsia with seizures stroke, which can lead to permanent brain damage or even death

  All the above point ultimately leads to morbidity and mortality to mother as well as child.

ACTIONS TO BE TAKEN – Proper training should be conducted and teach nurses about the pregnancy induced hypertension.

Q2.What are the danger signs for patients having high BP?

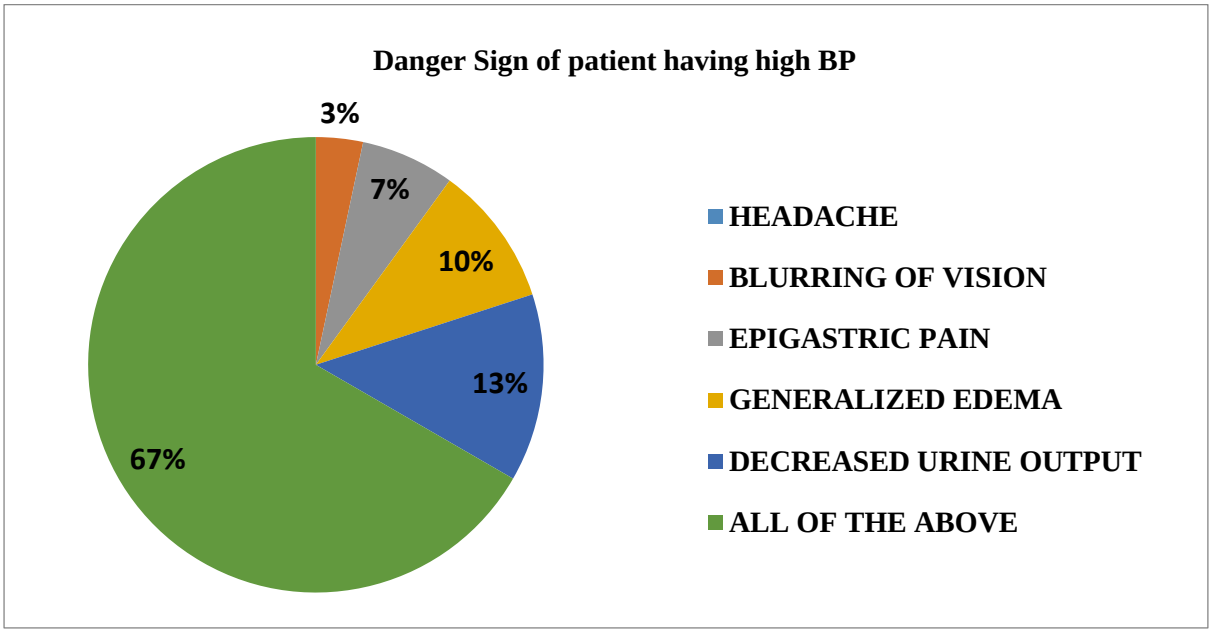


FIGURE 2

The correct answer for the Q 2 is All Of The Above .From the above graph we can depicts 67% means 33 nurses out of 50 sample size marked the correct answer. Remaining 33 % means 17 nurses marked wrong answer. This show that more than 50% of nurses know the danger signs of patient having high BP.

CONSEQUENCES – From the above graph we can see remaining 33% of nurses don't know the danger sign of patient having high BP, which leads to delay in diagnosis of pre eclampsia and eclampsia and result in delay in

management of eclampsia and ultimately leads to morbidity and mortality of mother as well as child .

ACTIONS TO BE TAKEN – Proper nursing should be conducted for nurse to teach them regarding how to observe the danger sign of BP.

Q3.What is Eclampsia ?

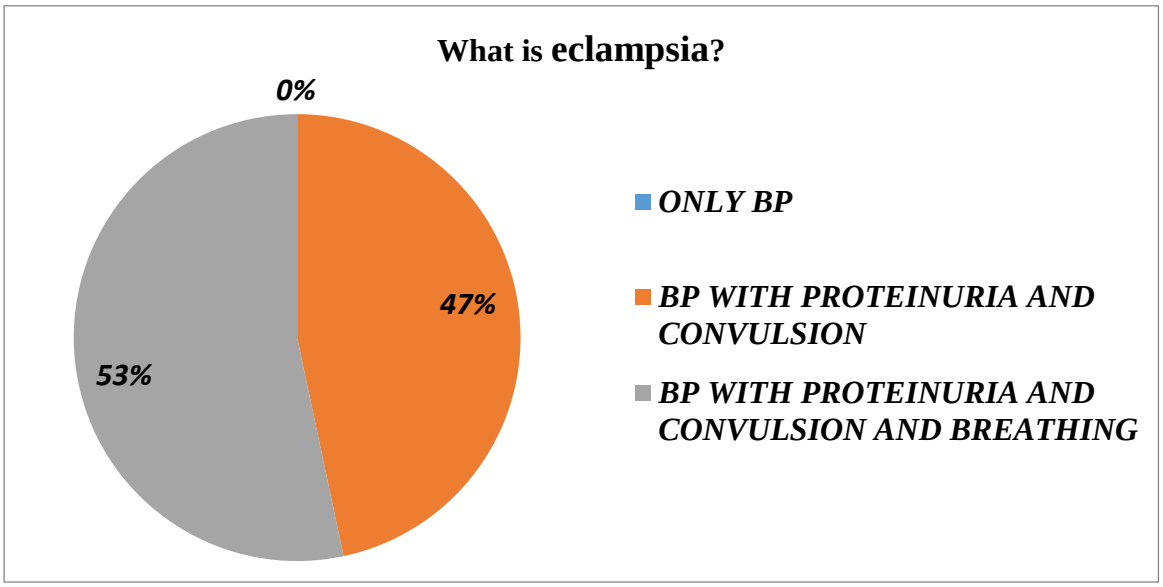


FIGURE 3

The correct answer for the Q3 is Eclampsia is BP with proteinuria and convulsion. In the above graph we can depicts that 53% means 26 nurses out of 500 has marked wrong answer. On the other hand 47% means 24 nurses have marked right answer .

CONSEQUENCES – In the above graph we can see approximately half of nurses marked right answer and half of nurses marked wrong answer ,that means nurses who have marked wrong answer they don't know the exact definition of eclampsia. If nurses wont have the knowledge of signs of eclampsia then it would lead to wrong diagnosis of complications and result in delay in management of complications and ultimately leads to morbidity and mortality of mother as well as child.

ACTION TO BE TAKEN - Proper training should be given to nurses regarding the eclampsia.

Q4.What is the value of BP in Eclampsia?

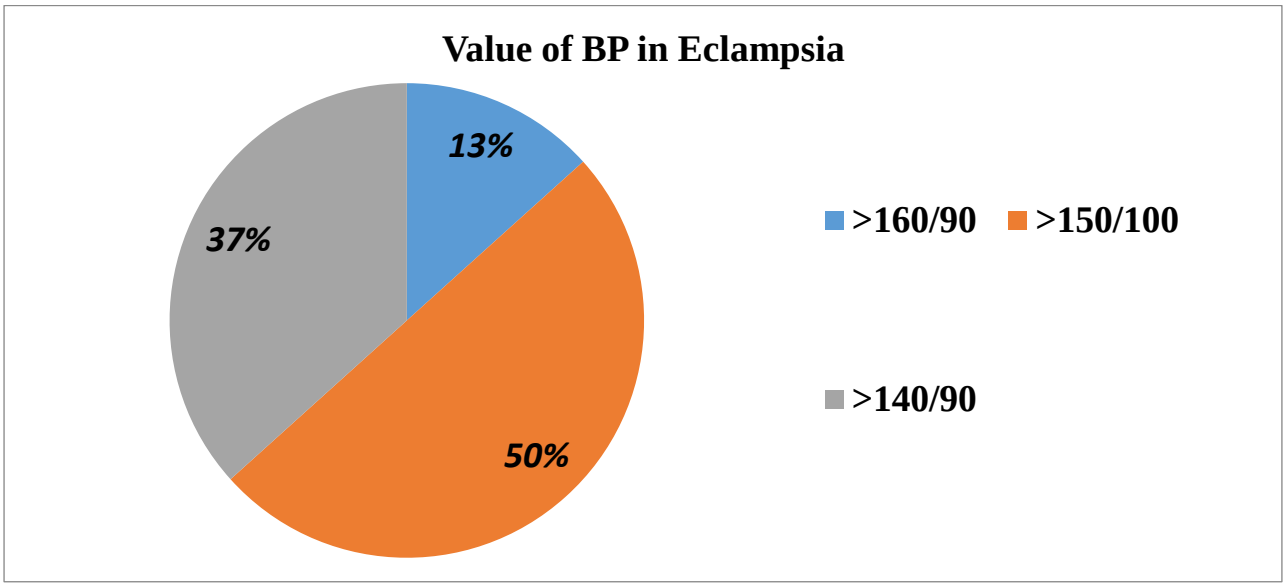


FIGURE 4

The correct answer for the Q4 is >140/90.From the above graph we can depicts that 63% means 31 nurses out of 50 has marked wrong answer and 37% means 19 nurses out of 30 has marked right answer. This shows more than 50 % of nurses marked wrong answer and they don't know the value of BP in Eclampsia.

CONSEQUENCES - Nurses those who don't know the value of BP in eclampsia leads to wrong diagnosis of complication and result in delay in management of complication and ultimately leads to mortality and morbidity on mother as well as child.

ACTIONS TO BE TAKEN – Proper training should be given to nurses in which they should be teach about the value of BP In eclampsia .

Q5.What are the important signs to diagnose severe pre eclampsia?

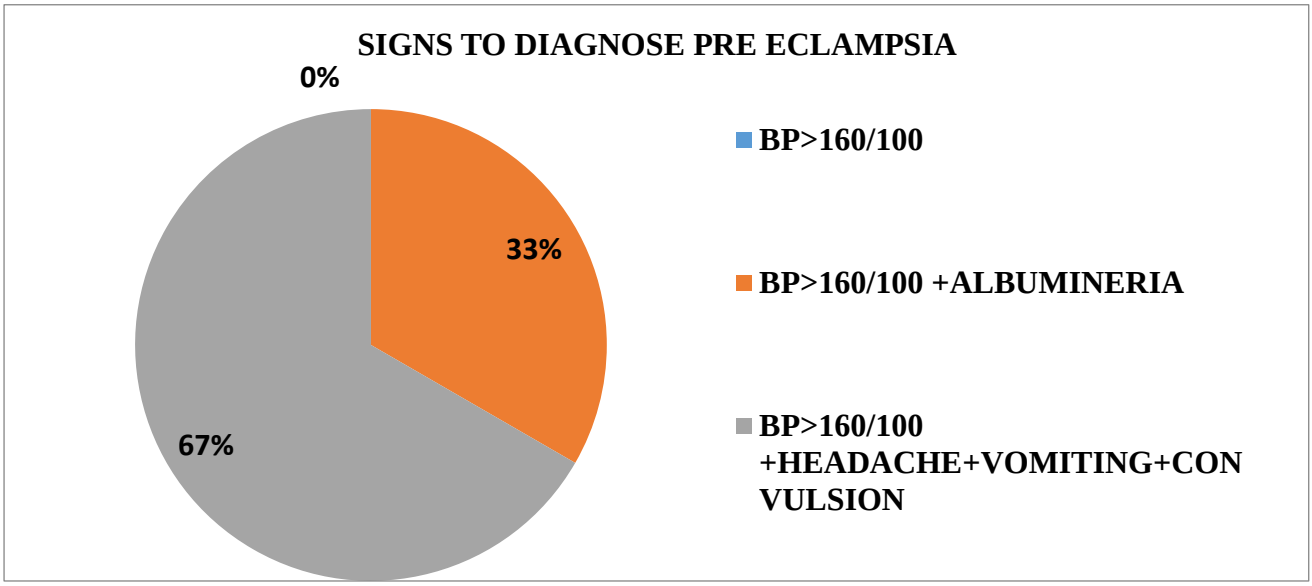


FIGURE 5

The correct answer of the Q5 is when BP >160/100+albumineria ,then it is the sign of severe pre-eclampsia .From the above graph we can see that 67% means 20 nurses have marked wrong answer and 33 % means 10 nurses have marked correct answer which is not satisfactory answer .

CONSEQUENCES – Nurses those whose have marked wrong answer lead to delay in diagnosis of pre eclampsia because in pre eclampsia convulsion are absent but is on the way to become eclampsia so we start administering the magnesium sulphate to patient to avoid convulsion in eclampsia. If nurses wait for convulsion to occur which actually not present in pre eclampsia leads to delay in diagnosis, result in delay in management of eclamspsia, ultimately cause morbidity and mortality to mother as well as child.

ACTIONS TO BE TAKEN-Proper training should be given to nurses regarding sign to diagnose pre eclampsia.

Q6.What is the value of proteinuria in Eclampsia ?

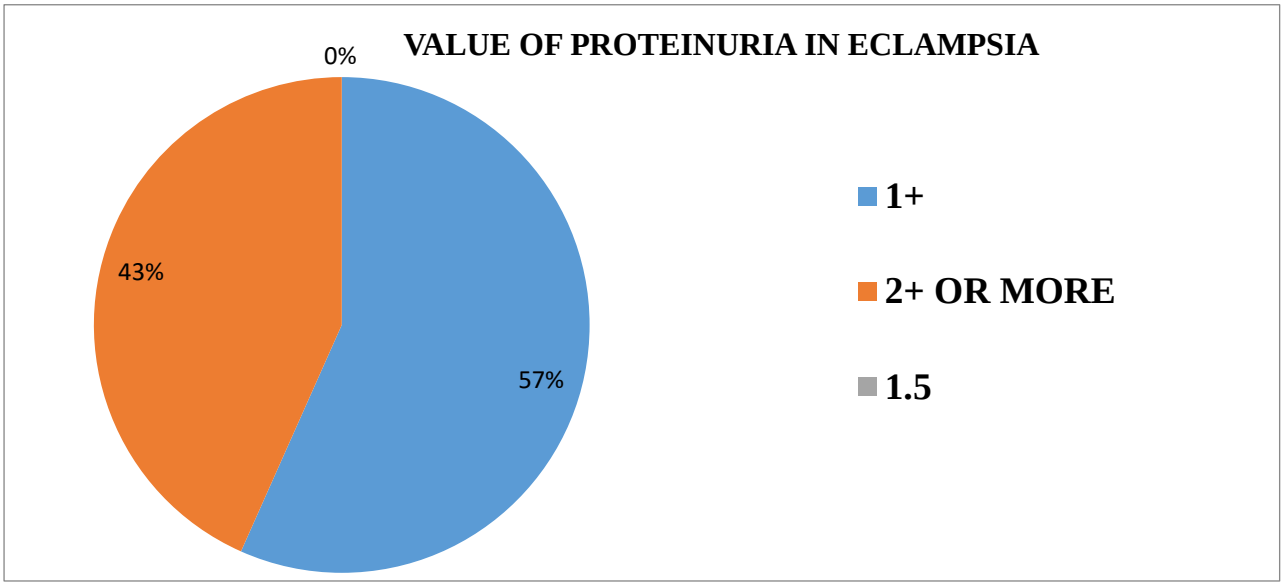


FIGURE 6

The correct answer for the Q6 is the value of proteinuria in Eclampsia is 2+ or more. Above graph shows that 57% means 28 nurses out of 50 has marked wrong answer and 43 % means 22 nurses out of 50 sample size has marked right answer. This show more than 50% nurses don't know the value of proteinuria in eclampsia. This test is basically done with dip strips or protein strips to find the albumin or protein traces in urine. This is the diagnosis sign of eclampsia.

CONSEQUENCES – Nurses those who have marked 1+ or 1.5 it means the condition has not reached to the level of eclampsia but on the way to become eclampsia which leads to wrong diagnosis of condition result in delay in management of complications and ultimately leads to morbidity and mortality of mother as well as child,because if the value of test is 2.5 or more than it is the exact condition of eclampsia.

ACTION TO BE TAKEN - Proper training should be given to nurses regarding the proteinuria test and its value.

Q7.What should be the position of patient during convulsion of eclampsia?

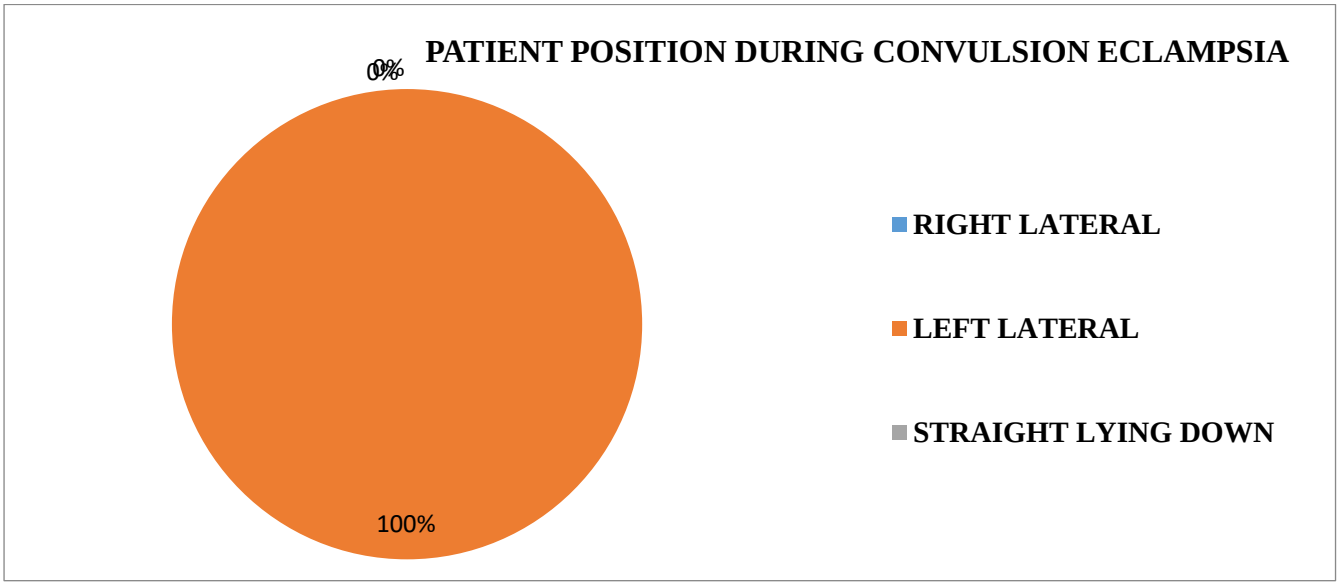


FIGURE 7

The correct answer of the Q7 is left lateral should be the position of patient during convulsion in eclamspia. Above graphs shows that 100% means 50 out of 50 nurses marked the right answer .

In this question we have got good response as knowledge of this position is must in nurses as this positioning decreases the risk of aspiration and will help to improve uterine blood flow by relieving obstruction of the vena cava by the gravid uterus. Protect the patient against injury during the seizure by padding and raising guardrails, using a padded tongue blade between the teeth, and suctioning the oral secretions as needed.

Q8. What is the choice of drug used to control convulsion in management of Eclampsia ?

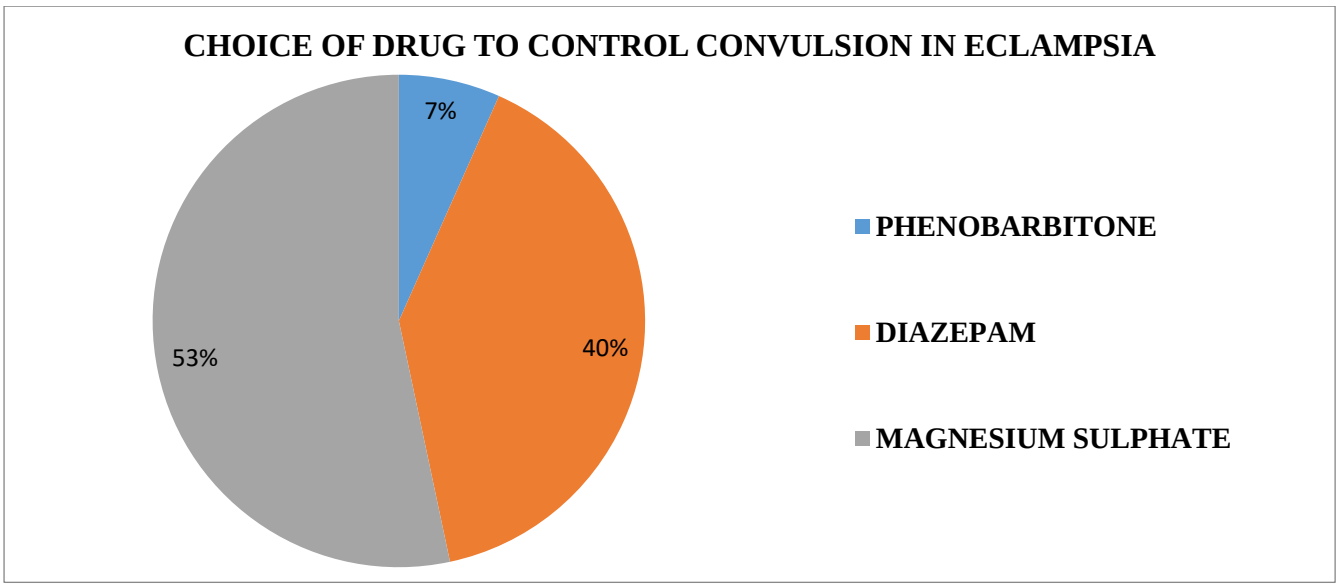


FIGURE 8

The correct answer of Q8 is Magnesium Sulphate .Above graph shows that 53% means 26 nurses out of 50 sample size has marked right answer, and remaining 47% means 24 nurses has marked wrong answer .

CONSEQUENCES – Nurses those who have marked wrong answer leads to wrong treatment given to patient that is Diazepam and Phenobarbitone .These drugs not used in management of eclampsia as phenobarbitone is anticonvulsant but given in kids and diazepam is sedative sometime used in seizures but not safe in pregnancy. On the other hand Magnesium sulfate is a antiseizure drug that reduces seizure risks in women with preeclampsia.It is most safest and effective drugs used in pregnancy during convulsion. A healthcare provider will give the medication intravenously. Sometimes, it's also used to prolong pregnancy for up to two days. This allows time for corticosteroid drugs to improve the baby's lung function. Magnesium sulfate usually takes effect immediately. It's normally given until about 24 hours after delivery of the baby. Women receiving magnesium sulfate are hospitalized for close monitoring of the treatment.If magnesium sulphate not given to the patient then it will worsen the condition of patient with **uncontrolled and continue seizure and leads to further morbidity and** mortality of mother as well as child.

ACTIONS TO BE TAKEN - Nurses those who have marked wrong answer should be properly trained about use of correct medication with proper dose in eclampsia.

Q9.What is the choice of drugs to control the pregnancy induced hypertension?

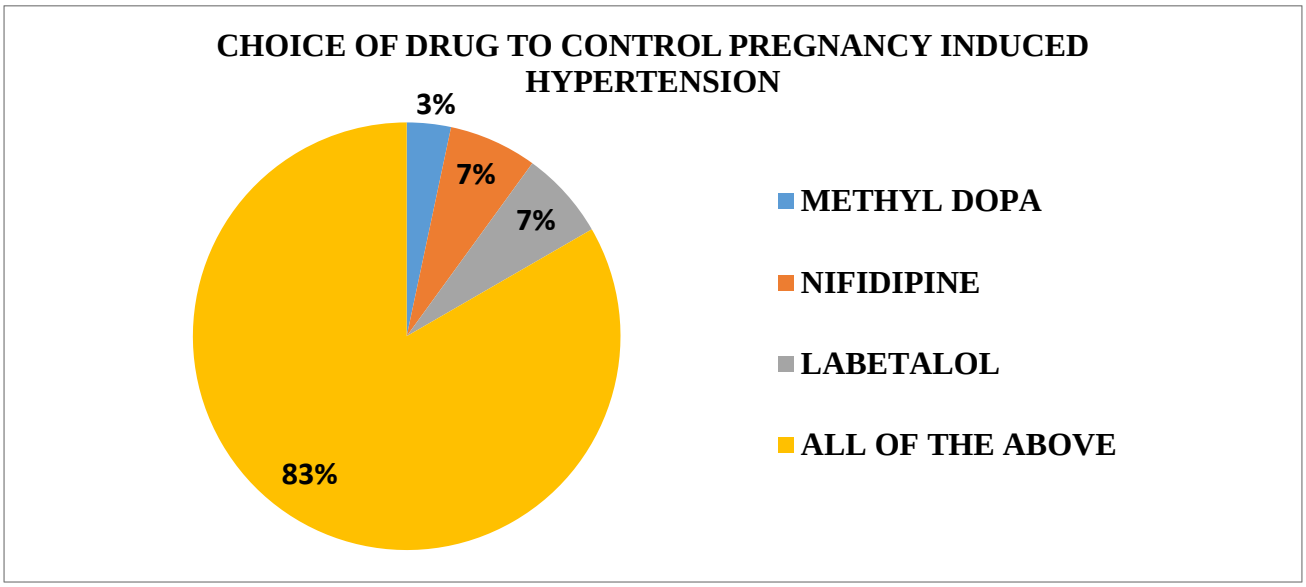


Figure 9

The correct answer of the Q9 is All Of The Above. In the above graph we can see 83% means 41 nurses out of 50 have marked right answer other remaining 18% means 9 nurses out of 50 have marked wrong answer. In this question response is good as maximum nurses know the management of pregnancy induced hypertension.

In this question no answer is wrong .All the answer are true .But Nurses those who haven't marked all of the above answer and marked 1 or 2 drugs should be trained enough about the medication management of pregnancy induced hypertension. As nurses should have knowledge about all the medication use in management of pregnancy induced hypertension.

Q10.What are the initial steps to manage eclampsia ?

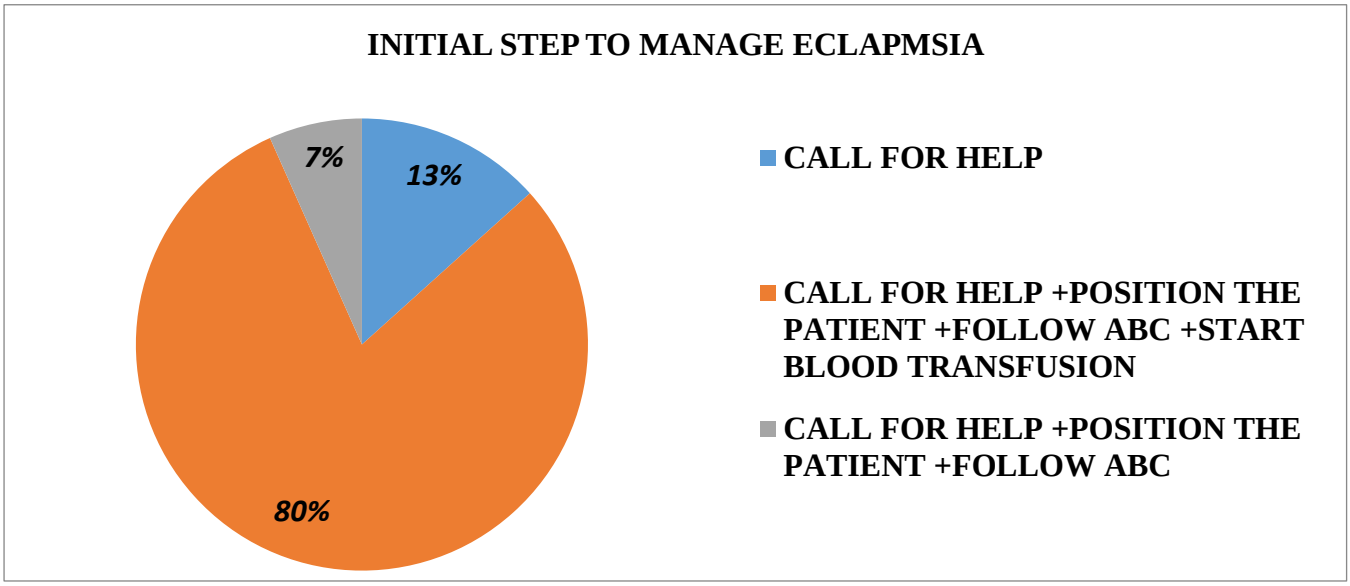


FIGURE 10

The correct answer of Q10 is call for help+ position the patient +follow ABC .But the above graph depicts that 93 %means 46 nurses out of 50 sample size have marked wrong answer in which 80% means 40 nurses have marked call for help+ position the patient +follow ABC +start blood transfusion and 13% means 6 nurses have marked call for help option. Only 7% nurses means 4 nurses have marked correct answer, which is actually an area of concern.

Consequences – Nurses those who have marked wrong answer leads to worsen the condition of patient as only call for help is not the complete steps for eclampsia management and other option which includes start blood transfusion is a wrong option for management of eclampsia and result of which wrong management of eclampsia ,worsen the patient condition ,ultimately leads to morbidity and mortality of mother as well as child.

Actions to be taken- Proper training should be given to the nurses regarding the initial steps of management of eclampsia

Q11.What should be eclampsia management kit contain ?

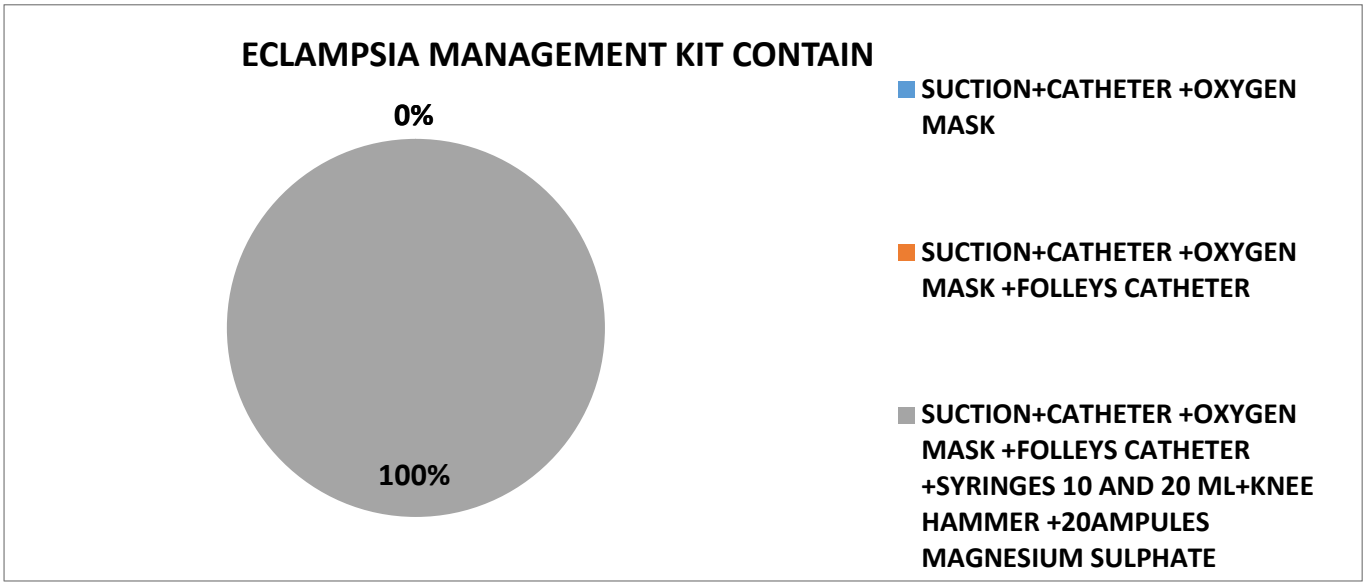


FIGURE 11

The correct answer for the Q11 is suction +catheter +oxygen mask +folleys catheter +syringes 10 and 2o ml +knee hammer +20 ampues magnesium sulphate .Above graph shows that 100% means 50 nurses out of 50 have marked right answer .Response to this question is positive and its good as nurses should have knowledge about what eclampsia management kit contain,as it leads to correct and fast management of eclampsia which ultimately leads to improve the condition of mother as well as child.

Q12. What is the loading dose of Magnesium Sulphate ?

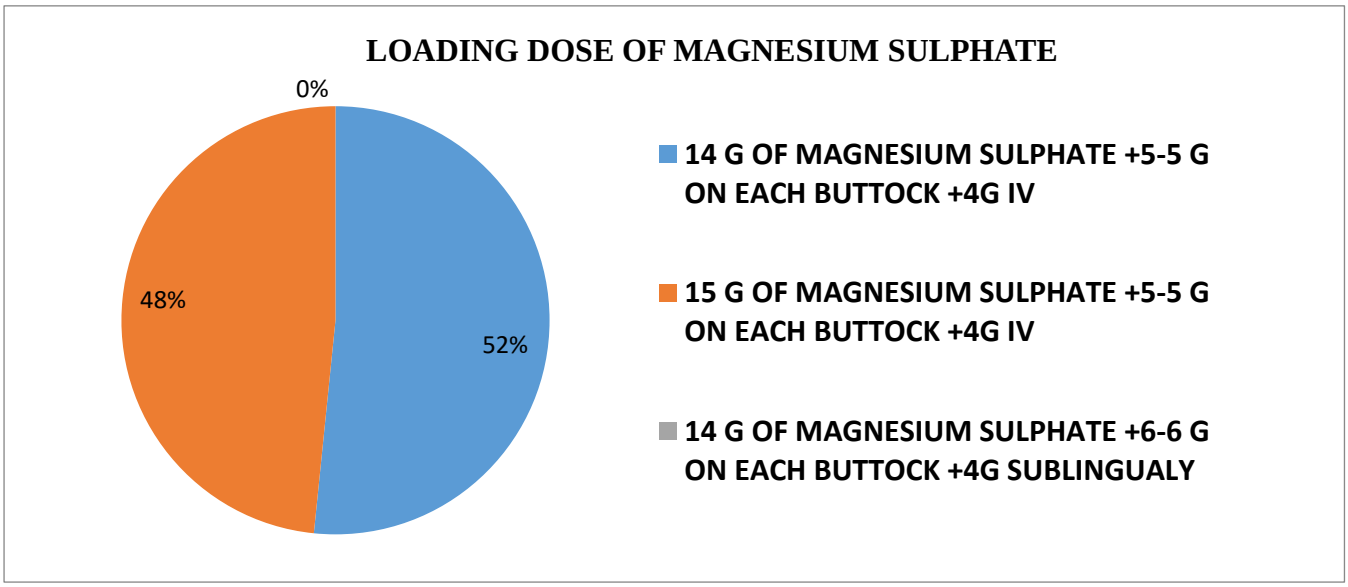


FIGURE 12

The correct answer for the Q 12 loading dose of magnesium sulphate is 14 g of magnesium sulphate +5-5g on each buttock +4g IV. Above graph shows that 52% means 26 nurses out of 50 have marked right answer and on other 48% means 24 nurses out of 50 have marked wrong answer which is half of the nurses in number .

CONSEQUENCES – 48% nurses have marked wrong answer that means they lack knowledge regarding the loading dose of magnesium sulphate .if we administered wrong dose of magnesium sulphate to patient then it leads to severe side effects of magnesium sulphate like .

- Respiratory rate goes down
- Urine output goes down
- Knee jerk absent
- nausea, diarrheoa, or vomiting
- large drops in blood pressure
- slow or irregular heart rate
- breathing problems
- deficiencies in minerals other than magnesium, especially calcium
- confusion or fogginess
- coma
- heart attack
- kidney damage

ACTIONS TO BE TAKEN – Proper training should be given to the nurses regarding the loading dose of magnesium sulphate so that correct dose can be administered to patient for convulsion management .

Q13.What are the thing require in labor room for the management of eclampsia ?

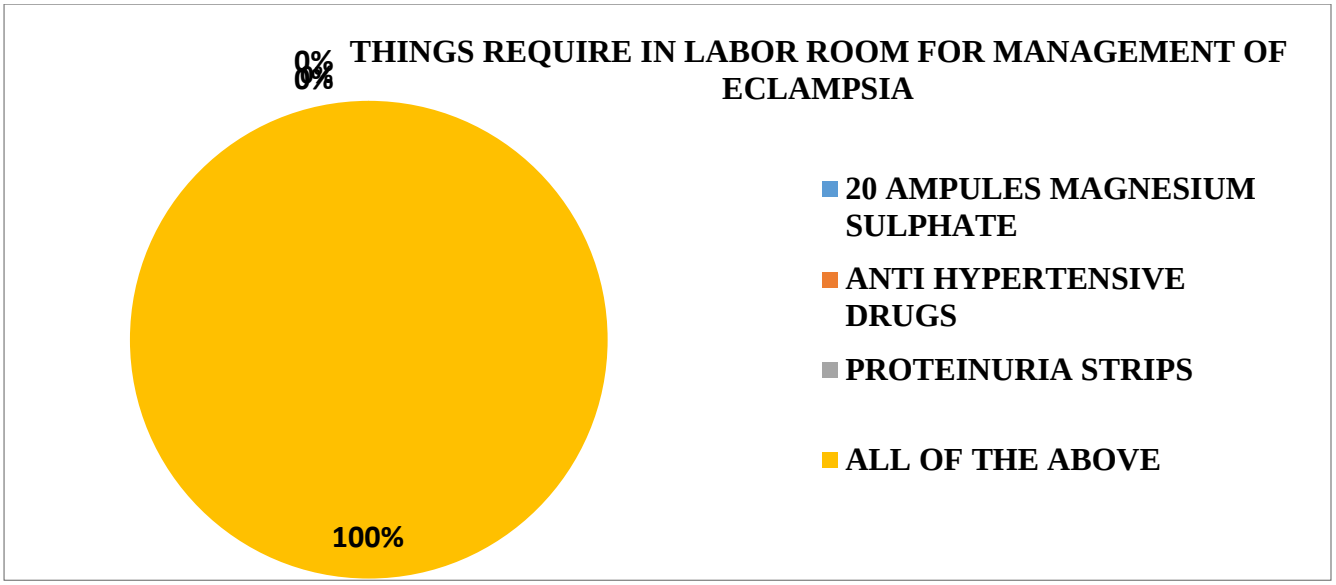


FIGURE 13

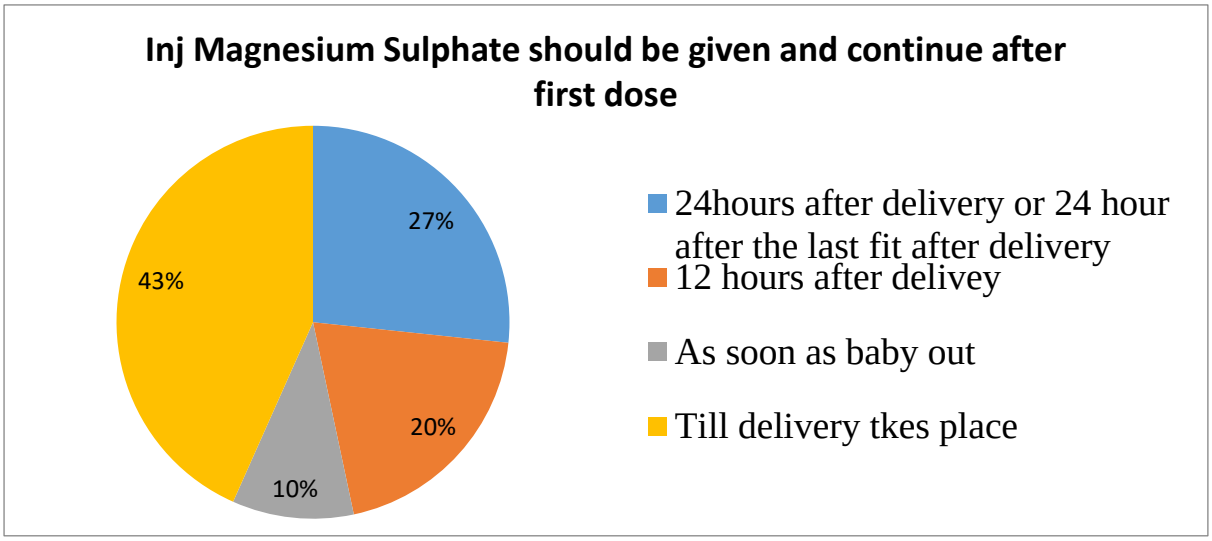
The correct answer of Q13 is all of the above.Above graph shows that 100% means 50 out 50 nurses have marked right answer .This shows that they have knowledge regarding the things require in labor room for the management of eclampsia that is magnesium sulphate ,antihypertensive drugs , proteinuria strips.

Magnesium sulphate require for the management of convulsion.

Anti hypertensive require for the management BP

Proteinuria strips require to measure albumin in urine during pregnancy .

Q14 .How long Inj. Magnesium Sulphate should be given after first dose ?



The correct answer of Q14 is 24 hour after delivery or 24 hours after the last fit after delivery .From the above graph we can see that 65% means 32 nurses out of 50 have marked wrong answer in which 43% means 21 nurses out of 50 nurses,10% means 5 nurses out of 50, 20% means out of 10 nurses have marked wrong answer and on the other hand only 27% means 13 out of 50 nurses have marked right answer .

CONSEQUENCES –The response of this questions seems not good as as 65% of nurses have marked wrong answer which shows they don't know how long Inj.Magnesium Sulphate should be given to patient after 1st dose which leads to delay in management of convulsion result in worsen the condition of mother as well as child.

ACTIONS TO BE TAKEN –Proper training should be conducted for nurses in which knowledge about magnesium sulphate should be given to patient.

Q15.What if recurrent fits occur after 30 minutes of loading dose ?

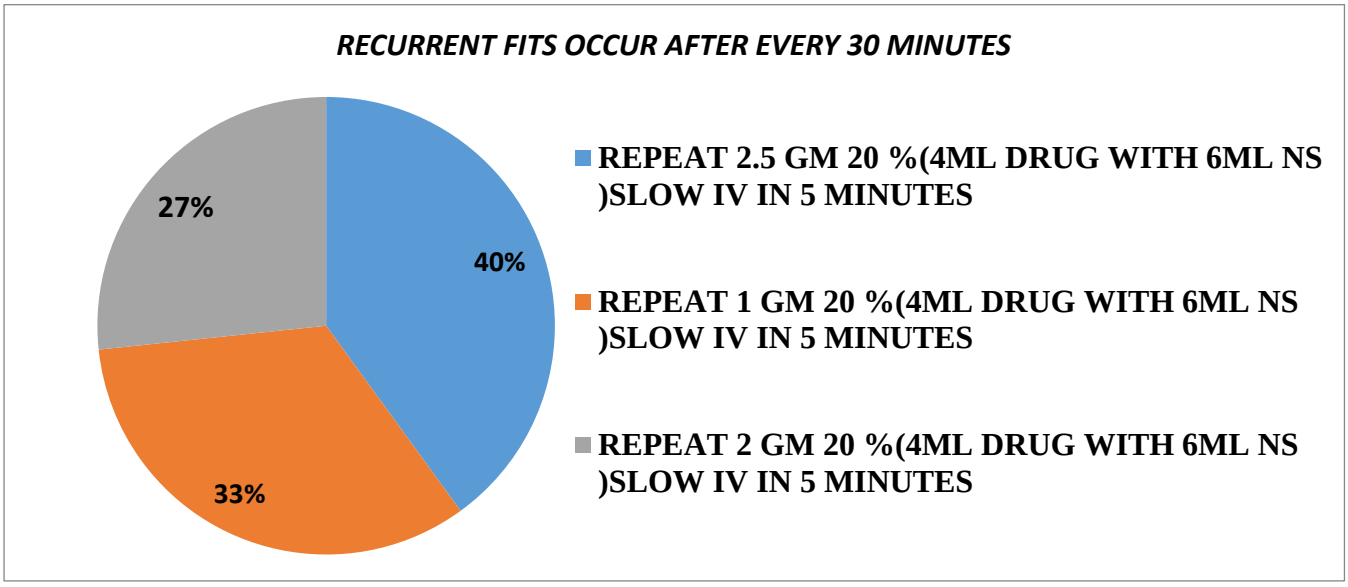


FIGURE 15

The correct answer of the Q15 is if recurrent fits occur after every 30 minutes than repeat the 2gm 20% (4ml drug with 6ml NS)slow IV in 5 minutes .From the above graph we can see 73 % of nurses have marked wrong answer in which 40% means 20 nurses out of 50 and 33% means 16

out of 50 .Only 27 % means 14 nurses out of 50 have marked the right answer which is very less in number .

CONSEQUENCES –Nurses those who have marked wrong answer don't know the repeat dose of magnesium sulphate and wrong dose leads to severe complications to both mother and child as if recurrent fits occur and not being cured with correct dose of magnesium sulphate then it leads to cause complication to both mother and child and ultimately leads to cause morbidity and mortality of mother and child.

ACTIONS TO BE TAKEN – proper training should be given to the nurses regarding the the correct dose of magnesium sulphate when recurrent fits occur.

Q16.What is the maintenance dose of Magnesium Sulphate ?

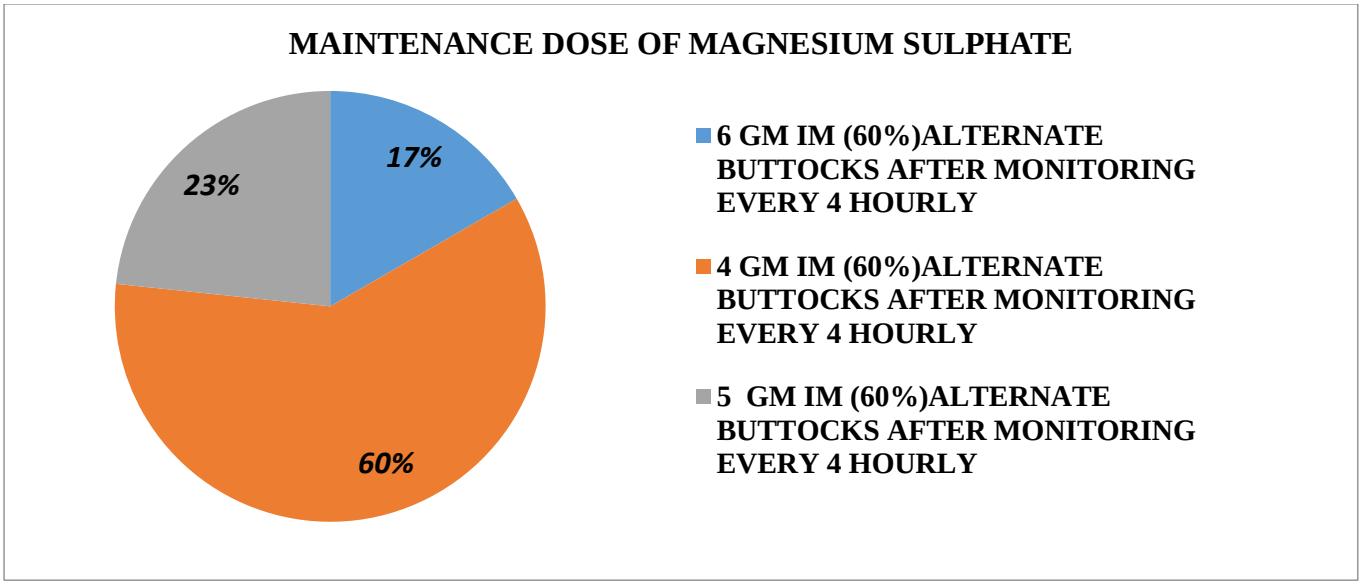


FIGURE 16

The correct answer of Q16 is the maintenance dose of Magnesium Sulphate is 5gm IM (60%) alternate buttocks after monitoring every 4 hourly. From the above graph we can see that 77 % of nurses have marked wrong answer in which 60% means 30 nurses out of 50 sample size and 17% means 8 out of 50 sample size. Only 23% means 12 nurses out of 50 have marked right answer.

CONSEQUENCES –More than 50% of nurses have marked wrong answer that shows they don't know the correct dose maintenance dose of magnesium sulphate to treat eclampsia.60% of nurses have marked 4 gm IM dose of Magnesium Sulphate which is actually not sufficient to meet the required dose and its leads to not treat the convulsion which ultimately worsen the condition

of mother as well as child .on the other hand 23 % of nurses have marked 6gm IM of Magnesium Sulphate which shows more dose than required which leads to cause the magnesium sulphate toxicity .

But there's a risk of **magnesium overdose**, called magnesium toxicity. Taking too much magnesium can be life-threatening to both mother and child. In women, the most common symptoms include:

- Respiratory rate goes down
- Urine output goes down
- Knee jerk absent
- nausea, diarrhea, or vomiting
- large drops in blood pressure
- slow or irregular heart rate
- breathing problems
- deficiencies in minerals other than magnesium, especially calcium
- confusion or fogginess
- coma
- heart attack
- kidney damage

ACTIONS TO BE TAKEN – Proper training should be given to nurses regarding the maintenance dose of Magnesium Sulphate .

Q17.What should be monitor to identify the toxicity of magnesium sulphate ?

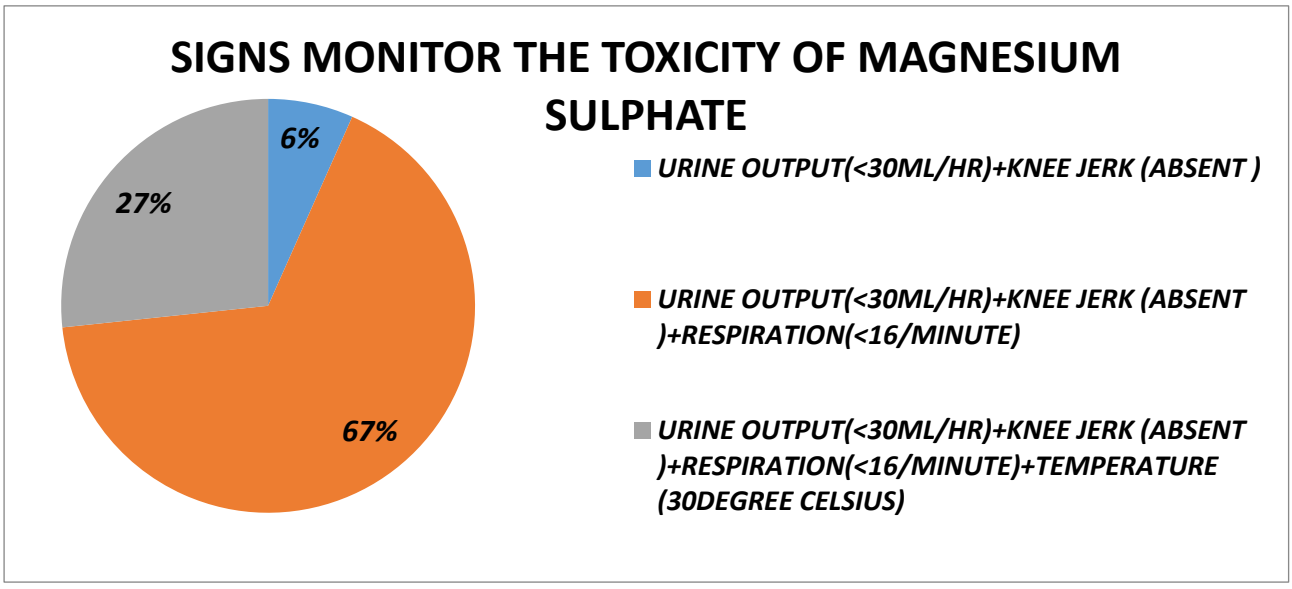


FIGURE 17

The correct answer of the Q17 is urine output (<30ml/hr)+knee jerk(absent)+Respiration (<16/minute).The above graph shows that 67% means 33 nurses out 50 have marked right answer and 33 % means 16 nurses out of 50 have marked wrong answer in which 27% means 13 nurses out of 50 and 6% means 3 nurses out 50.

CONSEQUENCES -The response is quite good in this but still 33 % nurses don't know magnesium sulphate toxicity sulphate .if its so then it leads to lack of knowledge to recognize the Magnesium Sulphate toxicity.If this toxicity not not cure on time then it cause life threatening situation for both mother and child and other symptoms like

- Respiratory rate goes down
- Urine output goes down
- Knee jerk absent
- nausea, diarrhea, or vomiting
- large drops in blood pressure
- slow or irregular heart rate
- breathing problems
- deficiencies in minerals other than magnesium, especially calcium
- confusion or fogginess
- coma
- heart attack
- kidney damage

ACTIONS TO BE TAKEN – proper training should be given to nurses regarding the signs and symptoms of magnesium toxicity so that proper steps should be taken and antidote of magnesium sulphate can be given to patient on time and prevent mother and child condition to get more worsen.

Q18.What should be done if observe any signs of toxicity of Magnesium Sulphate ?

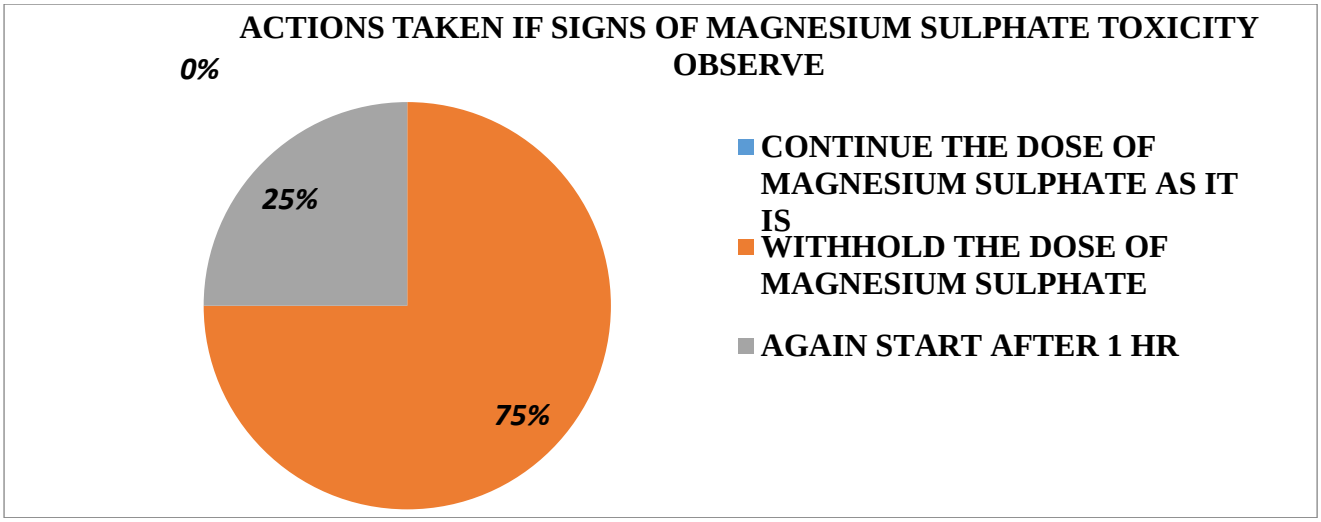


FIGURE 18

The correct answer of Q18 is withhold the dose of Magnesium Sulphate if finds the signs of Magnesium Sulphate toxicity. From the above graph we can see that 75% means 37 nurses out 50 have marked right answer and 25% means 13 nurses out of 50 have marked wrong answer.

CONSEQUENCES –the response of this question seems quite good but 25% nurses have marked wrong answer also.they have marked if we see sings of magnesium sulphate toxicity than we again start the dose after 1 hr,which is completely wrong answer ,this leads to worsen the mother and child condition and result cause mortality of mother and child.In this case we stop the dose of Magnesium Sulphate and administered antidote of Magnesium Sulphate to prevent the condition to get more worsen.

ACTIONS TO BE TAKEN – Proper training should be given to nurses regarding the steps to be taken if we found the magnesium toxicity in patient.

Q19.What is the antidote of magnesium sulphate ?

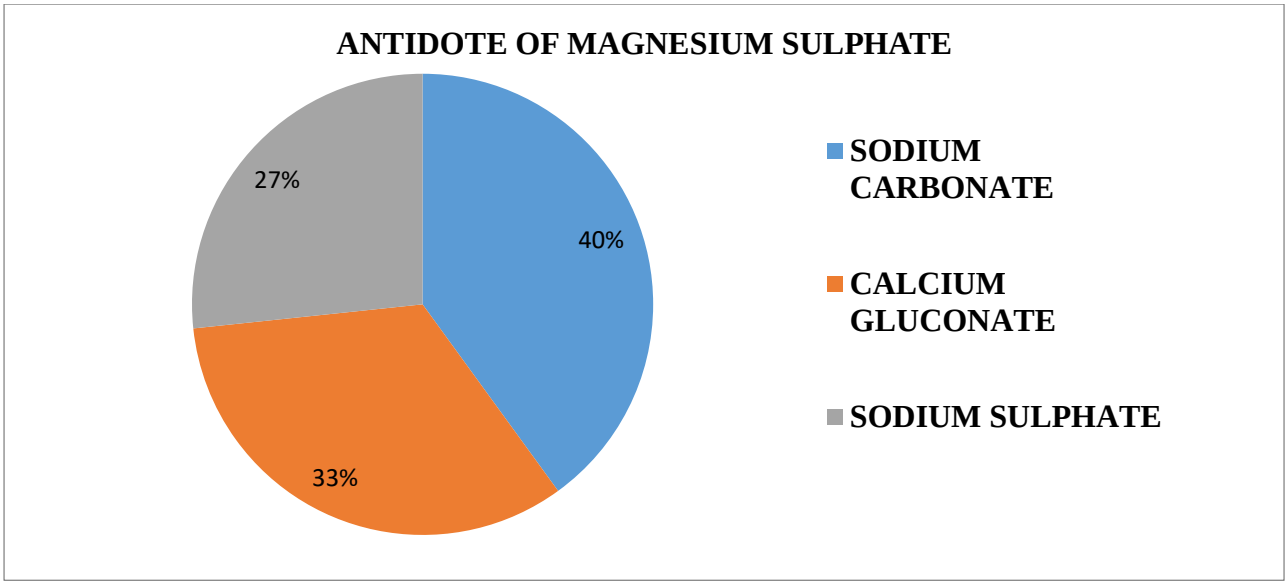


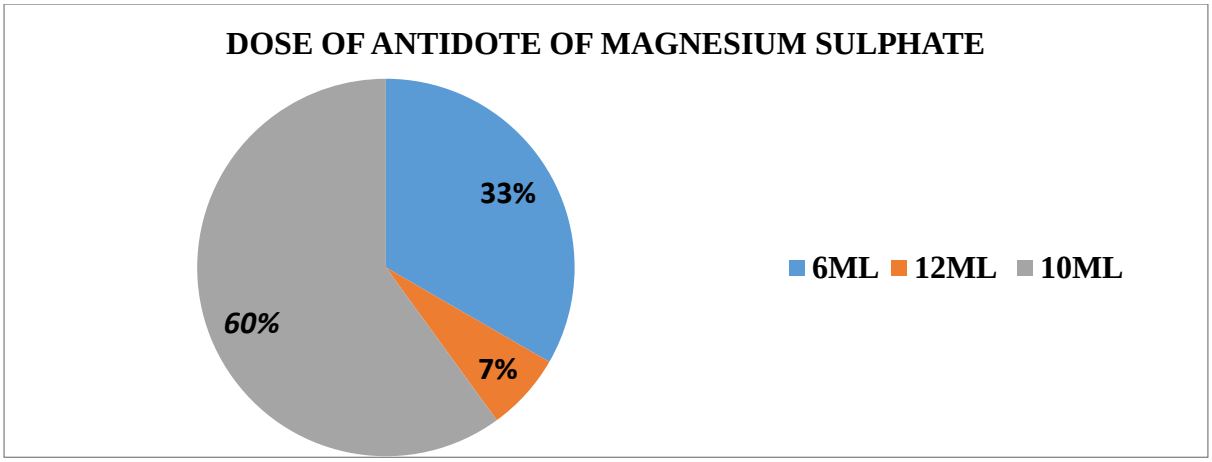
FIGURE 19

The correct answer of the Q19 is Calcium Gluconate . From the above graph we can see that 67% means 33 nurses out of 50 have marked wrong answer in which 40% means 20 nurses out of 50 and 27% means 13 Nurses out of 50 have marked wrong answer. Only 33% of nurses means 17 nurses have marked right answer.

CONSEQUENCES –The response is not good as less than 50% have marked right answer and other marked wrong answer. Calcium gluconate drugs is given when we find the toxicity of magnesium sulphate and to reduce its toxicity effect and prevent the condition of mother to get more worsen.If this drugs is not given in toxicity condition than it leads to cause more complications(magnesium sulphate toxicity -discussed above)to mother and ultimately leads to cause mortality .

ACTIONS TO BE TAKEN- Proper training should be given to nurses regarding correct antidote of Magnesium Sulphate and it beneficial effects.

Q20.What is the dose of antidote of magnesium sulphate toxicity ?



The correct answer of the Q20 is 10ML.As we know the antidote of Magnesium Sulphate toxicity is Calcium Gluconate from above question .From the above graph we can see 60% means 30 nurses out of 50 have marked right answer .This shows that 40% of nurses are aware of antidote of magnesium toxicity but they 60 % means above 50% nurses are well aware of the dose of antidote and on the other hand 40 %means of nurses which include 33 % means 16 nurses out of 50 nurses and 7% means 4 nurses out of 50 have marked wrong answer.

ACTIONS TO BE TAKEN- Proper training should be given to nurses regarding the dose of antidote of magnesium sulphate like calcium gluconate.

SUGGESTIONS

1.From the above response collectively ,we can suggest to conduct proper training, timely and consistently regarding the management of Eclampsia and maintenance dose of Magnesium Sulphate.

2.Training should be conducted in both way : theoretically and practically.

3.Pre and post test should also be done to check the understanding and their potential for eclampsia management .

4.Revision should be taken after a gap of 2 weeks to check the efficiency of nurses.

REFERENCES

https://www.researchgate.net/publication/322159908_NURSE'S_KNOWLEDGE_REGARDING_MANAGEMENT_OF_ECLAMPSIA_AT_SELECTED_PRIVATE_HOSPITAL_IN_BANGLADESH

https://www.researchgate.net/publication/292608205_Knowledge_of_eclampsia_management_amongst_nursing_staff

https://www.semanticscholar.org/paper/Knowledge-and-skills-on-managing-eclampsia-among-at-Jaffar/e7d39f41ea9dcf1327cdc7d23abba335b603e77a

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2761778/

Annexure

Questionnaire

My Name is Dr. Shruti Kanther .I am an MBA student in health and hospital management at the IIHMR University, Jaipur (Rajasthan).As part of my studies ,I am carrying out a research study on the **"Nurses knowledge regarding the management of Eclampsia at small health care organization in Jodhpur district ,Rajasthan".** Participation of you is entirely voluntary. You may change your mind later and stop participating even if you agreed earlier. Any information you provide including you and /or your identity will be treated with utmost confidentiality the information will not be used for the purpose other than the ones disclosed in this study.

Name …… **Age…….**

Sex ……. **Address……**

Contact no……. **Qualification……**

Q1.What is pregnancy induced hypertension?

1).140/90 at any stage of pregnancy

2). 140/90 after 20 weeks of pregnancy

Q1. गर्भावस्था में हाई ब्लड प्रेशर क्या होता हैं?

1). 140/90 गर्भावस्था की किसी भी अवस्था में

2). 140/90 गर्भावस्था के 20 हफ्ते बाद

Q2.What are the danger signs for ptient having high BP?

1). Headache

2).Bluring of vision

3).Epigastric pain

4).Generalized edema

5).Decreased urine output

6).All of the above

Q2.गर्भावस्था में हाई ब्लड प्रेशर के क्या क्या खतरे के निशान होते हैं?

1). सरदर्द

2).दृष्टि का धुंधला होना

3).एपिगैस्ट्रिक दर्द (पेट् के उपरी हिस्से मे दर्द्)

4).शरीर् का सूजना

5).मूत्र उत्पादन में कमी

6).उपरोक्त सभी

Q3.What is Eclampsia ?

1). Only hypertension

2). Hypertension with protein and convulsion

3). Severe Hypertension with protein ,convulsion and difficulty in breathing .

Q3. एक्लम्पसिया कब् कहा जाता हैः

1). सिर्फ बी.पी.

2). बी.पी.+ एल्बुमिन्यूरिया (प्रोटीन)+ दोहरे

3). बी.पी. + एल्बुमिन्यूरिया + दोहरे + सांस लेने में तकलीफ

Q4. What is the value of BP in Eclampsia?

1). >160/90 with fits/ convulsion and proteinuria

2). > 150/100 with fits/ convulsion and proteinuria

3). > 140/90 with fits/ convulsion and proteinuria

Q4.एक्लेम्पसिया में बी पी की क्या वैल्यू होती हैं ?

1). >160/90 एल्बुमिन्यूरिया (प्रोटीन)+ दोहरे

2). > 150/100 एल्बुमिन्यूरिया (प्रोटीन)+ दोहरे

3). > 140/90 एल्बुमिन्यूरिया (प्रोटीन)+ दोहरे

Q5. What are the important sign to diagnose severe Pre eclampsia?

1).BP > 160/100

2).BP>160/100 along with proteinuria

3).BP>160/100 with symptoms like headache and vomiting

Q5. सीवियर प्री एक्लेम्पसिया को पहचानने के क्या क्या संकेत होते हैं?

1). बी.पी. > 160/100

2). बी.पी. >160/100 + एल्बुमिन्यूरिया (प्रोटीन)

3). बी.पी. >160/100 + सर दर्द + उलटी

Q6.What is the value of proteinuria in eclampsia?

1). Proteinuria 1+

2). Proteinuria 2+ or more

3). Proteinuria 1.5

Q6. एक्लेम्पसिया में मूत्र में प्रोटीन की क्या वैल्यू होती हैं?

1). 1+

2). 2+ और इससे ज्यादा

3). 1.5

Q7.What should be the position of patient while managing eclampsia?

1). Right lateral position

2). Left lateral position

3). Straight lying down

Q7. एक्लेम्पसिया में मरीज़ की पोजीशन क्या होती हैं ?

1).दाए लेटरल पोजीशन

2).बाए लेटरल पोजीशन

3).सीधी लेटती हुए पोजीशन

Q7. एक्लेम्पसिया में मरीज को कोनसी पोजीशन में रखा जाता हैं?

Q8. The choice of drug used to control convulsion in management of Eclampsia

1). Phenebarbitone

2). Diazepam (Valium)

3). Magnesium sulphate

Q8.एक्लेम्पसिया में मरीज के दोहरे ठीक करने के लिए कोनसी दवाई दी जाती है?

1). फेनोबार्बिटोने

2).डायजेपाम (वैलियम)

3).मागनेसियम सलफेट

Q9. The choice of drug to control hypertension in pregnancy

1). Nifidipine

2). Labetalol +Nifidipine

3). Labetalol

Q9. गर्भावस्था में हाइपरटेंशन को रोकने के लिए कोनसी दवाई दी जाती है?

1). निफीडीपीन

2).लेबेटालोल + निफीडीपीन

3). लेबेटालोल

Q10. What are the initial steps to manage eclampsia?

1). Call for help

2). Call for help + position the patient +follow ABC + start blood transfusion

3). Call for help + position the patient +follow ABC

Q10. क्लेम्पसिया को मैनेज करने के लिए शुरुआती प्रक्रिया क्या होने चाइये ?

1). मदद के लिए बुलाना

2).मदद के लिए बुलाना + मरीज़ की पोजीशन ठीक करना+ ए. बी. सी. फॉलो करना+ खून चढ़ाना चालू करना

3). मदद के लिए बुलाना + मरीज़ की पोजीशन ठीक करना+ ए. बी. सी. फॉलो करना

Q11. What should be the eclampsia management kit contain?

1). Suction + catheter + oxygen mask

2). Suction + catheter + oxygen mask +Foleys catheter

3). Suction + catheter + oxygen mask + Foleys catheter + syringes 10 and 20 ml +knee hammer

Q11.एक्लेम्पसिया मैनेजमेंट किट में क्या क्या होना चाइये ?

1).सक्शन + कैथिटर + ऑक्सीजन मास्क

2).सक्शन + कैथिटर + ऑक्सीजन मास्क +फोलेस कैथिटर

3). सक्शन + कैथिटर + ऑक्सीजन मास्क + फोलेस कैथिटर + सिरिंगस 10 और 20 ml +कनी हैमर

Q12. What is the loading dose of Magnesium Sulphate?

1).14g of magnesium sulphate with 5-5 g on each buttock and 4g IV

2). 15g of magnesium sulphate with 5-5 g in each buttock and 5 g IM

3). 14g of magnesium sulphate with 6-6 g on each buttock and 4 g sublingualy

Q12.मागनेसियम सलफेट की लोडिंग डोज़ क्या होती है?

1).14 ग्राम मागनेसियम सलफेट + 5-5 ग्राम दोनों बुट्टोक पर + 4 ग्राम आई .वी

2).15 ग्राम मागनेसियम सुलफाट + 5-5 ग्राम दोनों बुट्टोक पर + 5 ग्राम आई. एम्

3). 14 ग्राम मागनेसियम सलफेट + 6-6 ग्राम दोनों बुट्टोक पर + 4 ग्राम जुबान के निचे रखना

Q13. Minimum Number of ampules of Magnesium Sulphate that should be present in Labour room:

1).10 ampules

2).5 ampules

3).20 ampules

4).15 ampules

Q13. प्रसव् श्कक्ष में मौजूद मैग्नीशियम सल्फेट के **ampules** की न्यूनतम संख्या:

1).10 ampules
2).5 ampules
3).20 ampules
4).15 ampules

Q14. Inj. Magnesium sulphate should be given upto:

1).24 hours after delivery or 24 hours after the last fit after Delivery .

2).12 hours after delivery

3).As soon as baby is out

4).Till delivery takes place

Q14. इंज. मैग्नीशियम सल्फेट **कब्** तक दिया जाना चाहिए?

1). डिलीवरी के 24 घंटे बाद या डिलीवरी के बाद अंतिम फिट होने के 24 घंटे बाद।
2).प्रसव के बाद 12 घंटे
3).जैसे ही बच्चा बाहर होता है
4).जब तक डिलीवरी होती है

Q15.What if recurrent fits occur after 30minutes ?

1).repeat 2.5 gm 20% (4 ml drug with 6 ml NS) slow IV in 5 minutes

2).repeat 1 gm 20% (4 ml drug with 6 ml NS) slow IV in 5 minutes

3).repeat 2 gm 20% (4 ml drug with 6 ml NS) slow IV in 5 minutes

Q15.हर आधे घंटे में यदि बार बार दोहरे आये तब क्या करे?
1).repeat 2.5 gm 20% (4 ml drug with 6 ml NS) slow IV in 5 minutes
2).repeat 1 gm 20% (4 ml drug with 6 ml NS) slow IV in 5 minutes
3).repeat 2 gm 20% (4 ml drug with 6 ml NS) slow IV in 5 minutes

Q16.What is the maintenance dose of Magnesium Sulphate ?

1). 6 gm IM (60%) alternate buttocks after monitoring every 4 hourly.

2). 4gm IM (40%) alternate buttocks after monitoring every 4 hourly.

3). 5 gm IM (50%) alternate buttocks after monitoring every 4 hourly.

Q16. मागनेसियम सलफेट की मेंटेनेंस डोज़ क्या होती हैं?

1). 6 gm IM (60%) alternate buttocks after monitoring every 4 hourly.
2). 4gm IM (40%) alternate buttocks after monitoring every 4 hourly.
3). 5 gm IM (50%) alternate buttocks after monitoring every 4 hourly.

Q17. What should be monitor to identify the toxicity of magnesium sulphate ?

1). Urine output + knee jerk
2). Urine output+knee jerk +respiration
3). Urine output + knee jerk + respiration + temperature

Q17. मागनेसियम सलफेट की टॉक्सिसिटी को जांचने के लिए क्या क्या देखा जाता है?

1).यूरिन आउटपुट + घुटने की पलटा
2).यूरिन आउटपुट + घुटने की पलटा +रेस्पिरेशन
3).यूरिन आउटपुट + घुटने की पलटा + रेस्पिरेशन + टेम्परेचर

Q18.What should be done if observe any sign of toxicity of magnesium sulphate ?

1). Continue the dose of magnesium sulphate as it is
2). With hold the dose of magnesium sulphate

Q18.मागनेसियम सलफेट की टॉक्सिसिटी के क्या क्या संकेत होते हैं?

1). मागनेसियम सलफेट की डोज़ को जारी रखना
2). मागनेसियम सलफेट की डोज़ को वही रोक देना

Q19. What is the antidote of Magnesium Sulphate ?

1).Sodium Carbonate
2). Calcium gluconate
3). Sodium Sulphate

Q19. मागनेसियम सलफेट की एंटीडोट क्या होती हैं?

1).सोडियम कार्बोनेट
2). कैल्शियम ग्लुकोनेट
3). सोडियम सलफेट

Q20. What is the dose of antidote of Magnesium sulphate toxicity ?

1). (6mg)
2). (12 mg)
3). (10 ml)

Q20. मागनेसियम सलफेट के एंटीडोट की डोज़ क्या होती हैं?

1). 6 मिलीग्राम
2). 12 मिलीग्राम
3). 10 मिलीलीटर