

5-2023

Nurses' and Nursing Students' Knowledge of Pregnancy-Related Complications Among African Americans

Tamija Alexander

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Nurses' and Nursing Students' Knowledge of Pregnancy-Related Complications Among
African Americans

by

Tamija Alexander

A Thesis
Submitted to the Honors College of
The University of Southern Mississippi
in Partial Fulfillment
of Honors Requirements

May 2023

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ABSTRACT

The literature highlights ethnic and racial disparities within healthcare and maternal outcomes. African American mothers have suffered from disproportionate mortality and morbidity rates compared to Caucasian women for centuries. In 2007–2016, African American and American Indian/Alaska Native women had significantly more pregnancy-related deaths per 100,000 births than did Caucasians, Hispanic, and Asian/Pacific Islander women. Cardiomyopathy, thrombotic pulmonary embolism, and hypertensive disorders are the three leading causes of complications during pregnancy among African Americans. The purpose of the research study was to identify if nurses and nursing students can recognize the early and late signs and symptoms of cardiomyopathy, thrombotic pulmonary embolism, and hypertensive disorders in African American mothers. The research study used a quantitative research method by using a survey to collect the data. The research tool was administered via Qualtrics. Participants were recruited using flyers, which were distributed to classmates and co-workers. The flyer was also posted on social media websites. Ninety-two percent of the participants were aware that African Americans are most prone to pregnancy-related complications. The participants lacked knowledge when it came to identifying pre-eclampsia, cardiomyopathy, and thrombotic pulmonary embolism and interventions for the specific complications.

Keywords: Pre-eclampsia, Cardiomyopathy, Thrombolytic pulmonary embolism, African American maternal mortality

DEDICATION

This research study is dedicated to my Aunt Lue'Ella, who passed away during childbirth, and to all African American mothers/their families who have suffered from pregnancy-related complications.

ACKNOWLEDGMENTS

Foremost, I would like to express my sincere gratitude to my thesis advisor Dr. Tinnon for the continuous support of my undergraduate study and research, and for her patience, motivation, enthusiasm, and immense knowledge. Her guidance helped me in all the time of research and writing of this thesis. I could not have imagined having a better advisor and mentor for my research study. Besides my advisor, I would like to thank my Co-advisor Dr. Maria Brown, and Mrs. Morris for their encouragement, insightful comments, and hard questions.

My sincere thanks also go to Honors College for the opportunity to conduct this research study. I am thankful to the thesis committee for their questions, insight, and recommendations.

Finally, I would like to thank my family for their continuous support in all my endeavors.

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LIST OF ABBREVIATIONS

ARDS	Acute respiratory distress syndrome
CVD	Cardiovascular disease
ECG	ElectrocardiogramER Emergency Room
IV	Intravenous

CHAPTER I: INTRODUCTION

For the past several decades, African American mothers and women have consistently experienced an almost four times greater risk of death from pregnancy complications than White women (Tucker et al., 2007). The complications that can arise during pregnancy are always a possibility. Technology and the evolution of medicine have helped decrease the overall maternal death rate within the United States. However, the United States fares worse in preventing pregnancy-related deaths than most other developed nations with African American mothers dying three to four times more than Caucasian mothers (Tucker et al., 2007). In 2007–2016, African American and American Indian/Alaska Native women had significantly more pregnancy-related deaths per 100,000 births than did Caucasians, Hispanic, and Asian/Pacific Islander women.

Cardiomyopathy, thrombotic pulmonary embolism, and hypertensive disorders are the three leading causes of complications during pregnancy for African Americans. Cardiomyopathy is an acquired or hereditary disease of the heart muscle, which makes it hard for the heart to deliver blood to the body. A condition in which one or more arteries in the lungs become blocked by a blood clot is considered a thrombotic pulmonary embolism. The most common hypertensive disorder during pregnancy is pre-eclampsia. Pre-eclampsia is characterized by the new onset of hypertension and proteinuria or the new onset of hypertension and significant end-organ dysfunction with or without proteinuria in the last half of pregnancy or postpartum. The purpose of the research study was to identify if nurses and nursing students can recognize the early and late signs and symptoms of cardiomyopathy, thrombotic pulmonary embolism, and hypertensive disorders in African American mothers in Mississippi.

CHAPTER II: LITERATURE REVIEW

For the past five decades, Black women have consistently experienced an almost four times greater risk of death from pregnancy complications than White women (Tucker et al., 2007). For decades African American women have experienced a greater risk of death from pregnancy complications than Caucasian women. Awareness about the issue has received more attention over the last few decades and the focus has been on how preexisting conditions influence this ratio. Creanga et al. (2019) reported a pregnancy-related mortality ratio of 38.9 per 100,000 live births for non-Hispanic black women versus 12.0, 11.7, and 14.2 for non-Hispanic white, Hispanic, and women of other races, respectively. Moaddab et al. (2011) analyzed the increased maternal mortality ratio at a population level and found that differences throughout the United States correlated significantly with the proportion of non-Hispanic black residents. To understand healthcare outcomes, we do have to recognize that genetics, health behaviors, economic status, and physical environment have an impact on the health of individuals. Howell et al. (2018) examined maternal morbidity in New York City and found significantly higher rates of morbidity at hospitals with high rates of non-Hispanic black patients than primarily non-Hispanic white patients; they concluded that at least some of the difference was due to hospital performance because they inferred from their data that the same patients would have had better outcomes at primarily white-serving hospitals. Health inequities are differences in health status or the distribution of health resources between different population groups. Many people often look at healthcare issues as one big problem, but to truly see the problems you must evaluate

some things individually. The discrepancy in the quality of care, access to healthcare status, and health outcomes should be reviewed.

Despite the disproportion among health conditions, there is no evidence of why African American women are four times more likely to die due to maternal complications than white women. Black women are also more likely to die from complications of pregnancy, including hypertensive disorders of pregnancy, and cardiomyopathy. For each of the selected complications, the pregnancy-related mortality ratios for black women were between 2.5 and 3.9 times greater than those for white women (Tucker et al., 2007).

Several studies showed that African Americans are more likely to suffer from cardiomyopathy, pre-eclampsia, and venous thromboembolic embolism. Cardiovascular disease is now the most common cause of maternal mortality (Somer et al.,2017). African American women are more likely to have peripartum cardiomyopathy and are also more likely to have more severe disease, both at diagnosis and at six and twelve months postpartum (Somer et al.,2017). Disparities in cardiovascular morbidities have been described in a variety of studies, including analyses of peripartum cardiomyopathy, pre-eclampsia, thrombosis, and myocardial infarction. All three of the three leading causes of African American mortality rate fall under cardiovascular morbidities.

Cardiomyopathy contributed to nearly 12% of pregnancy-related deaths for a rate of 0.88 deaths per 100,000 live births during 2006-2009. There are four key risk factors linked to CVD-related maternal mortality: race/ethnicity (higher risk of death in non-Hispanic black women versus non-Hispanic white women); age (older than 40 years); hypertension/ pre-eclampsia; and obesity (Ricci, 2021). Additionally, more than one-third of intensive care unit admissions in pregnancy and postpartum are related to cardiac

disease. In the California Pregnancy-Associated Mortality Review, the CVD pregnancy-related mortality rate for African Americans was more than eight times higher than that for whites. Eighty-four percent of women who died from CVD presented with symptoms suggestive of cardiopulmonary disease, which manifested during pregnancy or in the postpartum period (Hameed et al., 2015).

Nurses play a vital role in noticing the signs and symptoms of cardiac failure. Nurses should assess the patients for the following signs and symptoms: shortness of breath on exertion, dyspnea, cyanosis of lips and nail beds, swelling, jugular vein engorgement, rapid respirations, abnormal heartbeats, chest pain with effort or emotion, syncope with exertion, increasing fatigue, and moist cough (Hinkle et al., 2015). Peripartum cardiomyopathy is the development of heart failure in the last month of pregnancy or within 5 months of giving birth without any preexisting heart disease or any identifiable cause (Ricci, 2021).

In the United States, one out of every nine pregnancies is complicated by hypertensive disorder, and up to 5% are complicated by pre-eclampsia (Wilkerson & Ogunbodede, 2019). Worldwide, about 76,000 women die from pre-eclampsia each year, corresponding to 15% of all maternal death (WHO, 2019). Pre-eclampsia is a systemic syndrome that is typically characterized by new-onset hypertension and proteinuria in pregnancy (with proteinuria defined as the urinary excretion of 300 mg of protein in 24 h). Pre-eclampsia is characterized by poor placental perfusion and a systemic disease process that can involve multiple organ systems. The incidence of pre-eclampsia has been slowly increasing since 1987. When pre-eclampsia occurs during pregnancy it increases

the chance for cardiovascular events. Pre-eclampsia is more likely to occur in women who have chronic uncontrolled high blood pressure.

Venous thromboembolism is one of the leading causes of maternal mortality and morbidity with an annual incidence of one per 1,000 pregnancies (ACOG, 2018). Venous thromboembolism usually happens within the first three weeks of postpartum. Risk factors for developing venous thromboembolism include the use of oral contraceptives before pregnancy; smoking; prolonged standing; history of thrombosis; thrombophlebitis or endometritis; or evidence of current varicosities (Ricci, 2021). Research has shown that 60% of maternal deaths from 2011-2015 were preventable (CDC, 2019).

CHAPTER III: METHODOLOGY

The purpose of the research study was to identify if nurses and senior nursing students can recognize and properly intervene when African American pregnant women present with signs and symptoms of pre-eclampsia, cardiomyopathy, and thrombotic venous embolism. The research study was a quantitative research study. Quantitative research is a formal, objective, systemic process in which numerical data are utilized to obtain information about the world (Burns et al.,1997). Quantitative research is currently the most used method in nursing studies. Some researchers believe that quantitative research provides a sounder knowledge base to guide nursing practice than qualitative research (Norbeck, 1987). Well-developed case studies are great sources of descriptive information and can be used as evidence for or against theories. Case studies can increase the understanding of the circumstance that is being studied. The case study design also has the potential for revealing important findings that can generate new questions that can be tested.

The sample included nurses and nursing students located in Mississippi. The potential sample size for nurses included 13,464 LPNs and 52,442 RNs in the state of Mississippi (MBON). Also, a convenient sample was obtained from nursing students in the 4th and 5th semesters in the southeastern nursing baccalaureate program. The nursing students that participated in the research study had to be enrolled in or had completed an OB/Maternal Health Course. The data collection was gathered through a survey. The survey method was chosen because it provides detailed information that will shed light on aspects of how nurses think and intervene when their patients present certain symptoms. The survey was a researcher-created tool. The tool was developed after a

review of nursing text and current nursing literature examining the phenomenon. The created tool was reviewed by two Maternal Health/OB specialty nurses for face validity.

The researcher tool was administered via Qualtrics. Participants were recruited using flyers, which were distributed to classmates and co-workers. The flyer was also posted on social media websites. The link to the survey, the QR code, and the criteria were included on the flyer. When the participant was directed to the research tool rather than by link or QR code the online consent form appeared first and after the consent form was signed the participant was directed to the research tool. The participants scanned a QR code and/or clicked a link to be directed to the consent form. The QR code and link were located on the flyer. The survey included a description of the project, risks, benefits, confidentiality, participant's assurance, IRB number, and contact information. The survey also included the statement, "By clicking the button below, you acknowledge that your participation in the study is voluntary, you are 18 years of age, a nurse or nursing student that is/has completed a Maternal Health course." Participants were also informed they can opt out of the survey at any time. The data is stored in a spreadsheet for analysis with ease. Any hard-copy documents that contain identifiable information will be shredded. The research study has been approved by the Institutional Review Board under a protocol (22-1505), which ensures that research projects involving human subjects follow federal regulations. A descriptive analysis was used to interpret the data from the research study. A descriptive analysis helps describe, show, or constructively summarize data points such that patterns might emerge that fulfill every condition of the data. The survey included demographic information and three case studies on pre-eclampsia, cardiomyopathy, and thrombolytic pulmonary embolism. There were seven demographic questions and six

questions regarding the case study research tool. The demographics focused on the employment, information, ethnicity of the participant, the length of the participant's nursing career, the specialty in which the participant is employed, and the number of pregnant patients the participant has cared for. The case study questions provided a scenario with patients presenting with signs and symptoms of pre-eclampsia, cardiomyopathy, and thrombotic venous embolism. For each of the complications, there was a question to see if the participant could identify the complication, and there was a question to determine the interventions for the patients based on the presenting complication.

CHAPTER IV: RESULTS

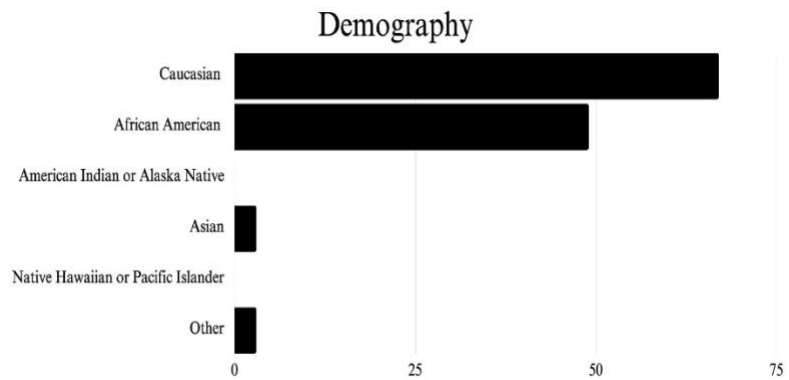


Figure 1.1: Ethnicity of the participants

Out of the 122 participants Caucasian represented 67 of the participants, 49 were African American, 3 were Asian, and 3 identified as other.

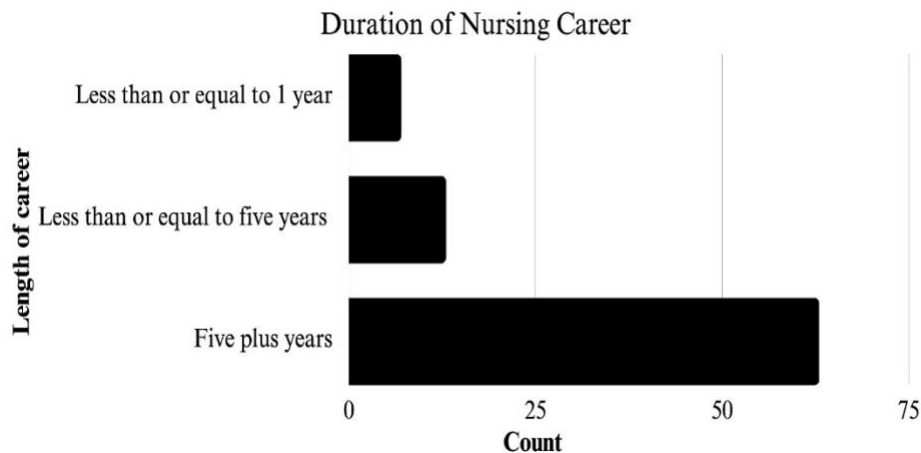


Figure 1.2: Duration of the participant's nursing career.

Nurses that have been nursing less than or equal to 1 year accounted for 7 of the participants, 13 have been a nurse less than or equal to 5 years, and 64 have been a nurse for 5 or more years. 19 of the nurses have worked as maternity nurses during their careers. The remaining 65 nurses have not worked as maternity nurses.

What ethnicity is more prone to pregnancy related complications?

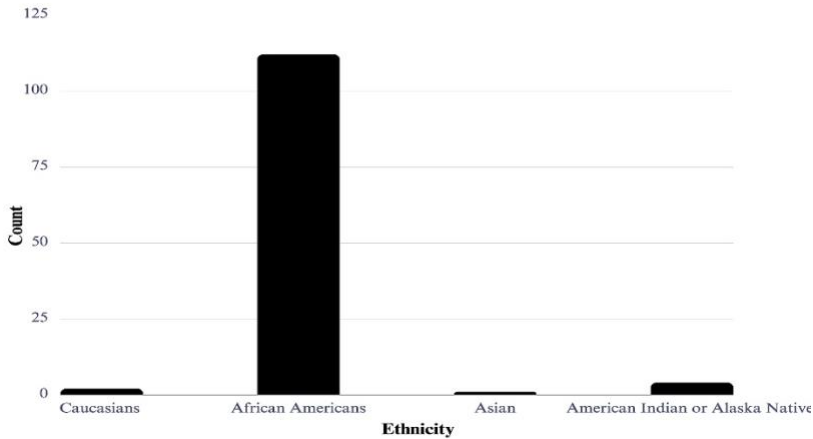


Figure 1.3: Ethnicity participants selected for being most prone to pregnancy-related complications.

The majority of the participants knew that African Americans are more prone to pregnancy complications, which accounted for 112 participants. Two selected Caucasians, 1 selected Asian, and 4 selected American Indian or Alaska Native.

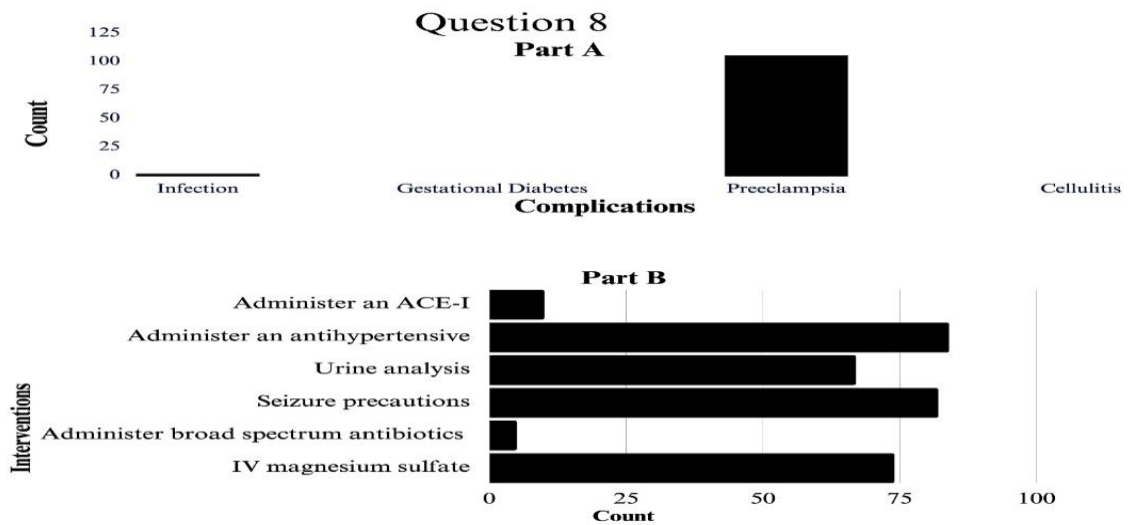


Figure 1.4 Part A: Complications Participants selected for the first case study.

Figure 1.4 Part B: Interventions selected for the complication presented in Part A.

For the first case study, 106 of the 122 participants knew that the patient was experiencing preeclampsia. For the following question on the correct interventions for

preeclampsia, 84 participants chose to administer an antihypertensive, 67 chose urine analysis, 82 chose seizure precautions, and 74 chose IV Magnesium sulfate.

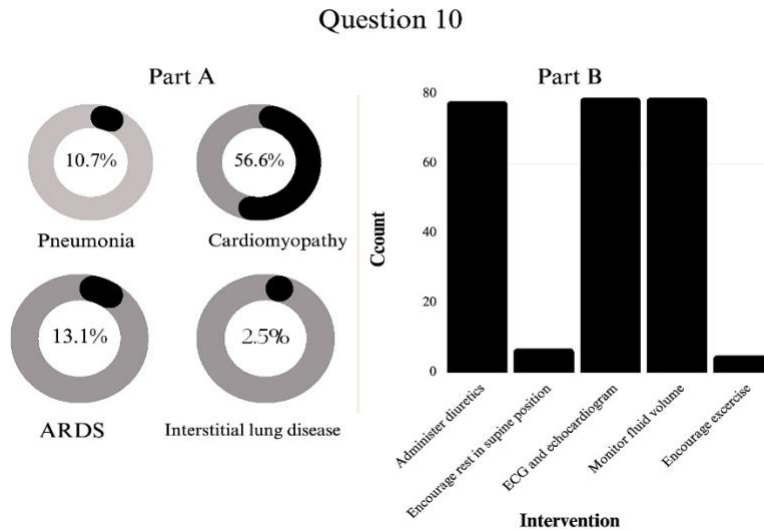


Figure 1.5 Part A: The complication participants selected for the second case study.

Figure 1.5 Part B: The interventions participants selected for the complications presented in Part A.

For the second case study, 56.6% of the participants were able to recognize the complication was cardiomyopathy. On the correct interventions for cardiomyopathy, 78 participants were selected to administer diuretics, 79 selected ECG and echocardiogram, 79 were selected to monitor fluid volume, and 5 were selected to encourage exercise.

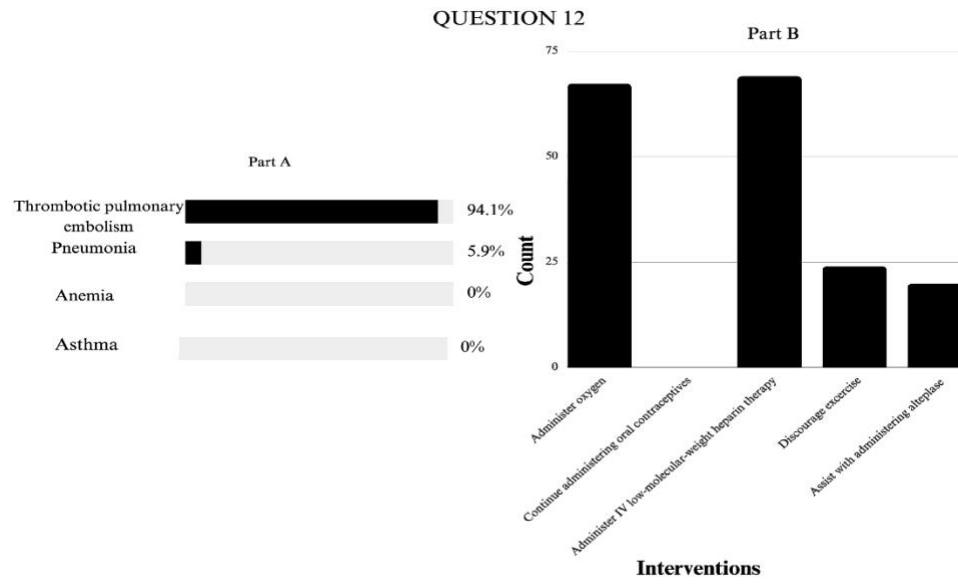


Figure 1.6 Part A: The complication participants selected for the third case study.

Figure 1.6 Part B: The interventions participants selected for the complication presented in Part A.

The final case study focused on complications of a thrombotic pulmonary embolism. Ninety-four-point one percent of the participants selected the correct answer. For the proper interventions 82 participants were selected to administer oxygen, 84 were selected to administer IV low-molecular-weight heparin therapy, 29 were selected to discourage exercise, and 24 were selected to assist with administering alteplase.

Which 3 complications do African American women have a significantly higher proportion of pregnancy related deaths?

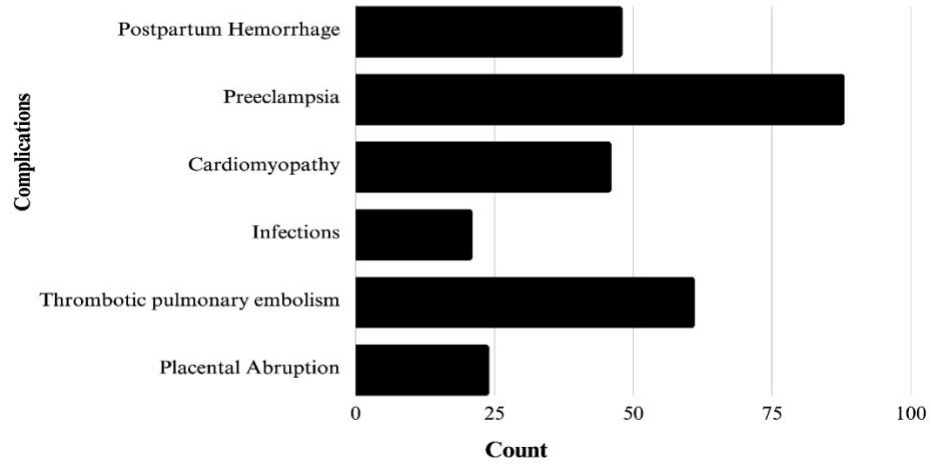


Figure 1.7: The three leading complications the participants selected.

The last question asked participants to identify the three leading complications among African Americans. There were 88 participants that selected pre-eclampsia, 46 selected cardiomyopathy, and 61 selected thrombotic pulmonary embolisms.

CHAPTER V: DISCUSSION

There is no doubt that African American mothers die at a significantly higher rates than Caucasian mothers, and this research shows that nurses' knowledge of the leading causes of African American mothers' mortality rate can be contributing to the phenomenon. For this research study, I wanted at least 85% of the participants to be able to identify complications based on signs and symptoms and for the participants to select the correct interventions for the complications. Based on the data gathered out of six case study style questions, there was only one question in which over 85% of the participants selected the correct answer. Therefore, this research study shows that nurses are not able to identify the signs and symptoms or identify correct interventions for cardiomyopathy, pre-eclampsia, or thrombotic pulmonary embolisms.

When breaking down the results, nursing student, emergency department, and OB nurses are separated from other nursing specialties. I separated them because OB nurses specialize in caring for pregnant women. They take care of pregnant women every day, and they should be able to recognize when these complications arise. Emergency department nurses care for most pregnant patients before they are transferred to the maternal unit. Emergency department nurses' knowledge of pregnancy-related complications could be the difference between life and death for many patients. Nursing students are separated to evaluate the knowledge obtained from the curriculum being taught. As nursing graduates transition into their careers, they need to be knowledgeable of complications and the proper interventions.

For the first case study, 100% of nursing students were able to identify the patient with pre-eclampsia. 100.0% of all emergency department and OB nurses were able to

identify pre-eclampsia, and 96.4% of all the other practicing nurses were able to identify it as well. Knowing that nurses can recognize pre-eclampsia is significant, because about 76,000 women die from pre-eclampsia each year, corresponding to 15% of all maternal deaths (WHO, 2019). Only 63.2% of nursing students selected urine analysis, which is one of the interventions performed for pre-eclampsia. Nurses, including ER and maternal nurses, did not reach at least 85% for any of the correct interventions. Although they were able to recognize the complications, the majority of the participants did not select the correct nursing interventions.

For the second case study, 100.0% of emergency department, maternal nurses, and nursing students were able to identify thrombolytic pulmonary embolism, and 96.4% of all the other practicing nurses were able to identify thrombolytic pulmonary embolisms. Only 78.9% of nursing students knew to administer IV low molecular weight heparin therapy, 42.1% knew to discourage exercise, and 36.8% knew to assist with administering alteplase. These results are a big red flag. No matter what specialty of nursing a person works in, thrombolytic pulmonary embolisms can occur. Nursing students need more knowledge on how to treat patients with pulmonary embolism. Nurses excluding ER and maternal nurses correctly selected 78.6% for administering oxygen, 25.0% for discouraging exercise, and 14.3% for assisting with administering alteplase. 82.6% of ER and maternal nurses correctly selected to administer oxygen, 30.4% to discourage exercise, and 39.1% to assist with administering alteplase. Discourage exercise had the lowest percentage of all the participants. Nurses need to be educated on how exercise can impact a patient presenting with a thrombolytic pulmonary embolism.

For the final case study 57.9% of nursing students were able to identify cardiomyopathy, 72.7% of all emergency department and maternal nurses were able to identify cardiomyopathy, and 73.2% of all the other practicing nurses were able to identify it, which suggests that there was a significant gap in learning regarding signs and symptoms of cardiomyopathy. as well. For the interventions 84.2% of nursing students correctly selected to administer diuretics, 63.2% selected ECG and echocardiogram, and 10.5% selected encourage exercise. Nurses excluding ER and maternal nurses correctly selected 75.0% for administering diuretics, 80.4% for ECG ad echocardiogram, 75.0% for monitoring fluid volume, and 5.4% for encouraging exercise. ER, and maternal nurses correctly selected 82.6% for administering diuretics, 82.6% for monitoring fluid volume, and 0.0% for encouraging exercise. Nurses lack a significant amount of knowledge related to cardiomyopathy.

Research has shown that 60% of maternal deaths from 2011-2015 were preventable (WHO, 2019). The lack of knowledge of nurses could be contributing to this problem. This research study has potential limitations. First, the sample selected for this research study was specifically Mississippi nurses and Mississippi nursing students who were currently enrolled in or had completed Maternal Health. The results of the study may not properly reflect the nurses and nursing students outside of the designated area of study. Second, this study only focused on three pregnancy-related complications and their interventions. If further research is conducted on more complications and interventions, it will provide more information on nurses' knowledge.

There are many examples in the literature of how disparities affect severe maternal morbidity and how certain complications contribute to the morbidity and mortality rates in maternal health. Future research should investigate whether there is a direct correlation between proper and timely recognition and management of certain maternal complications, which may lead to decreased maternal morbidity and mortality rates. Particularly, complications in obstetrical health in understudied populations such as African American, Asian, and Native American women need further exploration. The findings suggest that many nurses' and nursing students having trouble identifying when a patient is presenting with cardiomyopathy, and that they are not able to implement the correct interventions for pre-eclampsia, cardiomyopathy, or thrombolytic pulmonary embolisms. If all the disparities were eradicated, if healthcare professionals are unable to identify and select correct interventions for their patients, the problem will still be present. Findings suggest that nursing education needs more focus on African American maternal mortality. Progress will depend on researchers' abilities to define more precisely the mechanisms by which African American maternal mortality rates are impacted and then to apply this knowledge in designing interventions that improve pregnancy-related outcomes.

APPENDIX A: IRB APPROVAL LETTER

Office of
Research Integrity



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NOTICE OF INSTITUTIONAL REVIEW BOARD ACTION

The project below has been reviewed by The University of Southern Mississippi Institutional Review Board in accordance with Federal Drug Administration regulations (21 CFR 26, 111), Department of Health and Human Services regulations (45 CFR Part 46), and University Policy to ensure:

- The risks to subjects are minimized and reasonable in relation to the anticipated benefits.
- The selection of subjects is equitable.
- Informed consent is adequate and appropriately documented.
- Where appropriate, the research plan makes adequate provisions for monitoring the data collected to ensure the safety of the subjects.
- Where appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of all data.
- Appropriate additional safeguards have been included to protect vulnerable subjects.
- Any unanticipated, serious, or continuing problems encountered involving risks to subjects must be reported immediately. Problems should be reported to ORI via the Incident submission on InfoEd IRB.
- The period of approval is twelve months. An application for renewal must be submitted for projects exceeding twelve months.

PROTOCOL NUMBER: 22-1505
PROJECT TITLE: Nurses Knowledge of Pregnancy related complications among African Americans
SCHOOL/PROGRAM: Professional Nursing Practice
RESEARCHERS: PI: Tamija Alexander
Investigators: Alexander, Tamija-Tinnon, Elizabeth-
IRB COMMITTEE ACTION: Approved
CATEGORY: Expedited Category
PERIOD OF APPROVAL: 10-Feb-2023 to 09-Feb-2024

A handwritten signature in cursive script that reads "Donald Sacco".

Donald Sacco, Ph.D.
Institutional Review Board Chairperson

APPENDIX B: RESEARCH SURVEY

Q1

Welcome to the research study!

You are being invited to participate in a research study conducted by Tamija Alexander. Prior to participation, I would like to inform you about your rights as a research participant if you choose to participate. You should be aware that even if you agree to participate, you are free to withdraw at any time without penalty. Please be assured that your responses will be kept completely confidential.

I am conducting this study to better understand if nurses and senior nursing students are able to recognize and properly intervene when African American pregnant women present with signs and symptoms of certain complications. The findings will be used to help identify why African American mothers are four times more likely to die due to pregnancy related complications.

To be eligible for this study, you must: 1) Be at least 18 years of age 2) Be a nurse or nursing student in the state of Mississippi 3) If the participant is a nursing student they must be currently taking or has completed an OB/Maternal Health Course.

Description of the study

If you agree to participate in this study, you will be asked to complete a survey that should take less than 10 minutes. This survey will ask basic questions about your knowledge of maternal complication, specifically within the African American population. Participation in this research is voluntary. Please feel free to decline or discontinue participation without concern over penalty, prejudice, or any other negative consequence.

Benefits

There are no tangible benefits for you participating in this study. By reflecting on and describing your knowledge, it may be possible that you may have a positive feeling or sense of accomplishment regarding your awareness of the complications being studied.

Risks

Participating in this research involves no more than minimal risk.

Confidentiality

The survey will not collect any personal information, and your participation will be anonymous. The collected data will be kept on a secure, password-protected network to which only I will have access. After the study, any hard copy documents that may contain identifiable information will be shredded.

Participant's Assurance:

Q2

How long have you been a nurse?

- Nursing Student
- < or equal to 1 year
- < or equal to 5 years
- 5 plus years

Page Break

Q4

What nursing specialty are you currently employed in? *

Page Break

Q5

Have you ever been a maternity nurse(OB, postpartum, etc.) ...

- Yes
- No

Page Break

Q6

What ethnicity is more prone to pregnancy complications?

- White
- African American
- Asian
- American Indian or Alaska Native
- Native Hawaiian or Other Pacific Islander

Page Break

Q8

A 25-year-old, married, multigravida, black woman who has had six live births presented to a health center with the chief complaint of abnormal body swelling of 2 days' duration. On arrival to the first contact health center her blood pressure was 170/105 mmHg and her temperature was 36.5 °C. She had generalized swelling, a history of blurred vision, and headache. She had no history of abortion, stillbirth, and cesarean section and no history of antenatal care follow-up. She gave birth to her previous children at home with no history of obstetric complications. The gestational age at the time of arrival was 37 weeks. She was referred to a general hospital for further management.

What would you suspect is going on with this patient?

- Infection
- Gestational Diabetes
- Preeclampsia
- Cellulitis

Q9

Based on your suspected nursing diagnoses for the question above what interventions would you consider? Select all that apply

- Administer an ACE-I
- Administer an antihypertensive
- Urine analysis
- Seizure precautions
- Administer broad spectrum antibiotics
- IV Magnesium Sulfate

----- Page Break -----

Q25

A 35-year-old, African American women presented to the hospital with shortness of breath with activity and while at rest, 2+ pitting pedal edema. History: No family Hx of CVD, no previous cardiac disease, G4 P3 and now 38 weeks pregnant, reported hx of palpitations and fatigue. Clinical examination: BP: 95/65 mmHg, HR 130 bpm, bilateral basal crackles in lower lung fields, jugular vein engorgement, 2+ pedal edema.

What complications would you suspect this patient is experiencing?

- Pneumonia
- Cardiomyopathy
- Interstitial lung disease
- Acute respiratory distress syndrome (ARDS)

Q26

Based on your suspected nursing diagnoses for the question above what interventions would you consider?

- Administer diuretics
- Encourage rest in supine position
- ECG and echocardiogram
- Monitor fluid volume
- Encourage exercise

----- Page Break -----

Q27

A 37-year-old, African American, gravida 2, morbidly obese woman, at 31+1 weeks of gestation, on prophylactic enoxaparin for a deep vein thrombosis, presented to an outside hospital complaining of cough, shortness of breath, chest pain for one week, and lightheadedness.

What complications would you suspect this patient is experiencing?

- Thrombotic pulmonary embolism
- Pneumonia
- Anemia
- Asthma

Q28

Based on your suspected nursing diagnoses for the question above what interventions would you consider?

- Administer oxygen
- Continue administering oral contraceptives
- Administer IV low-molecular-weight heparin therapy
- Discourage exercise
- Assist with administering alteplase

Q7

African American women have a significantly higher proportion of pregnancy-related deaths with which three complications compared to Caucasian women?

- Postpartum Hemorrhage
- Preeclampsia
- Cardiomyopathy
- Infections
- Thrombotic pulmonary embolism
- Placental Abruption

 Import from library

Add new question

[Add Block](#)

End of Survey

We thank you for your time spent taking this survey.

Your response has been recorded.

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