

# [Good example of does lack of nutritional education contribute to preterm birth ra...](https://assignbuster.com/good-example-of-does-lack-of-nutritional-education-contribute-to-preterm-birth-rates-in-african-research-proposal/)

[Countries](https://assignbuster.com/essay-subjects/countries/), [United States](https://assignbuster.com/essay-subjects/countries/united-states/)

## Abstract

Preterm birth is the main cause of infant mortality in the world and in the United States, research shows that African American women are at a higher risk giving preterm birth than women from other races and ethnicities. The purpose of this research is to investigate one of the contributing factors to the observed high preterm birth rates among African American women and this is nutrition. The research aims to find out whether lack of nutrition education contributes to the observed high levels of preterm birth rates among this class of citizens. The research will be conducted on a selected group of African American expectant mothers at HMC clinic in Dallas, Texas. The research will utilize the casual research design and data will be collected using techniques such as questionnaires, interviews and secondary data sources.

## Introduction

Preterm birth rates continue to be a huge menace to expectant mothers in the United States. Although there is a little ambiguity regarding some of the causes of preterm births, research has shown that lack of adequate maternal nutrition is one of the factors that contribute to pre term births. In addition, research has also that the nutritional aspect is particularly very important when it comes to preterm birth rates among African American women. African American women are at the lowest level of the adequate nutrition chain and this feature is conspicuous in the rates of pre term births which are higher than those of other races. Compared to their counterparts from other races, expectant African American women have limited access to nutritional information that is required for the maintenance of healthy pregnancies. This research will help to establish whether nutrition education can help to alleviate the levels of preterm birth rates among the African American community. The study is also very significant to the nursing field because it is indeed the nursing fraternity which is charged with the role of availing the required nutritional information to the expectant mothers.

## Problem Statement

The population that is being studied in this research is expectant African American mothers. The independent variable here in this study is nutrition while the dependent variable is pre term birth rates. The research will seek to establish a relationship between the two especially in regards to the availability of information regarding the independent variable. At the end of the study, a general conclusion will be made.

## Purpose of the study

The purpose of this study is investigated if lack of nursing education contributes to the observed high birth rates among African American women. The study further aims to find out if there are lower levels of pre term birth rates among African American children in instances where pre term nursing education has been availed.

## Some of the questions that this study hopes to answer are:

- What does current research indicate about the relationship between maternal nutrition and pre term births?
- How does lack of adequate nutrition education contribute to pre term births?
- What kind of education needs to be availed to expectant mothers to reduce the probability of preterm birth rates?
In order to comprehensively research on this particular subject, I will be guided by a hypothesis that I have formulated for this case and this is that the provision of nursing education will significantly decrease pre term birth rates in this community of African American women.

## Literature Review

Existing research seems to indicate that the rate of pre term births rates in America are higher among African American women as compared counter parts from other races. In fact according to Koblinsky (2013), “ African American women are twice as likely to give birth too son that women form other ethnicities”.
While the reasons for this huge disparity are largely unclear, the high rates of pre term births among African American women are attributable to a couple of risk factors that include increased pregnancy stress, inadequate of access to quality healthcare among others.
However one of the major factors which have been cited as the major contributor to preterm birth rates among African America women is maternal nutrition or rather the lack of it.
Aaltonen ( 2011) states that many African American mothers are not aware of the strict nutritional diet that they are supposed to abide by in order to maintain healthy pregnancies.
This brings into light another significant issue and this nutritional education. Nutritional education refers to the provision of information related to diet and nutrition to serve a particular purpose.
According to Braude and Taylor (2012), this is something that has been lacking among the African American women. Most of them hail from middle class and poor backgrounds where they cannot access credible nutritional education. In addition, Kelley and Reuben (2010) accuse the federal government of not taking enough measures to ensure that nutritional education is availed to every expectant mother.
Collins conducted a research over a period of 12 years where he observed a sample of Caucasian women from a high income neighborhood who had access to nutritional health education and another comprised of African American women who had little or absolutely no access to nutritional health education. Over a period of 2 years, the researcher found that there were about eleven pre term births among the two sets of participants. Of these, 66% belonged to the African women. Collins therefore concluded that lack of maternal nutritional education had something to do with the observed pre term birth rates among African American women.
The underlying implication of this is that if the rates of preterm births are to be reduced among African American women, quality nutritional health education is needed. The government must initiate steps to ensure that these women are provided with adequate nutritional resources as well as education. Such action will significantly reduce infant mortality rates in the country seeing that pre term birth is the main cause of infant mortality.

## Study variables

The dependent variable in the research will be the preterm birth rates and the independent variable will be nutrition. Preterm birth rates refer to the babies who are born alive before thirty-seven weeks of the pregnancy are actually completed. Based on gestational age, the preterm birth subcategories include extremely pattern that is less than 28 weeks, very preterm that is from 28 to less than 32 weeks, and moderate to the rate preterm that is between 32 to less than 37 weeks.

## Methodology

Research design
In the research, I intend to use a causal research design. One of the reasons why I plan to use this strategy is because the variables in the research exhibit an empirical association that is preterm birth rates, the dependent variable is associated with nutrition, the independent variable. I also intend to use this design because in the research I seek the causal explanation, which will reflect the test of my hypothesis.

## Population

The entire group of individuals to which I am interested in generalizing my conclusions after conducting the research is the African American women. Therefore, this will be my theoretical or target population in the study. The accessible population in the research will be the expectant African American mothers in Dallas, Texas.

## Sample size and sampling method

In the study, I intend to use a sample of size 15, n= 15. The type of sampling method that I plan to use is the simple random sampling technique. Thus, I will first define the study population; determine the percentage of this study population; assign every expectant mother within this population a number; and then use arbitrarily selected numbers from the table of numbers, hence this will give each expectant mother an equal chance of being included in the research. I believe that in this manner, my random sample will be a representative sample of the target population.

## Inclusion and exclusion criteria

Protection of participants’ rights
The research will endorse the three basic principles contained in the Belmont Report. In terms of autonomy, it will be my obligation during the study to respect every participant as an individual who is capable to make an informed decision about participating in the study. Therefore, I will ensure that the research participants understand the nature of the research, benefits and alternatives, the risks, and an extended opportunity for them to ask questions.
In terms of beneficence principle, it will be my obligation to try to maximize the benefits for the study participants and the society while at the same time minimize the risk of harm to the study participants. Consequently, to achieve this, I will first perform honest and comprehensive risk/benefit calculation.
Justice will be the third principle that the research will uphold. I will ensure that there is equitable selection of the participants. In addition, I will ensure that there is equality in the distribution of the benefits as well as burdens among the population group that will benefit from the study.

## Data collection methods

The data collection methods that will be used for this research include;
- Administering questionnaires: Questionnaires involve providing the respondent with a series of questions listed on a piece of paper which are then used as guidance so as to get the most relevant answers for the research.
- Interviewing: interviews are a one on one conversation between the researcher and the respondent. This can be done face to face or over a phone conversation. I will prefer face to face conversations with several respondents.
- Analysis of secondary data sources: secondary data sources include previously written material or records with content related to the research topic.

## Procedure plan for implementing data collection

Administering questionnaires
In this case, the questionnaire will be open ended so that the respondent can have as much freedom as necessary. There will be two sets of questionnaires. One questionnaire will be administered to health professionals mostly the nurses and the physicians. Since these professionals are well conversant with medical terms, this questionnaire will have more detailed questions.
The second questionnaire will be administered to residents of the area where this research will be concentrated. This questionnaire will aim at trying to uncover the nutritional techniques that the residents apply during pregnancy.

## Interviewing

The interviews aim at getting first hand information from respondents. I will personally conduct several interviews with residents selected on a random basis but taking into account various ages, races, ethnicity and cultures. I will guide them through the interview with much emphasis being placed on their take on nutritional methods during pregnancy. I will also focus on their say on the importance of nutritional education and how effective it has been if at all it has been available to them.
I will also conduct several interviews with a few health professionals. I will try to uncover how much they have been able to offer nutritional education to the residents while also asking for their opinion on differing statistics on preterm birth weights on certain population groups than on others.

## Analysis of secondary data sources

This will focus on analyzing previous statistics or written material that has information relating to preterm birth weights. Recent health journals and books will be quite important in this research. I will also use health records from different health facilities within the region where the r5esearch is being conducted to provide me with important statistics. In this case, I will have to liaise with health facility managers so that they can allow access to such information.

## Data collection instruments

Data collection instruments will form a vital part of the research. Therefore the validity and reliable of each instrument will be a great consideration. Computer applications As see, data from health records will form one source of data. As such, analysis of data obtained from health records will require computer applications such as spreadsheets for analytical purposes. Computer applications are very reliable in that they provide in depth analysis with minimal human effort. Moreover they are more accurate and precise Questionnaires Considering the nature of the research, primary data is of great importance. Questionnaires come in handy when it comes to collection of primary data. Questionnaires are relatively easy to analyze and saves time especially when sample is big. They are very resourceful in collecting data that correspondents may feel uncomfortable to speak out. Voice Recorders Interviews will be used for the collection of primary data. Therefore, the use of recorders becomes inevitable. Recorders store information for a very long time and can be regularly retrieved.

## Findings

The will research will hope to find that lack of nutritional education is actually one of the largest contributing factors to the high pre term birth rate among African American women. Another expected finding of the study is that the provision of nutritional education to expectant African American mothers can help in alleviating the occurrence of preterm births.

## Conclusion

This research is very important because as stated earlier, pre term births is the main cause of infant mortality in the United States and in indeed the world. The implications of this study shed light into the impact that preventive measures that include provision nutritional education on expectant mothers will have on the national infant mortality rate. The study will also have significant implications on the nursing fraternity because it is indeed this fraternity that is charged with the provision of this education. The study will reveal the seriousness of the issue and the nursing fraternity will be reminded of one their primary responsibilities which is to ensure that quality care and health information is provided to those who require it for the maintenance of healthy body process which is this case pregnancy. I therefore urge the board committee to deeply consider my research proposal and fund it.

## References

Braude, P. R., & Taylor, A. (2005). ABC of pre-term birth. London: BMJ.
Collins, J. (2007). Preterm birth among African American and white women with a lifelong residence in high-income Chicago neighborhoods: an exploratory study.
Aaltonen, J. (2011). Impact of maternal diet during pregnancy and breastfeeding on infant metabolic programming: a prospective randomized controlled study. European Journal of Clinical Nutrition, 12(24), 24-29.
Kelley, M., & Rubens, C. E. (2010). Global report on preterm birth and stillbirth (6 of 7): ethical considerations. BMC Pregnancy and Childbirth, 12(33), 22-34.
Koblinsky, M. A. (1995). Beyond maternal mortality — magnitude, interrelationship and consequences of women's health, pregnancy-related complications and nutritional status on pregnancy outcomes. International Journal of Gynecology & Obstetrics, 12(23), 45-54.
Hutchinson, S. F. (1997). The relationship of maternal low birthweight and infant low birthweight among African-American women at term delivery: Findings from the 1988 National Maternal and Infant Health Survey.