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Socio - Economic Variables And Pregnancy Outcome Among Child Bearing Women In Akwa Ibom South Senatorial District, Nigeria

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ABSTRACT
The study examined the socio - economic variables and pregnancy outcome among child bearing women in Akwa Ibom South Senatorial District, Nigeria. To achieve the purpose of the study, two objectives, two research questions, and two null hypotheses were formulated to guide the study. The scope of the study was delimited to two socio-economic factors, namely: educational level and occupational type. The study adopted an ex-post facto research design. The population of the study comprised 4975 childbearing women from hospitals in Akwa Ibom South Senatorial District, Nigeria. A sample of 200 childbearing women was determined using multistage sampling technique. A structured questionnaire titled Socio-Economic Variables and Pregnancy Outcomes among Childbearing Women Questionnaire (SVPOCWQ) was used for data collection. The instrument was validated by three experts, while its internal consistency was determined using Cronbach's Alpha reliability method, which yielded a reliability coefficient of 0.85. Data collected from the field were analyzed using mean and standard deviation, while Analysis of Variance (ANOVA) was used to test the hypotheses at 0.05 level of significance. The findings revealed that educational level significantly influenced pregnancy outcomes among childbearing women. However, occupational type was found not to significantly influence pregnancy outcomes among childbearing women in the study area. In conclusion, the study emphasized that improved education, quality healthcare services, and accessible transportation systems are essential in promoting safe delivery practices and reducing maternal and neonatal health risks. Based on the findings, it was recommended the Ministry of Health, and other healthcare agencies should intensify regular community health education programmes, seminars, and awareness campaigns to educate women on the benefits of antenatal care, birth attendance, and facility-based deliveries, in order to improve pregnancy outcomes among childbearing women in Akwa Ibom South Senatorial District, Nigeria.
Keywords: Childbearing women, Pregnancy Outcomes

INTRODUCTION

Socio-economics variables and pregnancy outcomes remain a crucial public health concern among childbearing women in Nigeria. "Socio-economic variables and pregnancy outcomes" refer to the total environmental situations that influenced how women choose where and how to give birth, as well as the health effects of pregnancy for both the mother and the newborn. Socio-economic variables explain the conditions under which women live, work, and access resources, including education, occupational type, healthcare services, transportation, and cultural beliefs. These conditions shape women's ability to obtain

institutionalized care, make informed delivery decisions, and respond quickly to pregnancy-related complications (Ralman *et al.,* 2021a). Socio-economic variables refer to the social and economic characteristics or conditions of individuals that influence their standard of living, access to opportunities, health-seeking behaviour, and overall well-being. These variables describe the position of an individual within society based on factors such as education, occupation, income, access to healthcare, transportation, and cultural practices. In maternal health, socio-economic variables are particularly important because they influence a woman's ability to access quality healthcare before, during, and after pregnancy. Pregnancy outcomes refer to the result or end of a pregnancy. It explains what happens to the mother and the baby. It has to do with the health consequences such as maternal survival, neonatal survival, occurrence of complications, stillbirths, and overall wellbeing of mother and child. This implies that pregnancy outcomes are determined by various socio- economic variables which shape access to quality health care services and overall maternal wellbeing (Bassey *et al*., 2022). The socio- economic variables in this study are educational level and occupational level which are explained below:

Furthermore, educational level refers to the highest stage of formal education an individual has successfully completed. Educated women are more likely to understand the importance of prenatal care, proper nutrition, and skilled birth attendance. Women with higher educational levels tend to make informed decisions about family planning, spacing pregnancies, and seeking medical intervention when necessary. Lack of maternal health education can lead to reliance on traditional birth attendants (TBAs), increasing the risk of birth-related complications. Education is widely recognized as one of the most influential socio-economic variables of maternal health service utilization. Educated women are more likely to understand the importance of skilled birth attendance and institutional delivery due to better health literacy and increased autonomy in decision-making. According to Wang *et al.,* (2019), women with secondary or higher education are significantly more likely to deliver in a health facility compared to women with no formal education.

The mechanism through which education influences pregnancy outcomes is multi-faceted. First, education improves awareness of potential complications during childbirth and the importance of skilled care. Second, it enhances communication skills, enabling women to interact confidently with health professionals. Third, education increases the likelihood of employment and financial independence, allowing women to afford facility-based delivery which leads to better pregnancy outcome and associated costs such as transportation, drugs, and medical supplies (Fagbamigbe and Idemudia, 2021). Higher level of maternal education is associated with increased utilization of skilled birth attendants and facility-based deliveries (Yaya *et al.,* 2019). Education enhances women's autonomy, decision-making capacity, and health literacy, enabling them to recognize the benefits of skilled care during childbirth. Conversely, poverty and low educational attainment are associated with misconceptions, fear of health institutions, and dependency on traditional birth attendants (Izugbara and Wekesah, 2018).

In a similar manner, occupation in this context means the kind of work a woman does for a living. It refers to whether she is working in a formal job (like a teacher, nurse, or office worker) Doing informal work (like trading, farming, or hairdressing). Or not working at all (unemployed). Occupational type determines employment and economic status. Women who engaged in formal occupations are more likely to have stable jobs with steady finances, while those in informal sectors always experience irregular work patterns. This situation always leads to limited financial resources. It appears that employment and economic status influences job security, access to maternity benefits, and exposure to health information, which is essential for maternal healthcare utilization (Adewuyi *et al.,* 2021). This condition seems to influenced women's autonomy and decision-making power regarding healthcare utilization and may increase the risk of complications such as maternal morbidity and low birth weight due to delayed or inadequate care and this may influence pregnancy outcome positively or negatively (Budu *et al.,* 2021) and this may influence pregnancy outcome positively or negatively.

Employed women were found to have a significantly higher probability of seeking institutional delivery services compared to unemployed women (Ndinda *et al.,* 2021). This implies that occupational women have greater access to quality healthcare services, including skilled birth attendance and emergency obstetric care (Rahman *et al.,* 2021b). Poor women with no occupation may delay or avoid seeking

healthcare services due to financial constraints, and this may lead to higher risks of pregnancy complications, infections, and maternal mortality. Occupational women are more likely to afford the direct and indirect costs associated with health facility deliveries (Adebowale *et al.,* 2020). Occupation also plays a decisive role. A woman may desire to access health facility; but poverty and financial dependence can force her to opt for home delivery services of a TBA, which are often cheaper and more culturally familiar (Fagbamigbe and Idemudia, 2021).

Occupational women are often more empowered to make independent decisions pregnancy during about their health, may also come with health benefits or insurance coverage that incentivizes the use of formal health facilities (Obasohan, 2020). Similarly, the availability, affordability, and quality of healthcare services directly affect pregnancy outcomes. The structure and functionality of the health care services play a critical role particularly in influencing women's attitude regarding delivery procedures. Many times, systemic issues such as inadequate infrastructure, shortage of skilled personnel, poor quality of care, and limited geographical accessibility often deter women from having better pregnancy outcome, even when socio-economic conditions would otherwise allow for it (Doctor and Findley*,* 2017). For instance, poor rural women frequently encounter long distances to the nearest facility, lack of transport, and understaffed health centers, leading them to prefer traditional birth attendants (TBAs) or home births which the pregnancy outcomes may not end up well (Wang *et al*, 2019).

Statement of the Problem

Pregnancy and childbirth are important stages in the life of a woman and should ideally result in a healthy mother and a healthy newborn. In an ideal situation, every childbearing woman should have equal access to quality healthcare services, adequate transportation, appropriate health information, supportive cultural practices and sufficient economic resources, irrespective of her educational level or occupational status. These socio-economic conditions are expected to enable women to make appropriate decisions concerning pregnancy and childbirth, seek timely and skilled maternal healthcare services, and consequently experience favourable pregnancy outcomes. However, the reality is that pregnancy outcomes among women may vary according to their socio-economic circumstances. These circumstances may have important implications for pregnancy outcomes. Women who experience barriers to appropriate healthcare may be more likely to experience delayed antenatal care, inadequate monitoring of pregnancy, delayed treatment of complications and other conditions that can negatively affect the health of the mother and baby. Although maternal healthcare services are available in Akwa Ibom South Senatorial District, differences in the socio-economic circumstances of childbearing women may influence their ability to utilize these services and may consequently affect their pregnancy outcomes.

Maternal health outcomes are profoundly influenced by socioeconomic variables, posing significant challenges to achieving equitable care for pregnant women worldwide. Socio-economics and pregnancy outcomes can be seen as challenges, risks, and negative conditions that come up when women make an option about how and where to give birth, and how these options affect both the mother and the baby. Socio-economic variables can affect the baby's survival and health. They may face risks like birth asphyxia, low birth weight, or even stillbirth, especially when emergency care is not readily available. Some women may delay visit to hospital due to cost, distance, or cultural beliefs and can worsen pregnancy conditions that could have been managed earlier, leading to negative outcomes.

Certain belief like fear of cesarean section or preference for traditional birth attendant can deter women from attaining safer pregnancy outcomes even when complications come up. Many women cannot bear hospital bills, drugs, or transportation. Base on this, they look for cheaper but less safe delivery options which can increase health risks for the mother and child. In underserved communities where healthcare facilities is far or poorly equipped. Women's ability to achieve positive pregnancy outcome is limited. Substandard transport systems may prevent pregnant women from reaching health facilities on time, especially during emergencies and this may lead to complications or even death. In most cases, some women are not aware of safe delivery practices and danger signs in pregnancy which always lead to poor pregnancy outcomes. In addition, poor attitude of healthcare, insufficient staff strength workers, long waiting times and lack of equipment may restrict access to healthcare services and can lead to poor outcomes.

Objective of the Study

Specifically, the study aims to:

i. Determine the influence of educational level on pregnancy outcomes among childbearing women in Akwa Ibom South Senatorial District, Nigeria.
ii. Examine the influence of occupational type on pregnancy outcomes among childbearing women in Akwa Ibom South Senatorial District, Nigeria.

Research Questions

The following research questions guided the study:

i. What is the influence of educational level on pregnancy outcomes among childbearing women in Akwa Ibom South Senatorial District, Nigeria?
ii. What is the influence of occupational type on pregnancy outcomes among childbearing women in Akwa Ibom South Senatorial District, Nigeria?

Research Hypotheses

The following null hypotheses were tested at 0.5 level of significance

i. There is no significant influence of educational level on pregnancy outcomes among childbearing women in Akwa Ibom South Senatorial District, Nigeria.
ii. There is no significant influence of occupational type on pregnancy outcomes among childbearing women in Akwa Ibom South Senatorial district, Nigeria.

METHODOLOGY

The study adopted an Ex-post facto research design because the independent variables had already occurred and could not be manipulated by the researcher. The design was appropriate for examining the influence of independents variables on dependent variables. Ex-post facto research design was suitable for the study as it enables the researcher to use a cross – section of childbearing women to gather data on socio- economic variables and pregnancy outcomes among childbearing in Akwa Ibom South senatorial District Nigeria. The population of the study comprised childbearing women who attended antenatal care in the selected secondary health facilities in Akwa Ibom South Senatorial District. Records obtained from the selected health facilities showed a total antenatal attendance of approximately 4,975 from March to May 2026. The population comprised 660 attendees from General Hospital, Ikot Abasi, 1,549 from General Hospital, Iquita Oron, 2,433 from Immanuel General Hospital, Eket, and 333 from Cottage Hospital, Ibeno. The hospital attendance records served as the source of the population data. A multistage sampling technique was employed for the selection of respondents for the study. At the first stage, cluster sampling technique was used to select the secondary health facilities that constituted the study sites. The secondary health facilities in Akwa Ibom South Senatorial District were regarded. At the second stage, proportionate sampling technique was used to allocate the sample size of 200 respondents among the four selected health facilities according to their recorded antenatal attendance from March to May 2026.

A self-structured questionnaire tittle: '' Socio- economic factors of delivery choices and pregnancy outcomes'' (SEVCPOCWQ) was the instrument developed by the researcher for collection of data for the study. The instrument consists of section A and B. Section 'A' was constructed to elicit background information from respondents by addressing socio- economic variables like educational level and occupational type while section 'B' addresses pregnancy outcomes with 50 items and response options. The response for the instrument was scored using the 4 points rating scale that ranges from strongly agreed, agreed, disagreed and strongly disagreed. Section B were rated on a 4-point scale, using: Strongly Agree (SA) = 4, Agree (A) = 3, Disagree (D) = 2, Strongly Disagree (SD) = 1, respectively. To establish face validity of the instruments (test items meeting the expectation of the test user and the items covering the domains of the variables it is designed to test). They were given to two lecturers of Measurement and Evaluation in the Faculty of Education, University of Uyo and one lecturer from the Department of Human Kinetic and Health Education, Faculty of Education, University of Uyo, Uyo. Corrections and suggestions were made where necessary. Two variables were restructured, and fifty items were finally approved before taking to the field for administration. The internal consistency of the instruments was ascertained by administering the instrument to childbearing women in Akwa Ibom South Senatorial

District, Nigeria. The data obtained were subjected to Cronbach alpha statistical analysis which yielded a reliability coefficient of 0.85 for socio-economic factors of delivery choices and pregnancy outcomes questionnaire (SEVCPOCWQ). The result showed that the instrument was reliable and capable of measuring the intended variables with consistency.

Data for the study were collected from childbearing women attending antenatal care in four selected secondary health facilities in Akwa Ibom South Senatorial District, namely Immanuel General Hospital, Eket; General Hospital, Ikot Abasi; Cottage Hospital, Ibeno; and General Hospital, Iquita, Oron. Prior to data collection, the researcher obtained the necessary permission from the appropriate authorities of the selected health facilities. The researcher personally visited four selected health facilities and administered the Socio-economic Variables and Pregnancy Outcomes among Childbearing Women Questionnaire (SEVPOCWQ) to the selected respondents on a one-on-one basis. The purpose of the study was explained to the respondents, and appropriate instructions were given on how to complete the questionnaire. The researcher was present during the administration to clarify questions where necessary and to ensure proper completion of the instrument. The completed questionnaires were collected immediately after completion to minimize loss and ensure a high rate of retrieval. Data collected from the respondents was organized and analyzed. Mean and standard deviation was used to answer the research questions, while analysis of variance (ANOVA) was used to test the hypotheses at the 0.05 level of significance. In order to take decision as regards the hypotheses, whenever the associated probability value (p-value) is less than the significant level (.05), the null hypotheses were rejected and also whenever the associated probability value (p-value) is greater than the significant level (.05) the null hypotheses were accepted.

RESULTS

Research Question One: *What is the influence of educational level on and pregnancy outcomes among childbearing women in Akwa Ibom South Senatorial District, Nigeria?*

Table 1: Result of mean and standard deviation analysis on the influence of educational level on pregnancy outcome among childbearing women in Akwa Ibom South Senatorial District, Nigeria.

Pregnancy Outcome	N	Mean	Std. Deviation
Primary Education	21	57.1429	7.39111
Secondary Education	75	66.1733	12.01618
Tertiary Edu	104	71.7692	10.65089

Entries in Table 4.1.1 revealed the mean scores of 57.14, 66.17, and 71.77 for the pregnancy outcome among childbearing women with primary education, secondary education, and tertiary education respectively. The result shows that childbearing women with tertiary education have the highest mean score of 71.77, followed by those with secondary education with a mean score of 66.17**,** while those with primary education have the lowest mean score of 57.14**.** The result implies that there is positive influence of educational level on pregnancy outcomes among childbearing women in Akwa Ibom South Senatorial District, Nigeria.

Research Question Two: *What is the influence of occupational type on pregnancy outcomes among childbearing women in Akwa Ibom South Senatorial District, Nigeria?*

Table 2: Result of mean and standard deviation analysis on the influence of occupational type on pregnancy outcome among childbearing women in Akwa Ibom South Senatorial District, Nigeria

Pregnancy Outcome	N	Mean	Std. Deviation
Unemployed	11	71.0909	12.80980
Students	10	69.8000	9.31904
Civil Servant	22	63.1364	11.41968
Self-employed	157	68.5223	11.82218

The information in Table 4.1.2 revealed the mean scores of 71.09, 69.80, 63.14, and 68.52 for the pregnancy outcome among childbearing women who are unemployed, students, civil servants, and self-employed respectively. The result shows that unemployed women have the highest mean score of 71.09**,** followed by students with a mean score of 69.80**,** self-employed women with a mean score of 68.52, while civil servants have the lowest mean score of 63.14**.** The result implies that there is positive influence of occupation on pregnancy outcomes among childbearing women in Akwa Ibom South Senatorial District, Nigeria.

Hypothesis One

There is no significant influence of educational level on pregnancy outcomes among childbearing women in Akwa Ibom South Senatorial District, Nigeria.

Table 3: Result of ANOVA on the influence of educational level on pregnancy outcome among childbearing women in Akwa Ibom South senatorial district, Nigeria

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	4199.575	2	2099.788	17.631	.000
Within Groups	23461.780	197	119.095		
Total	27661.355	199			

The result in Table 4.2.6 revealed the F-value of 17.631 with its corresponding p-value of .000, which is less than the **.**05 level of significance with 2 and 197 degrees of freedom. The result is significant; therefore, the null hypothesis which states that there is no significant influence of educational level on pregnancy outcome among childbearing women in Akwa Ibom South Senatorial District, Nigeria is rejected. Hence, the result implies that educational level significantly influences pregnancy outcome among childbearing women in Akwa Ibom South Senatorial District, Nigeria.

Hypothesis Two

There is no significant influence of occupational type on delivery choices and pregnancy outcomes among childbearing women in Akwa Ibom South Senatorial district, Nigeria.

Table 4: Result of ANOVA on the influence of occupation on pregnancy outcome among childbearing women in Akwa Ibom South Senatorial district, Nigeria

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	697.083	3	232.361	1.689	.171
Within Groups	26964.272	196	137.573		
Total	27661.355	199			

The output in Table 4.2.7 revealed the F-value of 1.689 with its corresponding p-value of .171, which is greater than the **.**05 level of significance with 3 and 192 degrees of freedom. The result is not significant; therefore, the null hypothesis which states that there is no significant influence of occupation on pregnancy outcome among childbearing women in Akwa Ibom South Senatorial District, Nigeria is retained. Therefore, the result implies that occupation does not significantly influence pregnancy outcome among childbearing women in Akwa Ibom South Senatorial District, Nigeria.

Key Findings

The findings of the study showed that:

1. Educational level as variable significantly influences pregnancy outcome among childbearing women in Akwa Ibom South Senatorial District, Nigeria.

2. Occupation does not significantly influence pregnancy outcome among childbearing women in Akwa Ibom South Senatorial District, Nigeria.

DISCUSSION OF FINDINGS

The finding of the study revealed that educational level significantly influences pregnancy outcome among childbearing women in Akwa Ibom South Senatorial District, Nigeria. The result suggests that differences in educational attainment among women are associated with variations in their pregnancy outcomes. The reason for this finding is that education equips women with the knowledge and awareness needed to make informed decisions regarding maternal healthcare. Women with higher levels of education are more likely to understand the importance of antenatal care, skilled birth attendance, and facility-based delivery. They are also better positioned to recognize pregnancy-related complications and seek timely medical intervention when necessary. Consequently, educated women are more likely to choose health facilities for delivery, thereby increasing the likelihood of positive pregnancy outcomes. The finding of the study is in line with the findings of Adewuyi *et al.,* (2018), who reported that maternal education was a significant determinant of facility-based delivery among young mothers in Nigeria. Their study revealed that women with secondary and higher education were significantly more likely to deliver in health facilities compared to women with no formal education. The authors concluded that education enhances awareness and utilization of skilled birth attendants, thereby improving maternal health outcomes.

The finding of the study showed that occupation does not significantly influence pregnancy outcome among childbearing women in Akwa Ibom South Senatorial District, Nigeria. This was demonstrated by the obtained F-value of 0.894 and p-value of .445, which was higher than the .05 level of significance. This outcome indicates that differences in occupational status among the respondents did not lead to significant variations in their pregnancy outcomes. One possible explanation for this outcome is that maternal healthcare services may be relatively accessible to women regardless of their occupation. The availability of primary healthcare centres, government maternal health programmes, and community health campaigns may have enabled women from different occupational backgrounds to access similar healthcare services during pregnancy and childbirth. As a result, occupational status may not have been a major determinant of delivery pregnancy outcomes among the respondents.

The outcome of this study is inconsistent with the finding of Ajayi *et al.,* (2022), who observed that occupational status significantly influenced maternal healthcare utilization among women in Lagos State. Their study indicated that women engaged in formal employment were more likely to attend antenatal care, deliver in health facilities, and utilize skilled birth attendants than unemployed women or those engaged in informal occupations. The authors attributed this pattern to better financial resources, health awareness, and workplace support enjoyed by formally employed women.

CONCLUSION

This study concluded that pregnancy and childbirth are influenced by certain economic conditions and circumstances surrounding childbearing women. The study highlights the benefits of having a nice environment in which women can make appropriate decisions in regards to pregnancy and childbirth and obtain the needed help during the process. Ensuring good access to appropriate healthcare, improving women's capacity to make informed health decisions, and reducing barriers to the use of maternal health services are essential for promoting safe motherhood. Therefore, enhancing pregnancy outcomes requires a comprehensive approach that goes beyond the provision of medical services to address the broader circumstances in which women experience pregnancy and childbirth. Consistent efforts by healthcare providers, government agencies, families, and communities are essential to promote timely utilization of maternal health services and encourage safe delivery practices. Such efforts will contribute to the reduction of preventable maternal and neonatal complications and promote healthier pregnancy outcomes among childbearing women in Akwa Ibom South Senatorial District, Nigeria.

RECOMMENDATIONS

Based on the findings of this study the following recommendations are made:

1. The government through ministry of health and relevant health care agencies should strengthen policy aimed at improving regular community based -health education, seminars and awareness campaigns should be organized to educate women on the benefits of antenatal care, skill birth attendant and facility – based delivery
2. Child bearing women should be encouraged to access institutionalize care irrespective of occupational type.

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