THE PERCEIVED EFFECT OF ANTE-NATAL EDUCATION ON THE HEALTH OF PREGNANT WOMEN IN NSUKKA LOCAL GOVERNMENT AREA, ENUGU STATE

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Abstract

Pregnancy is the process of growing another human being in the womb till the time of birth. Knowing that another human being will soon come into the world should bring joy to every home but unfortunately, it's not usually so due to complications. Such complications could be anemia, high blood pressure, gestational diabetes, bleeding, preterm labour among others. These complications if not properly managed can lead to miscarriages, delay or prevent future pregnancy or even lead to death the woman as the case may be. However, these complications could be prevented through ante-natal education. Antenatal education is the education given to pregnant women during the routine ante-natal visit in the hospitals or clinics. This section is handled by nurses, midwives or even the doctors as the case may be. Effective ante-natal education helps in early detection of danger signs, prepares women for her delivery day, improves child delivery and reduces maternal child death. Irrespective of these effect of ante-natal education on pregnant women, there still exist some complications in various areas of the country leading to this study 'Perceived effects of ante-natal education in Nsukka Local Government Area. The study adopted a descriptive survey research design. The sample for the study is 150 pregnant women selected from a population of 316 pregnant women registered in government and private registered hospitals and health centres in Nsukka. 4 research questions were generated for the study. Questionnaire of 4-point scale was used for data collection. The data collected were analysed using mean in which items from 2.50 were accepted while items below 2.50 were rejected. The major findings of the study revealed that ante-natal health education provided to the pregnant women included danger signs in pregnancy, preparation for labour, nutrition in pregnancy. The study also found that ante-natal health education enhanced early detection of danger signs in pregnancy, reduced maternal and child mortality. Furthermore, the findings showed that the pregnant women experienced challenges such as poor teaching methods, inadequate/insufficient health workers among other findings. The study concluded that ante-natal health education impacted significantly in the lives of pregnant women in Nsukka local government area, reducing maternal and child mortality and should be improved by providing solutions to those challenges. The study hereby, recommends that adequate/sufficient modern digital teaching facilities should be provided by the government, non-governmental organizations and philanthropist to hospitals and ante-natal clinics. Government should also solve the problem of insufficient health workers by improving in the economic situation of the country which is the main reason our health workers are leaving the country in droves for greener pasture.

Key words: Ante-natal, Health Education, Pregnant, Nsukka Local Government.

Introduction

Pregnancy is an important and critical stage in women's life. It is a journey that marks the beginning of the emergence of human being(s) into the world. In other words, it's a stage when human being is been carried in the womb, develop, get matured until it been given birth to. The health of the future generation is to a great extent determined by the baby's growth and development within the womb (European Board and College Obstetrics and Gynecology, EBCOG, 2015). According to Okafor & Yawande (2020), childbirth is perceived by many as a natural process that would occur with little or no assistance, informing the choices people make regarding place of delivery. Child birth is considered a comprehensive experience that incorporates physical, emotional, psychological, developmental, social, cultural, and religious aspects (Abood & Alsafi, 2023).

Pregnancy and child bearing processes sometimes could be complicated demanding proper care, ultimate level of knowledge and skill by the health care givers in other to achieve safe delivery. Abood and Alsafi, (2023) further stated that better outcome could only be anticipated if is occurring within a health facility. Delivery in health facility plays a critical role in improving maternal health and new-born survival (Kahsay et al, 2019, Adedokun & Uthman, 2019). Health facilities with quality ante-natal education and care therefore, enhance safe delivery.

Ante-natal education also known as prenatal education is the information and teaching given in the hospitals and health care facilities specifically to pregnant women and sometimes their husbands about pregnancy, childbirth and care during ante-natal visit or care. Antenatal education according to Okorie (2026) is the systematic provision of information, guidance, and emotional support to pregnant women during routine antenatal visits; it typically addresses pregnancy changes, nutrition, danger signs, labor and delivery processes, pain management options, birth preparedness, and newborn care. Cumber et al, (2016) opined that pregnant women are educated on the following important topics during ante-natal education and care: nutrition, medication, lifestyle, exercise, personal and environmental hygiene, safety in the environment, etc. Ante-natal education prepares women and help them in taking wise decision over there health and that of the unborn baby and get them ready for the delivery day. Prenatal education is a tool that serves expectant mothers in making safe decisions both before and during child birth, applying skills for choosing the preferred delivery mode, managing their labor pain, and using abilities for postnatal care, infant care, breastfeeding, and motherhood (Mostafa et al, 2024). Ahmed and Piro (2022) stated that Pregnant women can ensure a safe and healthy delivery by receiving appropriate counseling. Studies conducted by (Ango et al,

2018) revealed that health education intervention has been found to be effective in improving knowledge and utilization of health services as receiving antenatal advice (health education) to deliver at the health facility and on birth preparedness and complication readiness (BP/CR) was significantly associated with health facility delivery. Ante-natal education works simultaneously with ante-natal care. Elgzar (2023) identified ante-natal education as a crucial role of midwives when providing antenatal care to pregnant women.

Ante-natal care on the other hand, is the regular medical and health services given to pregnant women in the hospitals and clinics to monitor, protect and take good care of their babies while in the womb and even after delivery. Cumber et al (2016) defined antenatal care (ANC) services as an umbrella term used to describe the medical procedures and care carried out during pregnancy. Among the components of ante-natal care are regular checkup, diagnostic test, nutritional guides, physical activity recommendations, emotional support, birth preparedness (Gard, 2023).

The long-term impacts of antenatal education include increased maternal awareness of the importance of postpartum health control and ongoing care for infants, ultimately contributing to a decrease in maternal and infant mortality rates in different parts of the world (World Health Organization, 2019). However, the ultimate goal of ante-natal education and care is safe delivery. Safe delivery is therefore, said to occur when mother and child is alive irrespective of the delivery method.

Review Studies conducted in Owerri by Okorie (2026) on the Effect of Antenatal Education Provided by Nurses on Women's Childbirth Preparedness and Outcomes revealed three major thematic findings: Ante-natal education improves knowledge and childbirth preparedness, enhances maternal psychological readiness & reduces fear, and associated with improved maternal and neonatal outcomes. Furthermore, a non-randomized study in northern Nigeria showed that antenatal education focusing on neonatal care and danger signs increased early initiation of breastfeeding by 31% and reduced neonatal morbidity related to delayed care seeking (Bello et al., 2024). When delivered effectively, antenatal education helps women understand what to expect during childbirth, reduces fear and anxiety, and improves their ability to make informed decisions regarding their health and that of their babies (Lumbiganon et al., 2022). Studies conducted in Ghana, Tanzania, and Nigeria showed that women who received structured antenatal education had higher levels of knowledge about labor stages, danger signs, and newborn care compared with those who received routine care alone (Aborigo et al., 2024; Mgaya et al., 2022; Onasoga et al., 2023). According to Kurniasih (2025), the effectiveness of antenatal education is not universal and is strongly influenced by various

factors, including delivery methods, socio-cultural context, and the quality of available health services.

However, irrespective of the impact of ante-natal education on maternal and child health, Nigeria continues to account for a significant proportion of global maternal deaths with factors such as poor birth preparedness, delays in seeking skilled care, and inadequate health education contributing to these outcomes (National Population Commission, 2023). This therefore, necessitates the need for this study, perceived effect of ante-natal education on the health of pregnant women in Nsukka Local Government Area, Enugu State. The findings of this study will be of great significant to pregnant women, their husbands, parents, health workers, government, the researchers and other researchers among others. The findings will bring great improvement to the health of pregnant women and their children, improvement in health sector and to the society at large.

Research Questions

The study was guided by four research questions:

1. What are the content of ante-natal health education received by pregnant women in Nsukka Local Government Area?
2. What are the general effects of the ante-natal health education on pregnant women in Nsukka Local Government Area?
3. What are the problems encountered by the pregnant women during ante- natal education programme?
4. What are the possible solutions to the identified problems encountered by pregnant women and health workers during ante-natal visits?

Methodology

The study adopted survey research design. Survey research design is appropriate for this study because it enabled the researcher to collect data from a representative sample of pregnant women attending ante-natal clinic. The population of the study was made up of all pregnant women that attended ante-natal clinic in 15 selected health centers which includes government and registered private hospitals in Nsukka. The total number is 316. The selected hospitals are: Nsukka General Hospital, Bishop Shanahan Hospital, University of Nigeria Nsukka Medical Centre, Ede-Oballa Health Centre, Opi Health Centre, Edemani Community Hospital, Eha-Alumona Health Centre, All Saints Hospital Nsukka, Akulue Hospital, Obimo Health Centre, Obukpa Health Centre, Chinenyenwa Maternity Home, Zim Uzo Hospital, Opi,

Chukwunonso Hospital, Zenith Hospital. Simple random sampling technique was used to select the number of the pregnant women from the selected hospitals and health centers. The sample size was determined using Taro Yamane method. 150 pregnant women were selected.

The instrument used for data collection was a structured questionnaire developed by the researcher titled "Perceived Effects of Ante-natal Education Questionnaire" (PEAEQ). The questionnaire has two sections A and B. Section A has the demographic information of the respondents while section B was structured to answer the research questions. The items were structured on a 4-point Likert scale ranging from Strongly Agree (SA) 4 points, agree (A) 3 points, disagree (D) 2 points, Strongly Disagree (SD) 1 point. The questionnaire was subjected to face and content validity by experts in Health Education and Measurement and Evaluation. The reliability of the instrument was established using Cronbach Alpha method. A pilot test was conducted using a small group of pregnant women outside the study area. A reliability coefficient of 0.70 was obtained indicating that the instrument was reliable. The researcher with the assistance of two trained research assistant personally visited all the 15 hospitals sampled and administered copies of the questionnaire to the respondents. The uneducated pregnant women were guided on how to fill the questionnaire using their dialect. At the end, the whole copies of the questionnaire were filled by the pregnant mothers and returned for analysis. Data collected were organized and analyzed with respect to the research questions. The cut off point was therefore, was 2.50. This was obtained by summing the scale values (4+3+2+1=10) and dividing by the number of response options (4), giving 2.50. 2.50 was used as the decision rule because it's the midpoint of the 4-point scale meaning that any responses of 2.50 and above were regarded as accepted while responses below 2.50 were regarded as unaccepted or rejected.

Results:

From Table 1, the mean score for each of the items is above 2.50 indicating that the respondents generally agreed that nutrition in pregnancy, personal hygiene, importance of regular clinic attendance, danger signs in pregnancy, exercises and rest during pregnancy, substances to take and not to take in pregnancy (drugs & drinks). family planning, preparation for labour & delivery, immunization in pregnancy and after delivery and breast-feeding practices were the topics taught during ante-natal education.

Table 1: Content of the ante-natal health education taught to the pregnant women in Nsukka Local Government Area during their ante-natal visit

S/N	Items	SA	A	D	SD	Total Score	Mean Score	Remark
1	Nutrition in pregnancy	140	10	0	0	590	3.93	Accept
2	Personal hygiene	100	50	0	0	550	3.67	Accept
3	Importance of regular clinic attendance	150	0	0	0	600	4.00	Accept
4	Danger signs in pregnancy	150	0	0	0	600	4.00	Accept
5	Exercises and rest during pregnancy	100	40	10	0	540	3.60	Accept
6	Substances to take and not to take in pregnancy (drugs & drinks)	70	70	5	5	505	3.37	Accept
7	Family planning	150	0	0	0	600	4.00	Accept
8	Preparation for labour & delivery	150	0	0	0	600	4.00	Accept
9	Immunization in pregnancy and after deliver	100	50	0	0	550	3.67	Accept
10	Breast feeding practices	50	100	0	0	500	3.33	Accept

Table 2: General effects of the ante-natal health care education on pregnant women in Nsukka LGA

S/N	Items	SA	A	D	SD	Total Score	Mean Score	Remark
1	Reduced maternal & child mortality	100	45	5	0	545	3.63	Accept
2	Reduced pregnancy related complications	100	50	0	0	550	3.67	Accept
3	Enhanced early detection of danger signs	130	20	0	0	580	3.87	Accept
4	Promotes safe delivery	70	80	0	0	520	3.47	Accept
5	Reduces fear and anxiety during delivery	60	70	10	10	490	3.27	Accept

From Table 2, it shows that the mean score for each of the items is above 2.50. This therefore, means that ante-natal education has reduced maternal and child mortality, pregnancy related complications, enhanced early detection of dander signs, promote safe delivery and reduces fear and anxiety during delivery.

From Table 3, items 1-5 and 7-8 have mean scores above 2.50 while item 6 has 2.50 all within the acceptable range. Which means that the respondents agreed that high ante-natal service charge is one of the problems encountered by the pregnant women during ante-natal program but the major ones are poor communication & illiteracy, inadequate/insufficient health workers, inadequate/insufficient equipment, poor attitudes of some health workers, insufficient time as well as poor infrastructure and poor teaching methods.

Table 3: Problems encountered by the pregnant women during ante-natal program

S/N	Items	SA	A	D	SD	Total Score	Mean Score	Remark
1	Poor communication & illiteracy	50	75	20	10	475	3.17	Accept
2	Inadequete/insufficient health workers	100	50	0	0	550	3.67	Accept
3	Inadequate/insufficient teaching equipment	150	0	0	0	600	4.00	Accept
4	Poor attitudes of some health workers	60	90	0	0	510	3.40	Accept
5	Insufficient time	100	40	10	0	540	3.60	Accept
6	High ante-natal service charge	20	45	80	5	375	2.50	Accept
7	Poor infrastructure	50	70	20	10	460	3.07	Accept
8	Poor teaching methods	70	60	16	4	496	3.31	Accept

Table 4: Solutions to the problems encountered by pregnant women during ante-natal visit

S/N	Items	SA	A	D	SD	Total Score	Mean Score	Remark
1	Use of simple English mixed with native language	75	75	0	0	525	3.50	Accept
2	Employment of qualified/sufficient health workers	90	60	0	0	540	3.60	Accept
3	Sufficient supply of teaching & learning equipment	150	0	0	0	600	4.00	Accept
4	Subsequent professional ethics & attitude training for health workers	75	75	0	0	525	3.50	Accept
5	sufficient time & time management	70	80	0	0	490	3.27	Accept
6	Reduced ante-natal service charge	150	0	0	0	600	4.00	Accept
7	Improved infrastructure	0	0	140	10	290	1.97	Accept
8	Improved teaching methods	150	0	0	0	600	4.00	Accept

From Table 4, all the items from 1-8 have the mean ratings that is above 2.50 meaning that all the items are acceptable as the solutions to the problems of the pregnant women during ante-natal care.

Discussion of the Findings

Findings on the content of the ante-natal health education received by the pregnant women during ante-natal clinic revealed that importance of regular clinic attendance, danger signs in pregnancy, family planning, preparation for labour and delivery are accepted by the pregnant women as the contents of the health education taught to them. This is in line with the report of WHO (2005) which stated that the components of ANC are consultation, family planning, Laboratory investigation, health education. It's also aligned with Cumber et al (2016) which stated that pregnant women are educated on the following important topics: nutrition,

medication, lifestyle, exercise, personal and environmental hygiene, safety in the environment, etc.

Findings on general effects of ante-natal health care education revealed that ante-natal education reduced maternal & child mortality, pregnancy related complications, fear & anxiety during delivery. it enhanced early detection of danger signs, promotes safe delivery. The study is supported with the findings of Okorie (2026) which stated that ante-natal education improves knowledge and childbirth preparedness, enhances maternal psychological readiness and reduces fear and associated with improved maternal and neonatal outcomes. Studies conducted in Ghana, Tanzania, and Nigeria showed that women who received structured antenatal education had higher levels of knowledge about labor stages, danger signs, and newborn care compared with those who received routine care alone (Aborigo et al., 2024; Mgaya et al., 2022; Onasoga et al., 2023). This suggests that targeted education allows women to make informed decisions, better plan for childbirth, and recognize complications early (Okorie, 2026).

Findings on the problems encountered by the pregnant women during ante-natal education showed that the women strongly agreed that their problems are poor communication & illiteracy, Inadequate /insufficient health workers, Inadequate/insufficient teaching equipment, poor attitudes of some health workers, Insufficient time, High ante-natal services, poor teaching method. These problems are great challenges to both the women and their unborn babies as well as the entire society. The effectiveness of ante-natal education does not only depend on its contents rather dealing with the challenges. Learning cannot be achieved where language barrier language barrier exists and learning materials and methods not adequate and properly handled. This is in line with the studies of Bitar (2022) which stated that Linguistic difficulties have been identified as a major obstacle to providing effective healthcare. According to Hadziabdic et al (2014) & Ikhilor (2019), Previous studies show that foreign-born women receive less information compared to native-born women because of language barriers.

The competent and number of health workers matters a lot in every health institution. Bergsjo (2001) opined that in some countries, antenatal classes are often led by health professionals such as midwives, doctors, or lactation counselors, while in others, trained public health educators or volunteers are also involved in the delivery of materials. Nigeria these days is facing a lot of challenges in health sectors. Good number of nurses and doctors are leaving the country to oversee seeking for better life thereby leaving the health conditions of the poor citizens in danger. The mass migration is as a result of bad economic situation of the country. It is estimated that 20,000 of the 72,000 Nigerian physicians educated in Nigeria were

practicing abroad in 2008 (Amorha et al, 2022). This number represents 28% of the physician workforce trained in Nigeria and is significantly higher than the proportion for any other African country (Falase et al, 2022). This number represents 28% of the physician workforce trained in Nigeria and is significantly higher than the proportion for any other African country (Falase et al, 2022,). As a result, Nigeria has a fragile health system that is unable to effectively deliver quality health services to its populace (Omiyi et al 2025). This includes increased workload for the remaining health workers, decreased access to health care services, and compromised quality of care (Ojo et al, 2023, Rahman Jabin et al, 2023, Jabin MSR, 2022). Increased workload negatively affects the attitudes of the health workers to their patients. The women's understanding of the teaching is not only affected by poor communication but teaching methods as well.

Findings on the solutions to the identified problems revealed that all the pregnant women accepted that their problems in antenatal education could be met following the provided solutions. These solutions are use of simple English mixed by native language, employment of qualified/sufficient health workers, sufficient supply of teaching and learning equipment, sufficient time and proper time management, reduced ante-natal service charge, Subsequent professional ethics & attitude training for health workers, Improved infrastructure, Improved teaching methods.

These days, technology has made learning so easy and comfortable demanding little or no infrastructure as some women can even learn from the comfort of their homes. Kurniasih (2025) stated that the approach used in this education varies, ranging from lectures, group discussions, practical demonstrations, to childbirth simulations. Some antenatal programs also involve couples or other family members, to create strong social support for pregnant women (Lumbiganon et al., 2012). Recent innovations in antenatal education include the use of technology, such as mobile apps and online learning platforms, which allow for wider and more flexible access to information.

Conclusion

Antenatal education is an education received by pregnant women from the onset of their ante-natal clinic. It aims is on educating pregnant women on how to take care of themselves and their baby in the room. Among the content of antenatal education are nutrition, rest, exercises, lifestyle behaviour among others, From the findings of this study, nutrition education is effective in reducing maternal and neonatal death, reduced pregnant complications, prepares women for labor among others. Upon the impact made so far, there

are still some recorded cases of still birth, maternal and child's death still exist in Nsukka Local Government area. These could be attributed to mass migration of health workers oversea searching for greener pasture. Corruption, bad policies, insecurities has crippled the economy of the nation Nigeria. The perceived effects of nutrition education could the enhanced by providing solutions to such problems. Among the solutions are effective communication, improved infrastructure, adequate teaching and learning materials, improvement in health sector in terms of staffing and staff retention. This thereby helps in improving the health status of children, adults and the society at large.

Recommendations

From the findings of the study, the following recommendations were made

1. Government should improve the economic situation of the country which is the major reason that makes the good number of our health workers to keep migrating to other countries seeking for greener pasture
2. Ante-natal education should be taught with bilingual language to enable the literate and illiterate to benefit
3. Improved teaching methods should be encouraged with provision of modern digital facilities by governments, non-governmental organizations, philanthropists etc.
4. Health workers should be subsequently given training by their employers on how to relate with their patients.
5. Government should make ante-natal service charges more affordable to every pregnant woman.
6. Government and individual owners of any health institution should improve on infrastructure, ensuring that every health institution is up to standard regards to accommodation.

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