

## Awareness and Utilization of Health Information on Risky Health Behaviours of Pregnant Women in Anambra State

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### Abstract

Health information enables an individual to take the best decision concerning his/her health. Pregnant women have peculiar health information needs. This study investigated the awareness and utilization of health information on risky health behaviours of pregnant women in Anambra State. Three specific objectives guided the study. Descriptive survey research design was adopted for this study. The population comprised eight thousand nine hundred and eighty four (8,984) pregnant women. Borg and Gall statistical tool was used to determine the sample size of eight hundred and ninety eight (898). Questionnaire was used as a data collection instrument for the study. Data obtained were analyzed using mean ratings and simple percentages. The study revealed that pregnant women in Anambra State are not aware of their risky health behaviours, secondly, they do not utilize the health information provided for them due to certain challenges. This implies that the lifestyle which pregnant women in Anambra State understood as normal, endanger their lives and that of their unborn children. Therefore, providing them with relevant health information and at the same time paying attention to the challenges that hinder their health information utilization can reduce to a great extent the number of women and babies dying of pregnancy related complications each year. It was recommended among others that healthcare providers and information professionals should utilize different media to increase the level of awareness on risky health behaviours associated with pregnancy.

**Keywords:** *Health information, Risky health behaviours, Pregnant women, Information awareness, Information utilization, Anambra State*

### Introduction

Information clears uncertainty and ignorance and helps one to overcome or avoid mistakes. It is the bedrock to the growth and development of an individual.

Without information, one may end up taking wrong decisions that may affect his/her psychological outcome and quality of life. Apparently, information adds to one's awareness or understanding of tips to healthy living.

Health as defined by the World Health Organization (2015) is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity. Therefore, every individual needs health information in order to take necessary preventive measures in life. Health information can be defined as any information that enables any individual to take the best decision concerning his/her health and at the same time understands the implication of any health decision taken. In other words, pregnant women need health information more than every other group because women could be addicted to a kind of lifestyle without being aware of the health implications of such a lifestyle or behavior during pregnancy. In this situation, awareness is the central determinant of someone's attitude and behavior towards lifestyle. Awareness in essence, enables an individual to make required decision concerning an existing situation.

Providing pregnant women with health information will enable them take good decisions concerning their health. However, it is one thing to provide health information and yet another thing for the health information provided to be optimally utilized to achieve the purpose. Utilization is the act of putting an acquired knowledge, experience or skill into effective use. It is the ability of one or group of persons to do something and achieve a goal. According to Anyaoku (2014), utilization of information refers to what people do with information after they have acquired it. The need for pregnant women to optimally utilize health information provided in health care centers

cannot be overemphasized; where this fails, the provision will be a waste of fund while their mortality rate will still be alarming.

Complications that go with pregnancy are so numerous and most of which could be attributed to risky behaviours of pregnant women. A lot of women die of pregnancy related complications each year. In 2020, the maternal mortality ratio in the African Region was estimated at 531 deaths per 100 000 live births. Countries with extremely high maternal mortality rates are South Sudan with 1223 deaths, followed by Chad with 1063 deaths and Nigeria with 1047 deaths per 100 000 live births (World Health Organization, 2023). During pregnancy, both the woman and her developing child face various health risks which have led to the death of many, whereas women need not die at childbirth. The vast majority of maternal death could be prevented if women had access to health information on their risky health behaviours during pregnancy and utilize the information as well.

Risky health behaviours are unhealthy habits that contribute to development of health issues. It places one at increased risk of losing his/her life. According to Chowdary (2018), risky behaviours are those actions that potentially expose people to harm, or significant risk of harm which will prevent them from reaching their potential. He went further to state that they are indulgence in any action or activity that can cause potential harm to the individual as a consequence of what he chooses to do. For example tobacco use, alcohol and drug use, unsafe sex behaviors, unhealthy dietary behaviors, obesity and physical inactivity.

Risky health behaviors have taken a lot of lives. According to Renner (2011), tobacco use, alcohol consumption and overweight led to 10.2 million deaths worldwide in the year 2004. He went further to state that these risky behaviours are responsible for 17.3% of global mortality.

In the light of the above, it is pertinent to find out the awareness that exist among pregnant women concerning risky health behaviours and the dangers associated with them, this will aid in their utilization of available health information that would guide them to choose a healthy lifestyle.

### **Objectives of the Study**

Specifically, the research sought to

1. Ascertain the awareness of risky health behaviours by pregnant women in Anambra State;
2. Investigate the extent of utilization of health information by pregnant women in Anambra State;
3. Find out the factors that hinder pregnant women from utilizing health information in Anambra State.

### **Literature Review**

#### **Awareness of Risky Health Behaviours by Pregnant Women**

Awareness is the ability of people to realize or know that something exists. When there are provisions made available for a certain group of individual, but they are not aware of it, the provisions are as good as useless.

The implication of this is that information sources which users are not aware of would be under-used.

Women have less awareness about their health (WHO, 2015). Knowledge and awareness about safe motherhood practices could help reduce pregnancy related health risks and promote safer pregnancies and deliveries (Okereke, Aradeon & Obanyo, 2013). The probability of a woman of reproductive age having more awareness of safe motherhood practices should increase with age, number of deliveries as well as number of antenatal care visits by the woman (Pembe, Urassa, Anders, Gunilla, Lennarth & Elizabeth, 2009). Ample evidence indicates that when women have greater knowledge through education, there is greater likelihood that they will have better pregnancy and delivery outcomes (Harrison in Okereke, et al., 2013). This is likely because acquiring knowledge through education equips women to make appropriate decisions about their health including during pregnancy and child bearing. A better informed woman is more likely to make appropriate decisions during obstetric emergencies (Jammeh, Sundby & Vangen, 2011).

The benefits of preconception information are not well understood by most couples or maybe they are ignorant of the implications involved. Many men wait until a positive test confirms their spouse pregnancy before they start making amends on their behaviours such as stopping the consumption of alcoholic beverages. This action according to Wallace and Hurwitz, in Hefferman (2008) is too late to have an

impact on the quality of the male's sperm, and could put the fetus at risk during a sensitive phase of early development.

According to Igberase, Isah and Igbekoyi (2009), awareness and perception among the community members on the causes of maternal deaths will influence their decision to seek help in the face of an emergency. There is increasing emphasis on the need to provide information to women of reproductive age as a strategy to reduce maternal deaths. They further stress that educating women about the risks of delivering in homes of traditional birth attendants, maternity homes and health centers, and the concept of early referral of women to the hospital should be reinforced. Awareness of physical activity during pregnancy is important for the health of the mother and child and may reduce the risk of adverse maternal, fetal, and neonatal outcomes (Dufek, 2016).

There are so many things pregnant women regard as nothing because they are not aware of the implications. Mooko and Aina (2007) were of the view that information is needed for awareness, increase in productivity and healthcare. Ilo and Adeyemi (2010) posit that lack of awareness of information contributed to a high rate of risky sexual behaviors among rural women. More so, Mooko and Aina further opine that every individual whether literate or illiterate needs information for a variety of issues essential for his or her survival. Lack of awareness and fear of unknowns in pregnancy bring many negative consequences for individuals

during their pregnancy (Chalak & Riahi, 2017).

Health information is very important. Being familiar with the health implications associated with risky behaviors may leave individuals with no other option than to be of good behaviour that will not only benefit their own lives but also the lives of their future children. Some of the maternal deaths could have been prevented if only pregnant women were aware of their risky health behaviors. Health information awareness should be increased in both pregnant women and women thinking of pregnancy, this will help to an extent in reducing maternal death rates. Community supports such as smoking cessation programs, food banks and addiction counseling programs play important role in changing unhealthy risky conditions.

### **Utilization of Health Information by Pregnant Women**

It is one thing to provide information and another thing to put the information provided into effective use. According to Anyaoku (2014) utilization of information refers to what people do with information after they have acquired it.

The poor maternal outcome in Nigeria might not be unrelated to the low utilization rates of health information on their unhealthy life styles during pregnancy. To achieve optimum health, pregnant women need to change their risky health behaviours to healthy behaviours. Most pregnant women are ignorant of the fact that non

utilization of health care services is very risky to their lives and that of their unborn child. Health promotion through health information dissemination is needed to build their knowledge and motivation in the utilization of health information and health care services. Moore, Alex-Hart and George (2011) opine that poor utilization of health facilities during delivery by pregnant mothers is still a major cause of maternal and childhood morbidity and mortality in Nigeria.

Health care service utilization is a key proximate determinant of maternal and infant outcomes. In the words of Reynolds and Tucker (2006), it is evident that well-timed antenatal care utilization is an opportunity to prevent the direct cause of maternal and neonatal deaths related to obstetric complications. This is true because during antenatal care services, a lot of problems are discovered and taken care of. For instance, during antenatal care services, some pregnancies like ectopic pregnancy that could be a threat to the life of the pregnant woman are terminated to save her life and other issues which could not be known to the mother except through antenatal care services.

While antenatal care can be an important tool in diagnosing and preventing risks during pregnancy, many women in developing countries do not use this service. Using a three level linear regression model, data from the 1993 Kenya Demographic and Health Survey were analyzed to determine the frequency and timing of use of antenatal care services. The result showed that the median number

of antenatal care visit was four and the first visits occur in the fifth month of the pregnancy on average (Magadi, 2001). Magadi opined that use of antenatal care is started later and is less frequent for unwanted and mistimed pregnancies, that even women who appear to use antenatal care frequently are less likely to use the services for a mistimed pregnancy. Magadi further stressed that long distance to the nearest antenatal care facility is an obstacle to antenatal care. However, implementing and assuring utilization of effective maternity care for women in the developing world is not an easy task. To assist in the utilization of health information by pregnant women, healthcare professionals must select health information that is appropriate to the client's level of understanding, this means putting information consolidation and repackaging into optimal use.

Health information dissemination on the need for effective utilization of health care services is very important so that pregnant women can be aware of the risks they are exposing their lives and that of their unborn children due to non-utilization of health care services and childbirth.

### **Factors that Hinder Pregnant Women from utilizing Health Information**

Information explosion has increased the amount of health information which consumers and providers have access to. Hence, information is expected to be at beck and call of pregnant women. Health information is seriously going around the globe today, but some of these information



do not get to those they were actually meant for, due to many factors. Pregnant women are faced with some challenges in the quest for information to handle their health information needs (Fenwick, 2015).

Nigeria does not currently offer free healthcare to patients. The cost of every maternal health service received by the pregnant women such as preconception, prenatal and postnatal care services are paid for by the patient and/ or family members, however the utilization of these services are just for those that can afford it. Poverty may be the number one barrier to utilization of health information by pregnant women. Health information utilization may not be easy unless the problem of poverty is drastically redressed.

Pregnant women use the Internet to search for online health information during pregnancy (Bantan & Abenhaim, 2015; Tripp, 2014; Waring, 2014). Many pregnant women cannot afford the luxury of electronic devices of communication because of poor income (Shieh & Weaver, 2011). The reliability of health information is a challenge experienced by pregnant women who can afford information technology (IT) devices (Bantan & Abenhaim, 2015; Blanchard-Rohnen & Siegrist, 2011). A study on views expressed on Google concerning vaginal birth after a caesarean section found that the Google search engine was considered to offer reliable and accurate online health information to pregnant women. However, most of the sampled sites on Google offer information that a lay person may not understand because the sites are academic-

oriented (Bantan & Abenhaim, 2015). When one downloads information he/she does not understand, the information is as good as useless. In other words, medical language used on health information conveyed online could be a big barrier to utilizing online health information by pregnant women. According to Oluwabamide and Jegede (2008), it is only when the people's language is actually used that they would assimilate the message and consequently changes their habits appropriately.

Midwives and maternity healthcare providers are the most often consulted and important sources of information on pregnancy, but most pregnant women continue to complain about unmet information needs (Fenwick, 2015; Das & Sarkar, 2014). The hindrances may occur as a result of poor attitudes of healthcare providers (Silal, 2012), the shorter attention span on the part of pregnant women (Wang, 2011; Clouse, 2013) or insufficient time to consult with healthcare providers on pressing pregnancy issues (McDonald, 2014; Heaman, 2015).

According to Dladla (2000), information use is hindered by many barriers. According to him, the principal barrier to information access and use is the lack of ability of the user to be aware of the resources, where to find them and how to use them. He further identifies the problem of physical access, cost and lack of the ability to use information and illiteracy as barriers to information use. Regrettably, Zeisel (2005) also indicates that lack of a functional and efficient public library services impedes community access to information and its

utilization because its sole functionality is to provide information to its community which includes stimulating public awareness and the use of health and wellness resources and to create a framework for health education programmes, aimed at the needs and interest of its particular community. However, he stressed further that collaboration among librarians and health information providers in health services is very important because libraries and librarians are very important in the health and wellbeing of its community.

### **Methodology**

Descriptive survey research design was adopted for this study. This research design was considered appropriate for this present study because only a portion of the population was studied and findings from this are expected to be generalized to the entire population. The population of the study comprised of eight thousand nine hundred and eighty four (8,984) pregnant women that registered for antenatal care in all the general/State teaching hospitals in Anambra State between the months of January, 2019 to December, 2019. The sample size for this study consists of eight hundred and ninety eight (898) registered pregnant women who were statistically determined using a mathematical model developed by Borg and Gall (1973). A questionnaire was used as the instrument

for data collection. The instrument went through face and content validation by three experts. A pilot study was done to test reliability of the instrument and the reliability coefficient was established using Cronbach Alpha, the following reliability coefficients were obtained .70, .82 and .71. Copies of the questionnaire were administered by the researcher with the help of tutored research assistants. The response rate was 96.9%. Data collected were analyzed using arithmetic mean and simple percentages. The decision level for response to research question 1 was 50%. Items with the value of 50% and above were positively interpreted while items below 50% were negatively interpreted. 4-point scale was used to answer other research questions, the decision level was between 2.50 values. Thus, any item with a mean score of 2.50 and above was positively interpreted while any item with a mean score below 2.50 was negatively interpreted. Statistical package for social sciences (SPSS) software version 24.0 was used as tool for data analysis in research.

### **Results**

This section is concerned with data presentation, analysis, interpretation and discussion of findings. The results are presented and analyzed based on the research questions.

**Research Question 1:** Are the pregnant women in Anambra State aware of their risky health behaviours?

**Table 1: Percentage Responses of Pregnant Women on the Awareness of Risky Health Behaviour**

	Item Statement	Freq	%	Remark
1	Frequent consumption of food high in sugar and fat can lead to excess weight gain (maternal obesity)	353	40.5%	Not Aware
2	Excess weight gain in pregnancy is associated with hypertensive disorders and gestational diabetes	387	43.4%	Not Aware
3	Alcohol intake during pregnancy increases the chances of fetus to have abnormal facial features, short stature, low body weight, intellectual disabilities, vision or hearing problems, and still birth.	151	17.3%	Not Aware
4	Tobacco intake or smoking during pregnancy is a risky factor of sudden infant death syndrome, brain and lung tissue damage of the fetus, miscarriage and babies being born too early.	562	64.5%	Aware
5	Frequent child bearing can lead to complications during pregnancy.	332	38.1%	Not Aware
6	Not adhering to preconception care and postnatal care instructions can lead to complications during pregnancy.	75	8.6%	Not Aware
7	Abortion can cause damage to the womb/ take the life of the pregnant woman.	687	78.9%	Aware
8	Avoiding tetanus vaccination during pregnancy can lead to the death of the unborn child and the mother.	567	65.1%	Aware
9	Self-medication during pregnancy can cause physical or mental deformity on the fetus.	262	30.1%	Not Aware
10	Taking of local herbs during pregnancy can lead to miscarriage and can disfigure the unborn child.	81	9.3%	Not Aware
11	Sex aids in easier labour and recovery	162	18.6%	Not Aware
12	Taking pills or herbs to lighten up the skin of the baby while in the womb can cause damage to the limbs and internal organs of the fetus.	400	45.9%	Not Aware
13	Delivering in the homes of traditional birth attendants/maternity homes is very risky.	455	52.2%	Aware
14	Irregular antenatal visits helps in promoting anemia.	178	20.4%	Not Aware
<b>Grand Percentage</b>			<b>38.08%</b>	<b>Not Aware</b>

**N=871**

**Decision rule; 50%=Aware, <50%=Not Aware**



Results in Table 1 showed that pregnant women in Anambra State are aware that: tobacco intake or smoking during pregnancy is a risky factor of sudden infant death syndrome, brain and lung tissue damage of the unborn child, miscarriage and babies being born too early (64.5%), abortion can cause damage to the womb/take the life of the pregnant woman (78.9%), avoiding tetanus vaccination during pregnancy can lead to the death of the unborn child and the mother (65.1%), delivering in the homes of traditional birth attendants/maternity homes is very risky (52.2%). The basis for the decision rule was 50%. The table also showed that they are not aware of the following information: frequent consumption of food high in sugar and fat can lead to excess weight gain (maternal obesity) (40.5%), excess weight gain in pregnancy is associated with hypertensive disorders and gestational

diabetes (43.4%), taking pills or herbs to lighten up the skin of the baby while in the womb can cause damage to the limbs and internal organs of the unborn baby (45.9%), irregular antenatal visits help in promoting anemia (20.4%), sex aids in easier labour and recovery (18.6%), alcohol intake during pregnancy increases the chances of fetus to have abnormal facial features, short stature, low body weight, intellectual disabilities, vision or hearing problems, and still birth (17.3%), frequent child bearing can lead to complications during pregnancy (38.1%), self-medication during pregnancy can cause physical or mental deformity on the fetus (30.1%), taking of local herbs during pregnancy can lead to miscarriage and can disfigure the unborn child (9.3%). These items are less significant because they are neither up to the decision rule of 50% nor the grand percentage of 38.08%.

**Research Question 2:** To what extent do pregnant women in Anambra State utilize the available health information needed to avoid risky health behaviours?

**Table 2: Mean Ratings on the Extent to Which Pregnant Women Utilize the Available Health Information Needed To Avoid Risky Health Behaviours**

	Item Statement	VHE	HE	LE	VLE	Total	Mean	Remark
1	After each delivery, I normally go for family planning for child spacing	119	86	152	514	871	1.78	Low Extent
2	I seek preconception care service before getting pregnant	79	65	225	502	871	1.67	Low Extent
3	I do not miss my antenatal appointments	71	35	160	605	871	1.50	Low Extent
4	I avoid high doses of caffeinated beverages during pregnancy	158	111	152	450	871	1.97	Low Extent
5	During pregnancy I eat food rich in iron very well	528	303	35	5	871	3.55	High Extent

Item	Statement	VHE	HE	LE	VLE	Total	Mean	Remark
6	I do not take drugs out of doctor's prescription	239	108	272	252	871	2.38	Low Extent
7	I don't indulge in abortion	177	84	325	285	871	2.17	Low Extent
8	I avoid alcohol intake during pregnancy	146	93	334	298	871	2.09	Low Extent
9	I neither smoke nor snuff tobacco	163	126	303	279	871	2.19	Low Extent
10	I do not take local herbs nor visit their maternity home for delivery	105	91	372	303	871	1.99	Low Extent
11	I do not abstain from sex especially at the last trimester of my pregnancy	68	80	398	325	871	1.87	Low Extent
12	I take tetanus vaccination two times before my delivery date.	638	176	33	24	871	3.63	High Extent
13	I do not get myself involved in unsafe sex practices	535	260	72	4	871	3.52	High Extent
14	During pregnancy, I do not mix drugs from chemist shops	136	80	353	302	871	2.05	Low Extent
15	I do enough exercise during pregnancy	415	209	196	51	871	3.13	High Extent
<b>Grand Mean</b>							<b>2.37</b>	<b>Low Extent</b>

**Note;** 2.50 = High Extent, < 2.50 = Low Extent

VHE = Very High Extent, HE = High Extent, LE = Low Extent, VLE = Very Low Extent

Table 2 shows that at a grand mean of 2.37, pregnant women utilized health information to avoid risky health behaviours because they: eat food rich in iron very well during pregnancy ( $\bar{x} = 3.55$ ), take tetanus vaccination two times before delivery date ( $\bar{x} = 3.63$ ), abstain from unsafe sex practices ( $\bar{x} = 3.52$ ) and do enough exercise during pregnancy ( $\bar{x} = 3.13$ ). Based on the decision rule of 2.50, pregnant women utilized health information to a low extent because they do not do the following: After each delivery, I normally go for family planning for child spacing ( $\bar{x} = 1.78$ ),

I seek preconception care service before getting pregnant ( $\bar{x} = 1.67$ ), I do not miss my antenatal appointments ( $\bar{x} = 1.50$ ), I avoid high doses of caffeinated beverages during pregnancy ( $\bar{x} = 1.97$ ), I do not take drugs out of doctor's prescription ( $\bar{x} = 2.38$ ), I don't indulge in abortion ( $\bar{x} = 2.17$ ), I avoid alcohol intake during pregnancy ( $\bar{x} = 2.09$ ), I neither smoke nor snuff tobacco ( $\bar{x} = 2.19$ ), I do not take local herbs nor visit their maternity home for delivery ( $\bar{x} = 1.99$ ), I do not abstain from sex especially at the last trimester of my pregnancy ( $\bar{x} = 1.87$ ), During pregnancy, I do not mix drugs from

chemist shops ( $\bar{x} = 1.03$ ). These items are less significant because they are neither up to the grand mean value of 2.37 nor the decision rule of 2.50.

**Research Question 3:** What are the factors that hinder pregnant women from utilizing health information in Anambra State?

**Table 3: Mean Ratings on the Factors That Hinder Pregnant Women from Utilizing Health Information**

	Item Statement	SA	A	D	SD	Total	Mean	Remark
1	Not being aware that such health information exists	403	422	25	21	871	3.38	Agree
2	Health care service delivery is quite expensive	462	306	38	65	871	3.33	Agree
3	Poor attitude of nurses pose a very big barrier	245	388	189	49	871	2.95	Agree
4	Antenatal care is very high in terms of cost	270	492	99	10	871	3.17	Agree
5	Antenatal procedure is quite tasking	192	350	214	115	871	2.71	Agree
6	My phone does not have regular access to the internet	263	337	158	113	871	2.86	Agree
7	I do not listen to radio	178	302	296	95	871	2.64	Agree
8	I do not watch television often	337	258	163	113	871	2.52	Agree
9	I'm always busy and do not have time to consult with health care providers	371	428	63	9	871	3.34	Agree
10	I do not understand the medical language used on health information online	39	262	301	269	871	2.08	Disagree
<b>Grand Mean</b>							<b>2.89</b>	<b>Agree</b>

**Note;** 2.50=Agree, <2.50=Disagree

SA=Strongly Agree, A=Agree, D=Disagree, SD=Strongly Disagree

Table 3 shows that at a grand mean of 2.89, pregnant women do not utilize health information because: they are not aware that such health information exists ( $\bar{x} = 3.38$ ), health care service delivery is quite expensive ( $\bar{x} = 3.33$ ), poor attitude of nurses pose a very big barrier ( $\bar{x} = 2.95$ ), antenatal care is very high in terms of cost ( $\bar{x} = 3.17$ ), they have no regular access to the Internet ( $\bar{x} = 3.13$ ), they do not watch television often ( $\bar{x} = 3.99$ ) and always busy, no time to consult with health care providers ( $\bar{x} = 3.34$ ).

At a decision rule of 2.50, they do not utilize health care information and service because: antenatal procedure is quite tasking ( $\bar{x} = 2.71$ ), they do not listen to radio ( $\bar{x} = 2.64$ ). The respondents however do not understand the medical language used on health information online ( $\bar{x} = 2.08$ ). These items were less significant because they are not up to the significant mean value of 2.89.

### Discussion of Findings

The result of research question 1, table 1 indicates that pregnant women are not aware that: irregular antenatal visits help in promoting anemia, sex aids in easier labour and recovery, frequent consumption of food high in sugar and fat can lead to excess weight gain (maternal obesity), excess weight gain in pregnancy is associated with hypertensive disorders and gestational diabetes, alcohol intake during pregnancy increases the chances of fetus to have abnormal facial features, short stature, low body weight, intellectual disabilities, vision or hearing problems, and still birth, frequent child bearing can lead to

complications during pregnancy, self-medication during pregnancy can cause physical or mental deformity on the unborn child, taking of local herbs during pregnancy can lead to miscarriage and can disfigure the unborn child, and taking pills or herbs to lighten up the skin of the baby while in the womb can cause damage to the limbs and internal organs of the fetus. The findings are in line with earlier studies by WHO (2014) which reported that pregnant women have less awareness about their health information needs. It is now clearer that pregnant women have poor awareness of the implications that go with their unhealthy lifestyle, therefore promoting healthy maternal lifestyle through various means is very crucial at this point in order to reduce/eliminate high maternal mortality rate. Supporting this opinion is the findings of Okereke, Aradeon and Obanyo (2013) which discovered that knowledge and awareness about safe motherhood practices could help reduce pregnancy related health risks and promote safer pregnancies and deliveries. The findings contradicts that of Pembe et al.,(2009) which revealed that the probability of a woman of reproductive age having more awareness of safe motherhood practices should increase with age, number of deliveries as well as number of antenatal visits by the woman. This opinion may not be right because age is not a true test of maturity; a pregnant woman may be experiencing her first pregnancy when age is no longer on her side. More so, every pregnancy comes with its own unique style. To be on the safe side, pregnant women should utilize healthcare facilities and services to a high extent irrespective of their age or number of deliveries.

The findings of research question 2, table 2 revealed that pregnant women utilize the following to a low extent: going for family planning after each delivery, seeking preconception care service before getting pregnant, not missing antenatal appointments, avoiding high doses of caffeinated beverages during pregnancy, not taking drugs out of doctor's prescription, not indulging in abortion, avoiding alcohol intake during pregnancy, not taking local herbs nor visit their maternity home for delivery, not abstaining from sex especially at the last trimester of pregnancy, not mixing drugs from chemist shops. And this confirmed the findings of Moore, Alex-Hart and George (2011) that poor utilization of health information and facilities during delivery by pregnant mothers is still a major cause of maternal and childhood morbidity and mortality in Nigeria. The poor utilization may be attributed to challenges or poor awareness that health care service utilization is a key to safe and healthy maternal and infant outcomes. Excellent utilization of healthcare information, facilities and services from pre-conception till the post natal stage can be a gateway to curbing life threatening complications which can occur even in postpartum period.

The result of research question 3, table 3 reveals that pregnant women do not utilize healthcare information, facilities and services because: they are not aware that such health information exists, health care service delivery is quite expensive, poor attitude of nurses pose a very big barrier,

antenatal care is very high in terms of cost, they have no regular access to the Internet, they do not watch television often and always busy, no time to consult with health care providers, antenatal procedure is quite tasking, they do not listen to radio. The finding is in line with that of Fenwick (2015) who reported that pregnant women are faced with some challenges in the quest for information to satisfy their health information needs. The findings also contradicted the studies of Tripp (2014), Waring (2014), Bantan and Abenhaim (2015) which reported that pregnant women use the Internet to search for online health information during pregnancy. This is because many pregnant women, especially those at the rural areas may not afford the luxury of electronic devices for browsing.

## Conclusion

This study was carried out to find the awareness that exist among pregnant women concerning risky health behaviours and the dangers associated with them. The result showed that pregnant women are less aware of their health information needs that promote healthy maternal lifestyle. This implies that if proper sensitization on risky health behaviours before conception, during pregnancy and at the postpartum stage is carried out regularly by healthcare providers and information specialists, childbirth complications and maternal mortality rate would be reduced to the barest minimum.

## Recommendations

1. Healthcare providers and information professionals should utilize different media to increase the level of awareness on risky health behaviours associated with pregnancy.
2. Pregnant women should utilize the available health information provided for them to avoid risky health behaviours.
3. Enough maternity centers and other healthcare services should be made available and affordable for pregnant women.
4. Attention should be paid to the challenges that hinder health information awareness and utilization by pregnant women in order to reduce the number of women and babies dying of pregnancy related complications.

## References

- Anyaoku, E. (2014). Empowering patients for chronic disease self-management through access to health information in Nigeria. Overview of strategies. *Journal of health information*, 2(1&2). Retrieved from <https://www.researchgate.net/pub/281677058>.
- Bantan, N. & Abenhaim, H.A. (2015). Vaginal births after caesarean: What does Google think about it? *Women and Birth*, 28(1), 21-24.
- Blanchard-Rohner, G. & Siegris, C. (2011). Vaccination during pregnancy to protect infants against influenza: Why and why not? *Vaccine*, 29(43), 7542-7550.
- Borg, W.R. & Gall, D.M. (1973). *A first course in factor analysis*. New York. Academic Press.
- Chalak, A. M. & Riahi, A. (2017) Information needs of pregnant women referred to health centres in Behshar city within 2016-2017. *Journal of Community Health Research* 6(3),165-174.
- Chowdary, N. C. (2018). What is the definition of risky behaviour? Retrieved from <https://www.quora.com/what-is-the-definition-of-risky-behaviour>.
- Clouse, K., Pettifor, A., Shearer, K., Maskew, M., Basett, J., Larson, B., Rie, V., Sanne, L., & Fox, P. (2013). Loss of follow-up before and after delivery among women testing HIV-positive during pregnancy in seeking behavior among rural pregnant women in India: Validating the Wilson model in the Indian context. *Yale Journal of Biology and Medicine* 87(3), 251-262.
- Das, A. & Sarker, M. (2014). Pregnancy related health Information Seeking behavior among rural pregnant women in India : Validating the Wilson model in the Indian context. *Yale Journal of Biology and Medicine* 87(3), 251-262.
- Dladla, S. (2000). The rich must share with the poor. *Land and Rural Digest* 53(15), 6-8.
- Dufek, J. S. (2016). Effects of active workstation use on walking mechanics and work efficiency. *Journal of November Physiother* (6) 289.
- Fenwick, J. (2015). Sources, responses and moderators of childbirth fear in



- Australian women: A qualitative investigation. *Midwifery*, 31(1), 239-246.
- Heaman, M. I. (2015). Barriers and facilitators related to use of prenatal care by inner-city women: perceptions of healthcare providers. *BMC Pregnancy and Childbirth*, 15(1): 2-14.
- Heffernan, A.E. (2008). Exercise and pregnancy in primary care. *Nurse Practitioner*, 25(3), 53-56.
- Igberase, G. O., Isah, E. C. & Igbekoyi, O. F. (2009). Awareness and perception of maternal mortality among women in semi-urban community in the Niger Delta of Nigeria. *Annals of African Medicine* 8(4), 261-265.
- Ilo, I. P. & Adeyemi, A. (2010). HIV/AIDS information awareness among market women: A study of Olofumuyin market, Sango-Ota, Ogun state, Nigeria. Retrieved from [www.unllib.uni.edu/LPP/ILO-adeyemi.htm](http://www.unllib.uni.edu/LPP/ILO-adeyemi.htm).
- Jammeh, A., Sundby, J., Vangen, S. (2011) Barriers to emergency obstetric care service in perinatal death in rural Gambia qualitative in-depth interview study. *ISRN Obstet Gynecol*. Retrieved from <https://www.ncbi.nlm.nih.gov/m/pubmed/21766039>.
- Magadi, M., Diamond, I., & Madise, N. (2001). Analysis of factors associated with maternal mortality in Kenyan hospitals. *J Biosoc Sci*. Jul;33(3):375-89. doi:10.1017/s0021932001003753. PMID: 11446400.
- McDonald, S. D. (2014). A qualitative descriptive study of the group prenatal care experience: perceptions of women with low-risk pregnancies and their midwives. *BMC Pregnancy and Childbirth*, 14(1), 334-346.
- Mooko, N. & Aina, L. O. (2007). Information environment of artisans in Botswana. *Libri International Journal of Libraries and Information Studies*, 57(1), 1-10.
- Moore, B. M., Alex-Hart, B. A., & George, I. O. (2011) Utilization of health care services by pregnant mothers during delivery: A community based study in Nigeria. *East African journal of public health*, 8(1), 49-51.
- Okereke, E., Aradeor, S. & Obonyo, B. (2013). Knowledge of safe motherhood among women in rural communities in Northern Nigeria: Implications for maternal mortality reduction. Retrieved from <http://googleweblight.com>.
- Oluwabamide, A. & Jegede, S. (2008). Speaking HIV/AIDS out in Nigeria: The role of indigenous languages. *International journal of language society and culture*, 26, 107-112.
- Pembe, A. B., Urssa, D. P., Anders, C., Gunit, L. Lennarth, N. & Elizabeth, D. (2009). Rural Tanzanian women's awareness of danger sign of obstetric complication. *BMC* <https://googleweblight.com>.
- Renner, A. T. (2011). *Socioeconomic Status and Risky health behaviours: Explaining the health Gradient*. Master's Thesis for Health Economics, Policy and law. Erasmus University Rotterdam, Institute of Health Policy and management.
- Reynolds, H. W. & Tucker, H. (2006). International family planning perspectives. *Adolescents use of*

- maternal and child health services in developing countries* 23,6-16.
- Shieh, C. & Weaver, M. (2011). Comparisons in perceived importance of and needs for maternal gestational weight information between African American and Caucasian pregnant women. *The Journal of Perinatal Education*, 20(2), 100-107.
- Silal, S. P. (2012). Exploring inequalities in access to and use of maternal health services in South Africa. *BMC Health Services Research*, 12(1), 120-132.
- Tripp, N. (2014). An emerging model of maternity care: Smartphone, midwife, doctor? *Women and Birth*, 27(1), 64-67.
- Wang, H., Zhang, W. & Liu, T. (2011). Experience of managing pregnant women with Eisenmenger's syndrome: Maternal and fetal outcome in 13 cases. *Journal of Obstetrics and Gynaecology Research*, 37(1), 64-70.
- Waring, M. E. (2014). Pregnant women's interest in a website or mobile application for healthy gestational weight gain. *Sexual and Reproductive Healthcare*, 5(4), 182-184.
- World Health Organization, African Region (2023). Maternal mortality: The urgency of a systemic and multisectoral approach in mitigating maternal deaths in Africa. Retrieved from <https://aho.afro.who.int/country-profiles/af>.
- World Health Organization (2015). Health definition. Retrieved from <http://www.who.int/health/definition/en>.
- Zeisel, J. (2005). Environment, neuroscience and alzheimer disease. *Alzheimer's care quarterly*.