Content available at: https://www.ipinnovative.com/open-access-journals

IP Indian Journal of Library Science and Information Technology

Journal homepage: https://www.ijlsit.org/

Original Research Article

Information need and resource utilization of pregnant women in University of Calabar teaching hospital

Ama-Abasi Racheal Daniel[1], Egbe Isu Michael[1], Otun Mumeen Omoniyi[1,*]

[1]*Dept. of Library & Information Science, University of Calabar, Cross River State, Nigeria*

ARTICLE INFO

Article history:
Received 07-10-2021
Accepted 28-10-2021
Available online 29-06-2022

Keywords:
Pregnant Women
Information
Information Need
Resource Utilization

ABSTRACT

The primary goal of this study was to look into the relationship between pregnant women's information needs and resource utilization at the University of Calabar Teaching Hospital in Calabar, Nigeria. To achieve the study's goal, four null hypotheses were developed to guide the investigation. A literature review was conducted based on the variables under investigation. The study used a survey research design. For the study, two hundred (200) respondents were chosen as samples. The purposive and accidental sampling techniques were used to make the selection. The instrument used for data collection was the "Information Need and Pregnant Women Resource Utilization Questionnaire (INPWRUQ)." The instrument's reliability was estimated using the test-retest reliability method. The statistical analysis techniques used to test the hypotheses under study were Product Moment Correlation Analysis. To a relative degree of freedom, the hypotheses were tested at the 0.05 level of significance. The analysis revealed that pregnant women's resource utilization is significantly related to their need for health information, nutrition information, delivery information, and breastfeeding information. Based on the findings, it was suggested, among other things, that the government provides libraries and free medical care to encourage women to seek health information.

This is an Open Access (OA) journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

For reprints contact: reprint@ipinnovative.com

1. Introduction

1.1. Background to the study

Pregnancy is a transformative event that involves numerous psychological and physiological changes. It is a time in a woman's life when health-related behaviors are critical, as pregnancy-related decisions can affect both the mother and her unborn fetus. The significant and life-changing implications of this stage in women's lives also place unique demands on the information they need and require Information is a critical resource that is required in almost every aspect of life, but notably in health-related endeavors (Ugboma, 2010). Information is defined as acquired or received knowledge. It is a critical resource for persons seeking information for a variety of reasons, including simple curiosity, self-diagnosis, studying and evaluating health-related treatments (WHO, 2008). According to Aina (2004), information enables decision-making, issue solving, and the decrease of ambiguity, but Corragio (2011) asserts that a lack of information results in the denial of options and opportunities for a better life. Thus, the quality of information received by pregnant women benefits both the mother and the fetus. To have a successful birth in which both mother and child survive, a pregnant woman requires information that enables her to overcome the obstacles inherent in pregnancy. Information requirements are a real scenario in which the term 'information' and 'need' are inextricably linked; information originates and is generated as a result of a need or an interest (Prasad, 2000). Balorinwa (2002) described information needs as

* *Corresponding author*.
E-mail address: otmum6k@gmail.com (Otun Mumeen Omoniyi).

https://doi.org/10.18231/j.ijlsit.2022.005
2582-1555/© 2022 Innovative Publication, All rights reserved.

demands or desires to have the information transferred for use, which causes man to inquire about events in the past, tasks to be completed, sources and services available, and the consequences of not following particular rules and regulations. Information requirements indicate the existence of a knowledge gap that must be filled. Case (2002) defined information needs as "a sense that one's own knowledge is insufficient to accomplish a task." Case defined information need as "a function of extrinsic uncertainty caused by a perceived difference between the individual's existing level of knowledge about significant environmental objects and the desired criterion condition." Pregnant women's knowledge needs cover a range of topics, including maternal health, nutrition, labor and delivery, physical activity, and breastfeeding (Ogunmodede, Ebijuwa, and Oyetola, 2013).[1] Ama-Abasi R. and Undie, M (2021).[2] asserted that Information utilization is for all, whether young or old and age does not significantly influence utilization of information resources.These informational demands can be met by reviewing books, visiting the hospital, meeting midwives and specialist physicians, speaking with neighbors, friends, and family members, and surfing the internet, among other methods. Resources are defined by their utility, scarcity, and the possibility of depletion or consumption. This demonstrates that resources are available and may be used by individuals to accomplish desired goals. The term "resource utilization" refers to the process of making the best use of existing resources in order to accomplish a specific goal. When an end user employs easily available knowledge to accomplish a goal, this is referred to as resource utilization. Additionally, in order for pregnant women live a healthy life and deliver their babies safely, they must utilize resources made available by hospitals, health care delivery organizations, and others to help reduce maternal and child mortality. Around the world, information has been regarded as a critical instrument for decision-making and minimizing uncertainty. Despite the wealth of information available from a number of sources, the research suggests that the maternal mortality rate remains high, particularly in developing countries such as Nigeria. The government and non-governmental organizations have undertaken numerous efforts to reduce maternal mortality. According to Umeora, Sunday-Adeoyeand, and Ugwu (2008),[3] these efforts have had little or no impact in Nigeria due to a lack of awareness about excellent antenatal care services. Despite years of failure to reduce maternal mortality, scientific information about it persisted until 2002, when the World Health Organization (WHO) established 'Focus Antenatal Care,' a goal-oriented antenatal care method (Munjanja, Lindmark & Nystrom, 2006). These interventions include iron or folic supplementation for pregnant and postpartum women, vitamin A supplementation for children and postpartum women, malaria prophylaxis measures such as insecticide-treated nets (ITNs), as well as intermittent preventive treatment (IPTp) and dietary supplementation for pregnant or lactating mothers (UNICEF, 2009). Despite these advances, over 500,000 women die during pregnancy, childbirth, or within a few weeks following delivery, the majority of whom live in impoverished nations (Tsawe, Moto, Netshivhera, Ralesego, Nyathi and Susuman, 2015).[4] These have been attributed in part to the area's pregnant women's low utilization of information resources and services. The rising rate of maternal and infant mortality, despite government initiatives and vaccination programs, inspired researchers to evaluate the information needs and resource usage of pregnant women at the University of Calabar Teaching Hospital in Calabar.[5]

1.2. Statement of the problem

True, pregnancy is a life-changing experience that brings with it a slew of psychological and physical changes. During this time, women desperately need information to ensure a safe and easy delivery of their children. During this time, women seek advice from a variety of healthcare providers such as midwives, traditional birth attendants, and specialist physicians. They also talk to neighbors, friends, and family, as well as search the internet, in order to assess information that may help them avoid some unforeseen circumstances and improve their lives during and after this period. Despite the abundance of information resources from a variety of sources, literature shows that the mortality rate among pregnant women remains high, particularly in developing countries such as Nigeria. If this situation persists, more women will likely die from preventable pregnancy-related causes. They are the driving force behind the study, which will look into the relationship between pregnant women's information needs and resource utilization at the University of Calabar Teaching Hospital in Calabar.[6]

1.3. Research questions

The study should be guided by the following research questions:

1. What is the relationship between pregnant women's health information needs and resource utilization?
2. What is the relationship between pregnant women's nutrition information needs and resource utilization?
3. What is the relationship between pregnant women's delivery information and their resource utilization?
4. To what extent does pregnant women's information need for breast feeding relate to their resource utilization?

1.4. Statement of hypothesis

The study should be guided by the following hypotheses:

1. There is no significant relationship between pregnant women's health information needs and resource utilization.
2. There is no relationship between pregnant women's nutritional information needs and resource utilization.
3. There is no noticeable relationship between pregnant women's delivery information needs and resource utilization.
4. There is no significant relationship between pregnant women's information needs about breastfeeding and their resource utilization.

2. Literature Review

2.1. Health information need and resource utilization

According to Olorunda (2004), women's information needs, including personal, religious, social, domestic, professional, and medical information, play an important role in determining the quality of life they live, as well as their output professionally or socially, at home and in the world at large. According to Mooko's (2005) research on the information needs and information-seeking behavior of pregnant women in three rural villages in Botswana, the majority of women's information needs are health-related. Saleh and Lasisi (2011) investigated the information needs and behavior of rural women in Borno State, Nigeria. According to the findings of this study, the most important health information required is antenatal and postnatal care, immunizations, particularly for the six killer diseases, how to prevent and manage Vascular Virginal Fistula (VVF), and how to safely deliver a pregnancy. Similarly, Momodu (2002) conducted a study on the information needs of Nigerian rural dwellers. He determined that women, in particular, required information on pre and postnatal care, as well as current immunization facilities for their children and themselves. According to Mooko (2005), pregnant women seek pre and postnatal care from medical practitioners (such as village nurses and traditional doctors). They rely on prior experience as well as informal sources such as friends, neighbors, and relatives for what they consider reliable information. According to Wathen and Harris (2006), information is sought from various sources depending on the nature of the information required. According to Snunith (1998), information sources are both formal and informal. According to Musoke (2005), women disseminate health information informally to relatives and friends, and formal sources of information typically carry public information through print and non-print media. Ogunmodede, Adefunke, and Solomon (2013) investigated the health information needs and information sources of pregnant women in Ogbomoso metropolis, Oyo state, Nigeria, and discovered that pregnant women relied on healthcare providers to meet their health information needs. According to Wathen and Harris (2006), health professionals are preferred when medical information is required. In their study, Nwagu and Ajama (2011) discovered that when people need health information, they often turn to informal sources such as friends, family, and relatives. Fredriksen, Harris, and Moland (2016) conducted a qualitative study on how Web-based discussion forums influence maternal health literacy. The findings of 11 interviews with women drawn from three different websites demonstrate the popularity of online forums for supplementing pregnancy information. According to the findings of the study, many of the interviewees valued the online platforms even more than their discussions with health professionals. According to Aaronson, Mural, and Pfoutz (1988), the primary sources of information used by pregnant women were health care providers and books. Health care providers received the most points (1845), followed by books (1608), friends (925), print media (910), family (753), self (598), and audiovisual media (380 points). The study concluded that pregnant women obtained health information through a variety of channels. [7]

In a study of low-income pregnant women, Shieh, McDaniel, and Ke (2009) confirmed that health care providers were the most reliable source of information. Nwagu and Ajama (2011) identified family and friends, local herb hawkers, local drug sellers (hawkers), traditional birth attendance, and traditional healers as the most used information sources in a similar study on women's health information needs and information sources. [8]

The positive relationship between income and healthcare utilization is well documented in Fotso, Ezeh, and Essendi (2009). They discovered a higher likelihood of maternal health care utilization among women in the highest quartiles of the household wealth index, compared to those in the lowest quartile. According to Gabrysch and Campbell (2009), women from low-income families or with limited financial resources may struggle to pay for healthcare. They discovered that women from higher-income households are more likely to be able to afford health care and are more likely to be exposed to relevant maternal and child health information. Furuta and Salway (2006) contend that, while household income may be high, women are more likely to use maternal healthcare when they have personal control over finances; thus, the interaction between household wealth and autonomy results in higher health care utilization (Fotso, Ezeh, and Essendi, 2009). [9–15]

Glenton (2002) discovered that barriers to using information resources include the use of medical terminology by health care professionals or providers that pregnant women may not understand, as well as these women's lack of communication skills. Van Ryn (2002) confirms that when sharing information, health information professionals can exhibit biases based on race, culture, and socioeconomic status. Parker, Ratzan, and Lurie (2003) agree that lower levels of literacy and

comprehension of medical information are a barrier to health care utilization. Gazali; Muktar and Gana (2012), on the other hand, identified low self-esteem and socio-demographic factors as barriers to pregnant women's use of health care resources. [16–20]

2.2. Nutrition information need and resource utilization

Uloma and Adedotun (2013) used the proportional random sampling technique to draw samples from each hospital and a questionnaire instrument for data collection in a study of 1900 pregnant women in selected hospitals in the Ibadan Metropolis. The frequency distribution and percentage counts were used to analyze the data. The study's findings revealed that doctors and nurses were the most accessible and used sources of nutrition information, whereas libraries were the least accessible and used sources of nutrition information. The study attributed the difficulties in information utilization to libraries' lack of funds and time. The study concluded by stating that the availability, accessibility, and utilization of nutrition information would result in a safe delivery, lowering maternal mortality. In their study of nutrition education on pregnancy-specific nutrition knowledge and healthy dietary practice among pregnant women in Addis Abeba, Zelalem, Endeshaw, Ayenew, Shiferaw, and Yirgu (2017) discovered that health professionals were the most common source of nutrition information for pregnant women. Midwives and nurses were identified as the primary source of information for pregnant women in Addis Abeba. In their study, Bianchi et al. (2016) discovered that French pregnant women paid close attention to nutrition-related information obtained from healthcare providers, the social environment, and the media. Zelalem, Endeshaw, Ayenew, Shiferaw, and Yirgu (2017) concluded that nutrition education during pregnancy by health care providers could improve women's knowledge and practice during pregnancy and recommended that emphasis be placed on promoting nutrition education during antenatal care for pregnant women to receive reliable and accurate information from health professionals. According to Sulistyowati (2019), there is little evidence of healthcare professionals providing nutrition information to pregnant women. According to the findings of the study, pregnant women are not receiving enough nutrition information in antenatal care to make informed decisions during their pregnancy. He also identified nutrition counseling and online media as potentially effective tools for pregnant women to promote a healthy diet and supplementation. Sayakhot and Carolan-Olah (2016) discovered that pregnant women primarily use the internet to meet their nutrition information needs. Nyang O. and Otun M. O (2021) [21–29] cited Oyewusi and Oyeboade (2009) who gave the following data on how users got aware of information resources: 137(34.9%) personal search, 83(21.1%) reference services 51 (13%) library use instruction while the following indicated utilization – 82.9% for academic pursuits, 7.9% for research, 1.8% to socialize and 7.4% for sleep. Bookari, Yeatman, and Willaimson (2017) used individual semi-structured telephone interviews with 17 pregnant (across all trimesters) and 9 postpartum women in five Australian states to conduct a study on Australian pregnant women. Inductive thematic analysis was used to transcribe and analyze the data. According to the study's findings, women value nutrition information and actively seeks it, as well as passively receive it, primarily from health care providers, the media, and their social networks. According to the study, health care providers were more reliable, but they had limited time and used different approaches.

2.3. Delivery information need and resource utilization

Ogunmodede, Ebijuwa, and Oyetola (2013) investigated pregnant women's health information requirements and sources in Ogbomoso city, Oyo state, Nigeria. The study discovered that pregnant women have a variety of information demands, including knowledge about pregnancy, information about birth, and information about breastfeeding. The study concluded that, despite the enormous information needs of pregnant women in Ogbomoso metropolis, the sources of information used did not support the respondents' educational status, as a greater percentage of respondents overlooked the professionalism of nurses as a good source of information, and that the level of patronage of maternity health centers, local chemists, and Davies and Bath (2002) observed that pregnant women rely on healthcare workers for information about delivery. This was because these sources were widely regarded as trustworthy and thought to deliver pertinent and reliable information. According to Ruppel and Rains (2012), the majority of pregnant women rely on health care providers for delivery information because they regard healthcare workers as authoritative sources. Ruppel and Rains (2012) discovered that the primary attribute of information sources is their ability to give access to medical expertise, which requires the possession of medical skills. Das and Sarkar (2014) noticed that pregnant women in rural India rely largely on knowledge and misunderstandings about pregnancy gathered from elderly women, acquaintances, mothers-in-law, and husbands due to a lack of access to health information. Additionally, they noted that doctors and paramedical workers were consulted only in the event of difficulties. [30]

According to Owusu-Addo et al. (2017), pregnant teenagers in Ghana's Ejisu-Juaben Municipality rely heavily on traditional sources for birth information, as opposed to official sources such as midwives, nurses, or physicians. Nwagwu and Ajama (2011) discovered that pregnant women preferred delivery information from traditional informal sources such as traditional healers, traditional birth attendants, faith healers, family and friends, drug

hawkers, and home priests, regardless of the availability of professional healthcare workers. They consult these sources because they view them as more trustworthy and authentic. However, academics have expressed varying degrees of approval for the use of informal sources of information. While the use of these sources is deemed necessary in areas with limited access to professional healthcare (Ford and Kaphingst, 2009), other researchers have criticized their use, citing their limited knowledge of human health (Nwagwu and Ajama, 2011) and the possibility that the information provided by these sources may conflict with that obtained from health care workers. Meanwhile, Nwagwu and Ajama (2011) identified distance, high cost, and language barriers as barriers to healthcare workers being used as sources for delivery information, while Das and Sarkar (2014) identified poor quality of care provided in hospitals, long waiting times, fear and embarrassment associated with discussing pregnancy with a physician, and a shortage of healthcare workers. According to Ruppel and Rains (2012), it is critical for pregnant women to seek birth information from professional healthcare workers because they hold medical competence and, as such, are generally a source of authoritative and accurate delivery information. Bredesen (2013) evaluated the women's perceptions and health care utilization throughout pregnancy and labor in a rural village in northern India and discovered that rural women lack access to health care resources. This study established that a lack of educational resources, distance, expense, and transportation, as well as cultural, religious, and familial pressures, all had an effect on women who sought health care. Adedokun and Uthman (2019) discovered that pregnant women with no education and those from low-income households do not use healthcare services during delivery in Northern Nigeria. Additionally, the study discovered that well-educated women and women from affluent families are frequently exposed to critical information on health care utilization, including facility delivery.[31–35]

2.4. Breast feeding information need and resource utilization

Breast care during pregnancy is an important part of preparing for breastfeeding. According to Jiang, Yang, Wen, Hunter, Gengsheng, and Qian (2012), a sizable proportion of parents require information on bottle feeding, breastfeeding routines, and expressing and storing milk. According to Victora, Bahl, Barros, Franca, Horton, Krasevec, Murch, Sankar, Walker, and Rollins (2016) and WHO (2015), expressing and storing milk, breastfeeding routine, and bottle feeding are important topics that pregnant women should be well informed about.

According to Shieh, McDaniel, and Ke (2009), pregnant women obtain breastfeeding information from sources such as health professionals, books/brochures, and family/friends. They identified barriers related to the information's availability through the media, computer access/use, a lack of family/friends, proximity to health centers, and, in turn, transportation. According to Danso (2014), pregnant women's primary source of exclusive breastfeeding information comes from health care professionals when they visit clinics, health centers, and hospitals. He also observed that, in addition to health care professionals, pregnant women learn about exclusive breastfeeding through reading, the media, school, friends, and other relatives. Berkule-Silberman et al. (2010) discovered that family and friends were rated as the most important sources of breastfeeding information by 287 pregnant women of low socioeconomic status, followed by print media and healthcare professionals, with television and the internet ranked lower in comparison.[36–43]

Andy (2015) discovered that maternal socio-demographic characteristics such as age, education, parity, economic status, and employment may influence breastfeeding and resource utilization. Andy also identified other factors that influence resource utilization, such as antenatal attendance, multiple births, type of delivery, previous breastfeeding experience, breastfeeding support, knowledge of individuals' feeding as babies, maternal prenatal feeding intention, and infant birth weight.

Melo (2008) conducted a prospective study on the quality of breastfeeding preparation in antenatal courses and to identify other sources of breastfeeding information at Thomayer's Hospital in Prague. Data collected from questionnaires presented on the Lactation League's web pages from 2005 to 2006 from 351 mothers was statistically analyzed. Mattar (2007) conducted a randomized trial at a tertiary referral center, recruiting 401 eligible low-risk antenatal mothers from clinics at Singapore's National University Hospital. Women in group A received breastfeeding educational materials as well as individual lactation counseling from a lactation counselor; women in group B received only breastfeeding educational materials with no counseling; and women in group C received only routine antenatal care. The author concluded that where breastfeeding practices are suboptimal, simple face-to-face antenatal education and counseling improved breastfeeding practice up to 3 months after delivery. He observed that providing printed or audiovisual educational materials is insufficient, and he recommended that health care workers make every effort to have one face-to-face encounter with expectant mothers to discuss breastfeeding before they deliver.

Ekström and Widström (2006) investigated whether mothers who were attended by specially trained midwives and nurses in breastfeeding counseling perceived better continuity of care and emotional and informative breastfeeding support than mothers who only received routine care. In southwest Sweden, ten municipalities were

randomized to intervention or control municipalities, each with an antenatal center and a children's health center. The intervention included process-oriented breastfeeding counseling training as well as continuity of care at antenatal and child health centers. 540 mothers completed three questionnaires, one at three days, one at three months, and one at nine months postpartum.

3. Research Methodology

For the study, a survey research design was used. This study took place at the University of Calabar Teaching Hospital in Calabar. The population of this study comprised of 1,283 registered pregnant women at the University of Calabar Teaching Hospital, Calabar as obtained from UCTH Information Management Unit, February, (2021). A non-probability sampling technique involving both purposeful and accidental sampling was adopted. Purposive sampling technique was adopted because of the peculiar attributes of the population. The researchers purposefully used only pregnant women undergoing antenatal care at the University of Calabar Teaching Hospital in this study. The researcher used the purposive sampling technique to choose the antenatal days (Tuesday and Friday) for the study, whereas the accidental sampling technique was used because the researcher only gave the instrument to pregnant women who were present at the hospital on the selected days. The questionnaires were administered to one hundred (100) pregnant women from the two days used for data collection.

3.1. Presentation of result

3.1.1. Hypothesis, one

There is no significant relationship between Health information need and resource utilization by pregnant women. The independent variable in this hypothesis is Health information need; while the dependent variable is resource utilization by pregnant women. To test this hypothesis, Health information need and resource utilization by pregnant women was correlated using Pearson Product Moment Correlation Analysis. The result of the analysis is presented in Table 1. The result of the analysis as presented in Table 1 revealed that the calculated r-value of 0. 480 is significant at .05 level of significance with 198 degrees of freedom. With this result, the null hypothesis which stated that there is no significant relationship between Health information need and resource utilization by pregnant women was rejected. This result implied that, Health information need has a significant positive relationship with resource utilization by pregnant women. The positive r implied that the more Health information need, the more the resource utilization by pregnant women tends to be. On the other hand the less Health information need, the less the resource utilization by pregnant women tends to be.

3.1.2. Hypothesis two

There is no significant relationship between Nutrition information need and resource utilization by pregnant women. The independent variable in this hypothesis is Nutrition information need; while the dependent variable is resource utilization by pregnant women. To test this hypothesis, resource utilization by pregnant women was correlated with Nutrition information need using Pearson Product Moment Correlation Analysis. The result of the analysis as presented in Table 2 revealed that the calculated r-value of 0. 255 is significant at .05 level of significance with 198 degrees of freedom. With this result, the null hypothesis was rejected. This result indicated that, the Nutrition information need has a significant positive relationship with resource utilization by pregnant women.

3.1.3. Hypothesis three

There is no significant relationship between Delivery information need and resource utilization by pregnant women. To test this hypothesis, Delivery information needs were correlated with Resource utilization by pregnant women using Pearson Product Moment Correlation Analysis. The result of the analysis is presented in Table 3 revealed that the calculated r-value of 0. 308 is significant at .05 level of significance with 198 degrees of freedom. With this result, the null hypothesis was rejected. This result implied that, Delivery information need has a significant relationship with resource utilization by pregnant women.

3.1.4. Hypothesis four

There is no significant relationship between Breast feeding information needs and resource utilization by pregnant women. To test this hypothesis, Breast feeding information need was correlated with resource utilization by pregnant women using Pearson Product Moment Correlation Analysis. The result of the analysis is presented in Table 4 which revealed that the calculated r-value of 0. 239 is significant at .05 level of significance with 198 degree of freedom. With this result, the null hypothesis was rejected. This result implied that, Breast feeding information needs have a significant positive relationship with resource utilization by pregnant women.

4. Discussion of Findings

This section is devoted to the discussion of the findings of the hypotheses formulated to direct the study. This discussion will be done hypothesis by hypothesis. The result of the first hypothesis revealed that there is a significant positive relationship between health information needs and resource utilization of pregnant women. The finding is in line with the view of Ogunmodede, Adefunke and Solomon (2013), who studied health information needs and information sources of pregnant women in Ogbomoso

Table 1: Pearson product moment correlation analysis of the relationship between health information need and resource utilization by pregnant women (N=200)

Variables	X	SD	r-value	Sig.
Health information need	18.198	2.98		
			0. 480*	.000
Resource utilization by pregnant women	18.74	1.43		

* Significant at .05, DF = 198

Table 2: Pearson product moment correlation analysis of the relationship between nutrition information need and resource utilization by pregnant women (N=200)

Variables	X	SD	r-value	Sig.
Nutrition information needs	17.70	1.64		
			0. 255*	.000
Resource utilization by pregnant women	18.74	1.43		

* Significant at .05, DF = 198

Table 3: Pearson product moment correlation analysis of the relationship betweendelivery information need and resource utilization by pregnant women (N=200)

Variables	X	SD	r-value	Sig.
Delivery information need	18.08	3.16		
			0. 308*	.000
Resource utilization by pregnant women	18.74	1.43		

* Significant at .05, DF = 198

Table 4: Pearson product moment correlation analysis of the relationship betweenbreast feeding information need and resource utilization by pregnant women (N=200)

Variable	X	SD	r-value	Sig.
Breast feeding information need	17.65	1.62		
			0. 239*	.000
Resource utilization by pregnant women	18.74	1.43		

* Significant at .05, DF = 198

metropolis, Oyo state, Nigeria, and revealed that healthcare providers were used by pregnant women to meet their health information need. The study is also in consonance with Noll et al., (2001), who opined that health professionals are preferred in particular when medical information is required. Health information needs Barone, et al., (2002) in their study observed that sometimes informal sources, such as friends, family, and relatives, are the ones people turn to when they need health information.

Shieh, McDaniel and Ke (2009) in a study on low income pregnant women, affirmed that health care providers were the highest source of information. In a similar study on women‘s health information needs and information sources, Nwagu and Ajama (2011) identified family and friends, local herb hawkers, local drug sellers (hawkers), traditional birth attendance and traditional healers as the most utilized information sources.

Education is an opportunity to empower women, and empowered women have greater confidence and capability to make a decision to use modern health services for themselves and for their children. Having some form of education is associated with higher odds of accessing and using maternal healthcare compared to those with no formal education (Chakraborty and Islam, 2003).

The study is also in consonance with Fotso, Ezeh and Essendi (2009), Kamal (2009), Munsur, Atia, Kawahara (2010) and Regassa (2011) who opined that there exists a strong and positive association between maternal education and utilization of maternal health care. In Swaziland, literate women were found to use antenatal care, institutional deliveries, and postnatal care than those with no education, (Tsawe et al., 2015). The positive relationship between income and utilization of healthcare services is well documented in Fotso et al., (2009) and Nuamah et al., (2016). They found higher odds of maternal health care utilization among women in the highest household wealth index quartiles, compared to those in the lowest quartile. Gabrysch and Campbell (2009), argued that women from poor families or with limited financial resources may have difficulties paying for the cost of healthcare. They revealed that women from households with higher economic status have the power to afford health care and have greater exposure to utilizing relevant information related to maternal and child health.

This shows that pregnant women tend to use information resource they perceive to be more reliable and affordable.

4.1. Nutrition information need and pregnant women resource utilization

The result of the second hypothesis revealed that there is a significant positive relationship between health information needs and information seeking behavior of students. The finding of this hypothesis is in line with view of Zelalem, Endeshaw, Ayenew, Shiferaw and Yirgu (2017), who studied nutrition education on pregnancy specific nutrition knowledge and healthy dietary practice among pregnant women in Addis Ababa and found that the common source of pregnant women nutrition information was health professional.

4.2. Delivery information need and resource utilization of pregnant women

The result of the third hypothesis indicated that there is a significant positive relationship between family care information needs and information seeking behavior of students. The finding of this hypothesis is in agreement with the view of Davies and Bath (2002), who observed that pregnant women utilize healthcare workers as sources of delivery information. This was due to the fact that these sources were highly trusted and perceived to provide relevant and accurate information. It is also in consonant with the study of Ruppel and Rains (2012), who reported that the majority of pregnant women utilize healthcare workers as source of delivery information because they found healthcare workers to be authoritative sources of delivery information. It also confirm the study of Ruppel and Rains (2012), who found that the main characteristics of the sources of delivery information is the degree to which the source provides access to medical expertise which involves the possession of medical training and asserts that it is important for pregnant women to utilize delivery information from professional healthcare workers since they possess medical expertise and as such they are generally a source of authoritative and reliable delivery information.

The study also conform with the study of Nwagwu and Ajama (2011), who pointed out factors such as distance, high cost and language differences as the barrier to utilization of health care workers as sources to meet their delivery information need and Das and Sarkar (2014) who identified poor quality of care provided in the hospital, long waiting time, fear and embarrassment to discussing pregnancy with a physician and shortage of time as barriers to utilization of health care workers as sources to meet pregnant women delivery information need.

4.3. Breast feeding information needs and pregnant women resource utilization

The result of the fourth hypothesis showed that career choice information needs has a significant positive relationship with information seeking behavior of students. The finding of this hypothesis is in line with the study of Danso (2014), who opined that pregnant women's main source of exclusive breastfeeding information originated from health care professionals when they visit clinics, health centers and hospitals. He also observed that apart from the health care professionals, pregnant women learnt exclusive breastfeeding from reading, mass media, and through school, friends and other relatives. Petit (2010), observed that pregnant women are aware of and have opportunities to utilize breastfeeding information through electronic sources, oral and print sources. The study also revealed the impact social and cultural relationships, and neighborhoods have on utilization of information on breastfeeding. Moreover, health care workers were found to be one of the most used sources of breastfeeding information due to the fact that most pregnant women attend clinics with their children where information sharing takes place (Petit, 2010).

5. Conclusion and Recommendations

Based on the results and findings of the study, it was concluded that health information need, nutrition information need, delivery information need and breast feeding information need significantly relate to pregnant women's resource utilization in University of Calabar Teaching Hospital.

Based on the findings of the study, the following recommendations have been made:

1. That the government should provide libraries and free medical care to encourage women to seek health information, among others.
2. Nutrition education during pregnancy of health care providers could improve knowledge and practice of women during pregnancy.
3. Resources (both print and non-print) on delivery information need should be made available and affordable to pregnant women at different health centers.

5.1. Suggestions for further studies

In as much as the researcher cannot claim that the results of this finding is very accurate, she therefore suggests that the following studies be conducted:

1. Information need and resource utilization of pregnant women in Nigeria.
2. Pregnant women information need and information seeking behavior.

3. Attitude and information utilization by pregnant women in Cross River State.

6. Source of Funding

None.

7. Conflict of Interest

None.

References

1. Aaronson LS, Mural CM, Pfoutz SK. Seeking Information: Where Do Pregnant Women Go? *Health Educ Q*. 1988;15(3):335–45.
2. Aina LO. Library and Information Science Text for Africa. Ibadan: Third world service Ltd. *South AfrJ Libraries Inf Sci*. 2004;71(1):102–3.
3. Abasi RA, Undie M. Students demographic variables as determinants of utilization of information resources among undergraduates of universities in South-South Nigeria. *J Library Sci Inf Technol*. 2021;6(1):33–9.
4. E A. A Literature Review of the Factors That Influence Breastfeeding: An Application. *Int J Nursing Health Sci*. 2015;2(3):28–36.
5. Andy E. A Literature Review of the Factors That Influence Breastfeeding: An Application of the Health Believe Model. . *Int J Nursing Health Sci*. 2015;2(3):28–36.
6. Balorinwa M. Impact of ritual pollution on lactation and breastfeeding practices in rural West Bengal. *Int Breastfeeding J*. 2002;4(2):4358. doi:10.1186/1746-4358-4-2.
7. Bookari K, Yeatman H, Williamson M. Informing Nutrition Care in the Antenatal Period: Pregnant Women's Experiences and Need for Support. *BioMed Res Int*. 2017;2017:4856527.
8. Bredesen JA. Women's Use of Healthcare Services and Their Perspective on Healthcare Utilization during Pregnancy and Childbirth in a Small Village in Northern India. *Am Int J Contemp Res*. 2013;3(6):1–9.
9. Case DO. Looking for information: A survey of research on information seeking, needs and behaviour; 2012. p. 284–8.
10. Corragio M. Health literacy and the information needs and dilemmas of first-time mothers over 35 years. *J Clin Nurs*. 2011;16(1):1162–72.
11. Chakraborty N, Islam MA, Chowdhury RI, Bari W, Akhter HH. Determinants of the use of maternal health services in rural Bangladesh. *Health Promot Int*. 2003;18(4):327–64. doi:10.1093/heapro/dag414.
12. Das A, Sarkar M. Pregnancy-related Health Information seeking behavior among Rural pregnant women in India: Validating the Wilson Model in the Indian context. *Yale J Biol Med*. 2014;87(3):251–62.
13. Davis RE, Bath KE. An exploration of how Mexican American WIC mothers obtain information about behaviors associated with childhood obesity risk. *J Nutr Educ Behavior*. 2002;49(3):187–95. doi:10.1016/j.jneb.2016.10.002.
14. Danso ML. Perinatal Factors, Motivation, and Attitudes Concerning Pregnancy Affect Dietary Intake. *Top Clin Nutr*. 2014;17(2):71–9.
15. Ekström A, Widström A. Breastfeeding support from partners and grandmothers: perceptions of Swedish women. *Birth*. 2006;30(4):261–6.
16. Ferrari RM, Siega-Riz AM, Evenson KR, Moos MK, Carrier KS. A qualitative study of women's perceptions of provider advice about diet and physical activity during pregnancy. *Patient Educ Counseling*. 2013;91(3):372–7.
17. Fotso JC, Ezeh AC, Essendi H. Maternal health in resource-poor urban settings: how does women's autonomy influence the utilization of obstetric care services? *Reprod Health*. 2009;1742:6–9. doi:10.1186/1742-4755-6-9.
18. Furuta M, Salway S. Women's position within the household as a determinant of maternal health care use in Nepal. *Int Fam Plan Perspect*. 2006;32(1):17–27.
19. Gabrysch S, Campbell OMR. Still too far to walk: literature review of the determinants of delivery service use. *BMC Pregnancy Childbirth*. 2009;9:34.
20. Gazali LM, Muktar KS, Gana A. Experiences with nutrition-related information during antenatal care of pregnant women of different ethnic backgrounds residing in the area of Oslo. vol. 29. Norway," Midwifery; 2012. p. 130–137.
21. Glenton C. Developing patient-centred information for back pain sufferers. *Health Expectations*. 2002;5(4):319–29.
22. Jiang H, Li M, Yang D, Wen LM, Hunter C, Gengsheng H. Awareness, intention and needs regarding breastfeeding: findings from first mothers in Shangai. *China Breastfeeding Med*. 2012;7(6):526–34. doi:10.1089/bfm.2011.0124.
23. Kamal SM. Factors affecting utilization of skilled maternity care services among married adolescents in Bangladesh. *Asian Popul Stud*. 2009;5(2):153–70.
24. Munsur AM, Atia A, Kawahara K. Relationship between educational attainment and maternal health care utilization in Bangladesh: evidence from the 2005 Bangladesh household income and expenditure survey. *Res J Med Sci*. 2010;4(1):33–40.
25. Inyang O, Otun MO. Information On Effective Current Awareness Services Display For Utilization Of Resources In Tertiary Institutions Libraries In Cross River South Metropolis. *Libr Philosophy Pract*. 2021;3:15.
26. Nwagu WE, Ajama M. Women's health information needs and information sources: a study of a rural oil palm business community in South-Western Nigeria. *Ann Libr Inf Stud*. 2011;58(2):270–81.
27. Ogunmodede TA, Ebijuwa AS, Oyetola SO. Health Information Need And Information Sources Of Pregnant Women In Ogbomoso Metropolis, Oyo State, Nigeria Library Philosophy and Practice (e-journal). *Libr Philosophy Pract*. 2013;p. 981.
28. Prassad HN. Information seeking behaviour of polytechnic students: The case of Akanu Ibiam Federal Polytechnic, Unwana Nigeria. *Libr Philosophy Pract*. 2000;p. 319.
29. Parker RM, Ratzan SC, Lurie N. Health literacy: a policy challenge for advancing high-quality health care. *Health Aff (Millwood)*. 2003;22(4):147–53.
30. Regassa N. Antenatal and postnatal care service utilization in southern Ethiopia: a population-based study. *Afr Health Sci*. 2011;11(3):390–7.
31. Saleh P, Lasisi M. Internet use by pregnant women seeking pregnancy-related information: a systematic review. *BMC Pregnancy and Childbirth*. 2011;16:65. doi:10.1186/s12884-016-0856-5.
32. Shieh C, Broome ME, Stump TE. Factors associated with health information-seeking in low income pregnant women. *Women Health*. 2009;50(5):426–42.
33. Shirima R, Medhin G, Greiner T. Information and socio economic factors associated with early breastfeeding practices in rural and urban Morogoro. *Tanzania Acta Pdiatrica J*. 2001;90(8):936–42.
34. Sim TF, Hattingh HL, Sherriff J, Tee LBG. Perspectives and attitudes of breastfeeding women using herbal galactagogues during breastfeeding: a qualitative study. *BMC Complement Altern Med J*. 2014;14(2):1–11.
35. Tsawe M, Moto A, Netshivhera T, Ralesego L, Nyathi C, Susuman AS. Factors influencing the use of maternal healthcare services and childhood immunization in Swaziland. *Int J Equity Health*. 2015;14(1):32–42.
36. Uloma DO, Adedotun AA. Information Seeking behavior of Pregnant women in selected hospital in Ibadan metropolis. *J Inf Knowledge Manag*. 2013;4(1):1–16.
37. Unicef. The State of the World's Children 2009. Maternal and newborn health. *Child Aust*. 2009;p. 1–168. Available from: https://www.unicef.org/reports/state-worlds-children-2009.
38. Van Ryn M. Research on the provider contribution to race/ethnicity disparities in medical care. *Med Care*. 2002;40(1):140–51.
39. Victora CG, Bahl R, Barros AJD, Franca GVA, Horton S, Krasevec J, et al. Breastfeeding in the 21stcentury: epidemiology, mechanisms, and lifelong effect. *Lancet*. 2016;387(10017):475–90. doi:10.1016/S0140-6736(15)01024-7.

40. Wathen B, Harris V. Health information-seeking behaviours, health indicators, and health risks. *J Public Health*. 2006;100(8):1520–5. doi:10.2105/AJPH.2009.180521.
41. Wennberg AL, Lundqvist A, ogberg UH, om HS. Women's experiences of dietary advice and dietary changes during pregnancy. *Midwifery*. 2013;29(9):1027–34. doi:10.1016/j.midw.2012.09.005.
42. World Health Statistics. Part II Global Indicators. World Health Organization; 2015. Available from: https://www.who.int/data/gho/data/themes/topics/topic-details/GHO/world-health-statistics.
43. World Health Organization. WHO Recommended Interventions for Improving Maternal and Newborn Health; 2009. Available from: http://apps.who.int/iris/bitstream/handle/10665/69509/WHO_MPS_07.05_eng.pdf?sequence=1.

Author biography

Ama-Abasi Racheal Daniel, Lecturer II

Egbe Isu Michael, Lecturer II

Otun Mumeen Omoniyi, Assistant Lecturer

Cite this article: Ama-Abasi Racheal Daniel, Egbe Isu Michael, Otun Mumeen Omoniyi. Information need and resource utilization of pregnant women in University of Calabar teaching hospital. *IP Indian J Libr Sci Inf Technol* 2022;7(1):22-31.