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CHALLENGES FACED BY PREGNANT WOMEN IN INFORMATION-SEEKING IN THE TAMALE METROPOLIS

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Abstract

The study explored the stages of pregnancy at which pregnant women seek information from various sources and the challenges pregnant women encounter in seeking information. A Mixed-method approach was used to carry out the study. A questionnaire was used to collect data from 148 pregnant women from three hospitals namely, Tamale Teaching Hospital, Tamale West Hospital, and the Seventh Day Adventist Hospital, Interviews were conducted with three midwives, one from each hospital, and a Gynecologist at the Tamale Teaching Hospital. The findings of the study revealed that the main challenges that were identified include lack of funds, non-use of the internet, and attitudes of some midwives. Most pregnant women will prefer staying in the house due to lack of funds which negatively affects their information behaviour. The research made many recommendations, including providing complete and factual information during prenatal care visits, raising awareness of services that are offered, addressing the digital divide, and encouraging culturally appropriate information dissemination strategies. Longitudinal studies are recommended to further understand the changing nature of information-seeking challenges during pregnancy and their impact on health outcomes.

Keywords: Challenges, Pregnant women, Information-seeking, Health information, and Prenatal care.

Introduction

Information-seeking behavior refers to the actions and strategies individuals employ to search for and acquire information on a particular health topic or issue. Health care-seeking behavior, also known as help-seeking behavior, is a specific type of information-seeking behavior that involves seeking help or advice from a healthcare professional for a health problem (Thompson et al., 2016). The advent of the internet has significantly influenced information-seeking behavior, as individuals now turn to online sources as a primary means of obtaining health information (Akakpo, 2022). Online health information-seeking behavior has been on the rise, with patients seeking more responsibility in making decisions about their health (Akakpo, 2022). This shift can be attributed to the convenience, accessibility, and vast amount of information available on the Internet (Akakpo, 2022).

Several theoretical frameworks have been developed to understand and explain information-seeking behavior. Dervin's model, for example, focuses on the user's perspective and aims to guide theory in this area (Gray, 2016). Other models, such as the comprehensive model of health information seeking, take into account various factors that influence information-seeking behavior, including the perceived trustworthiness of sources and the individual's specific needs (Rains, 2007). Gender and other patient characteristics have been found to influence healthcare-seeking behavior. Studies have shown that gender differences exist in healthcare-seeking behavior, with women generally being more likely to seek care than men (Thompson et al., 2016). Factors such as age, illness prevention, trust in physicians, and the presence of chronic conditions have also been identified as important predictors of healthcare-seeking behavior (Thompson et al., 2016).

It is important to note that health-seeking behavior is different from health behavior. Health-seeking behavior specifically refers to the actions taken by individuals who perceive themselves as having a health condition or being ill to seek an acceptable cure or treatment (Paudel et al., 2022). On the other hand, health behavior encompasses any activities undertaken by individuals, whether healthy or not, to prevent disease or detect it in an asymptomatic stage (Paudel et al., 2022). Understanding information-seeking behavior is crucial for healthcare professionals and researchers. By gaining insights into how individuals seek and process health information, healthcare providers can tailor their communication strategies to effectively reach and engage their target audience. This can lead to improved health literacy, informed decision-making, and better health outcomes.

Information-seeking patterns and challenges faced by pregnant women in Africa are important to understand to improve maternal and child health outcomes. One study conducted in Uganda found that many pregnant women in Mulago Hospital made their first antenatal care visit after 20 weeks of gestation (Kisuule et al., 2013). This is concerning because early antenatal care visits are crucial for the early detection of HIV and STDs, malaria and anemia prophylaxis, health education, and treatment or prevention of complications (Kisuule et al., 2013).

The study also identified the reasons for late attendance at antenatal care. One reason reported by the women was that they did not have any problems with their current pregnancy and therefore saw no reason to come early for antenatal care (Kisuule et al., 2013). This suggests a lack of

awareness about the importance of early attendance at antenatal care. The majority of the study participants did not know the right gestation age at which a pregnant woman should start attending antenatal care (Kisuule et al., 2013). This lack of knowledge may contribute to delayed initiation of antenatal care.

Financial constraints were also identified as a barrier to early attendance at antenatal care. Some women reported that they did not have money for transport to bring them to the hospital (Kisuule et al., 2013). This highlights the need for interventions that address the financial barriers faced by pregnant women in accessing healthcare services. Another study conducted in Tanzania also explored the impact of mistimed and unwanted pregnancies on the timing of antenatal care initiation (Exavery et al., 2013). The study found that women with mistimed or unwanted pregnancies were more likely to delay their first antenatal care visit compared to women with planned pregnancies (Exavery et al., 2013). This suggests that addressing the underlying factors contributing to mistimed and unwanted pregnancies may also help improve the timing of antenatal care initiation.

One study conducted in Northern Ghana assessed the knowledge and preventive practices towards COVID-19 among pregnant women seeking antenatal services (Kumbeni et al., 2021). The findings revealed the need for intensified education on COVID-19 preventive practices at health facilities, particularly in rural communities (Kumbeni et al., 2021). This highlights the importance of providing accurate and up-to-date information to pregnant women to ensure their safety and the well-being of their unborn children.

Another study focused on the challenges faced by women with disabilities in accessing and using maternal healthcare services in Ghana (Ganle et al., 2016). The study highlighted negative perceptions of women with disabilities, physical inaccessibility of health facilities, and healthcare providers' lack of knowledge about the specific needs of disabled women (Ganle et al., 2016). These findings emphasize the need for disability-friendly healthcare facilities, patient-centered training for healthcare providers, and improved accessibility to ensure that women with disabilities can access and utilize maternal healthcare services effectively (Ganle et al., 2016).

In addition to these challenges, there may also be barriers related to the timing of antenatal care initiation. A study conducted in Ho, Ghana found that pregnant women had limited knowledge and participation in exercise and physical activity during pregnancy (Asante et al., 2022). This suggests a need for healthcare providers to strengthen education and promotion of exercise and physical activity among pregnant women to improve their overall health and well-being. Financial constraints may also pose challenges for pregnant women in Ghana. By addressing these challenges, Ghana can improve the information-seeking patterns and overall health outcomes for pregnant women in the country. This study therefore investigated the stages of pregnancy at which pregnant women seek information from various sources and the challenges pregnant women encounter in seeking information.

Wilson's 1999 model of information behavior

Wilson's 1999 model of information behavior provides a comprehensive framework for understanding the information-seeking behavior of pregnant women (Wilson, 1999). The model

emphasizes the dynamic and complex nature of information behavior and highlights the interplay between various factors that influence the information-seeking process.

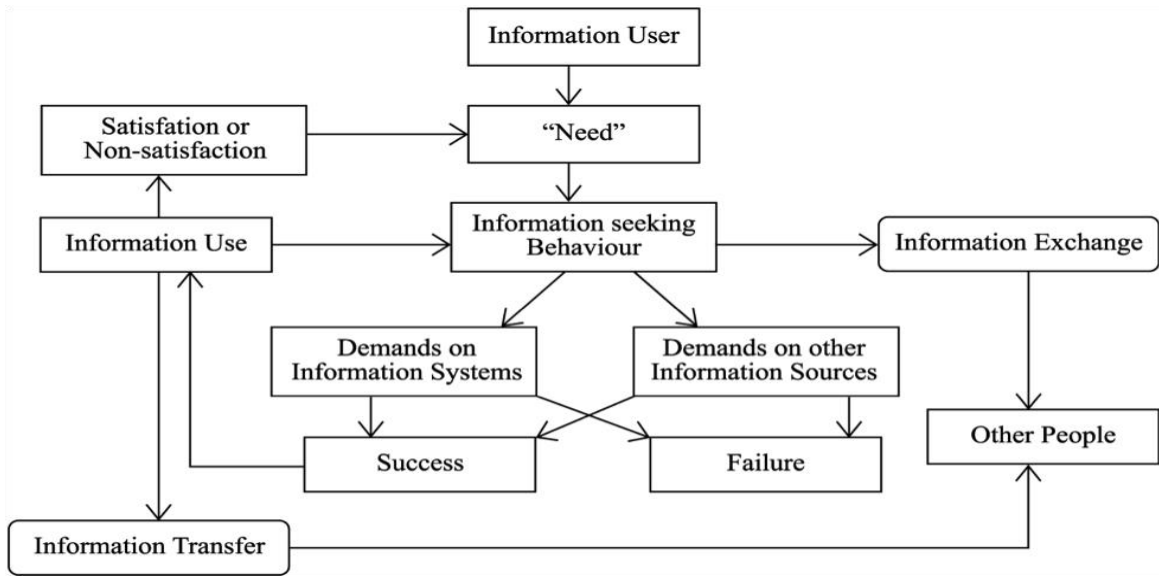
According to Wilson's model, information behavior is influenced by individual characteristics, situational factors, and the information environment (Wilson, 1999). Individual characteristics include personal needs, goals, and preferences, as well as cognitive and affective factors that shape the information-seeking process. Situational factors refer to the specific context in which information-seeking occurs, such as the stage of pregnancy, health status, and available resources. The information environment encompasses the sources, channels, and systems through which pregnant women access information, including healthcare providers, online platforms, social networks, and traditional media (Wilson, 1999).

The model recognizes that pregnant women may seek information from multiple sources and that the credibility, accessibility, and relevance of these sources can influence their information-seeking behavior (Wilson, 1999). It also acknowledges the iterative nature of information behavior, with pregnant women engaging in a continuous cycle of seeking, evaluating, and using information to meet their specific needs. The model emphasizes that information behavior is not a linear process but rather a dynamic and ongoing interaction between the individual and the information environment (Wilson, 1999).

Several studies have applied Wilson's model to explore the information-seeking behavior of pregnant women. For example, Bianchi et al. (2016) conducted a qualitative study on nutrition-related information-seeking behaviors among French pregnant women. They found that pregnant women actively sought information from healthcare professionals, social networks, and the media, but often encountered conflicting and contradictory information, leading to confusion and challenges in adopting healthier eating behaviors.

Szwajcer et al. (2005) investigated nutrition-related information-seeking behaviors during pregnancy and identified different groups of women based on their information-seeking behaviors and the timing of their identification as mothers (Szwajcer et al., 2005). They found that information sources for pregnant women included the Internet and the social environment and that different groups of women exhibited different information-seeking behaviors. Also, Noncungu and Chipps (2020) examined the information-seeking behavior of first-time pregnant women in South Africa and found that barriers to health information access and information-seeking behavior included limited resources, lack of awareness, and cultural beliefs (Noncungu & Chipps, 2020).

Overall, Wilson's model provides a comprehensive framework for understanding the information-seeking behavior of pregnant women. It highlights the complex interplay between individual characteristics, situational factors, and the information environment, and emphasizes the iterative and dynamic nature of information behavior. Applying this model in this study can help researchers and healthcare professionals gain insights into the challenges and needs of pregnant women in accessing and utilizing health-related information.



Wilson's 1999 Information behavior model

Source: https://www.researchgate.net/figure/Wilsons-model-of-information-behaviour_fig1_228784950

Materials and Methods

Ndunguru (2007) defines research design as a gathering of conditions for specifying relationships between variables in a study, operationalizing these variables in a study, controlling the effects of extraneous variables, and a strategy for selecting the sources and types of information to be used in answering research questions. In other words, a research design shows the various steps or ways of operational data collection. It permits a researcher to conclude relationships between variables. Research design links the data to be collected and findings to be drawn to the initial questions of the study. A mixed-method approach was used for this study.

This study was carried out among pregnant women and health professionals in three health facilities in Tamale Metropolis. The hospitals the researcher considered for the study included the Tamale Teaching Hospital, West Hospital, and Seventh Day Adventist Hospital. These hospitals were selected because Tamale Teaching Hospital serves as a referral center and the rest of the hospitals (Seventh Day Adventist Hospital and West Hospital) form part of the major hospitals in the metropolis and they are well equipped with modern facilities. The availability of such modern facilities attracts a lot of pregnant women to these hospitals. The total number of pregnant women who have conceived in the last seven months and have registered with the Teaching hospital as patients as at the time of research is 1122, West Hospital had 352- and Seventh-Day Adventists hospital had 43 which totaled 1517. According to Neuman (2007) when a population is more than a thousand it is advisable to use 10% to arrive at a confidence level that depicts the representation of the population. To ensure equity, 10% of the total population was calculated to arrive at a sample size of 151.7 and this represented all the pregnant women at the selected hospitals. Four health professionals (3 Midwives and a Gynaecologist) from the selected hospitals also formed part of the population. This brought the sample size considered for the study to 155. Pregnancy is the period from conception to birth, and women who have conceived are expected to carry the pregnancy over a period of nine months. Some pregnant women also deliver within the seventh month. These pregnant women sometimes experience pregnancy symptoms such as enlargement of the nose and breast, swollen feet, nausea, severe headaches, vomiting, and preeclampsia or eclampsia. Gynecologists and midwives from the selected hospitals also formed part of this population.

A proportional sampling technique was used to select pregnant women from each hospital after which accidental sampling was used in administering the questionnaire. Purposive sampling was also used in interviewing the Gynecologists and midwives since they are experts in their field of study. The main instruments that were used for data collection were questionnaires and interview guides. The questionnaire was distributed to pregnant women to provide responses and participants who were uneducated responded to the questionnaire with the aid of research assistants who helped with interpretation after which the answers from the respondents were written or documented. Interviews were conducted with midwives and Gynecologists with the view to gathering some professional health issues related to pregnant women and their behavior concerning information.

Data collection is a very important aspect of all research activities because the outcome of every study is based on the kind of data collected. Regarding this study, data will be collected in stages.

Stage 1: Meeting with the participants

The researcher met with the pregnant women at the antenatal clinic on the same day but with different time schedules and generally spoke to them about the study after which they were to ask questions relating to the research. All the questions asked were answered to clear any doubts in the minds of the respondents. Data collection then commenced the following day since the Directors of the various hospitals gave the researcher the approval to begin at any convenient time.

Stage 2: Distribution/administration of questionnaires

Based on the verbal approval to conduct research from the Directors, the questionnaire was administered to the participants of the study. The researcher used a period of five weeks to undertake this exercise. The questionnaire was taken from pregnant women upon completion on the same day. Pregnant women who could read and write requested that their questionnaire be given to them to answer on their own after which the questionnaire was taken back, and some pregnant women also asked the researcher and the assistants to write down the responses to questions asked since their conditions will not allow them to do the reading and writing at the same time. The pregnant women who were illiterates were assisted by the research assistants who read out the questions in their local dialects (Dagbanli) to them after which responses were written. A convenient sampling method was used to distribute the questionnaire to the pregnant women.

Stage 3: Conducting the Interview

A flexible face-to-face interview was conducted using a guide (see Appendix B). The interview was recorded by writing and audio/ tape recording of the responses to the questions that were asked. Gynecologists and midwives were interviewed, and one Gynaecologist and one midwife from the selected hospitals were interviewed accordingly. The midwives who were interviewed proposed a convenient date and time and a less busy scheduled date that suited the researcher. The researcher began the interview by explaining the aims and objectives of the study to each professional that was interviewed and it was conducted at their convenience A telephone interview was used in interviewing the Gynaecologist at the Tamale Teaching Hospital.

Presentation of Results and Findings

Background Information/demographic characteristics of respondents

The demographic information collected included age, education, marital status, and occupation. These have been presented in the table below and under the sub-headings below.

Age

Age is considered an important factor in determining one’s maturity. In Ghana, children are considered adults when they attain the age of eighteen. However, in the northern part of Ghana, the girl child can be given out for marriage at any age which forms part of the Northern traditional practices. Until recently young girls have always been given out to older men for marriage and the government is doing everything possible to fight for the rights of these girls who are considered to be juveniles. Figure 1 represents the age distribution of respondents.

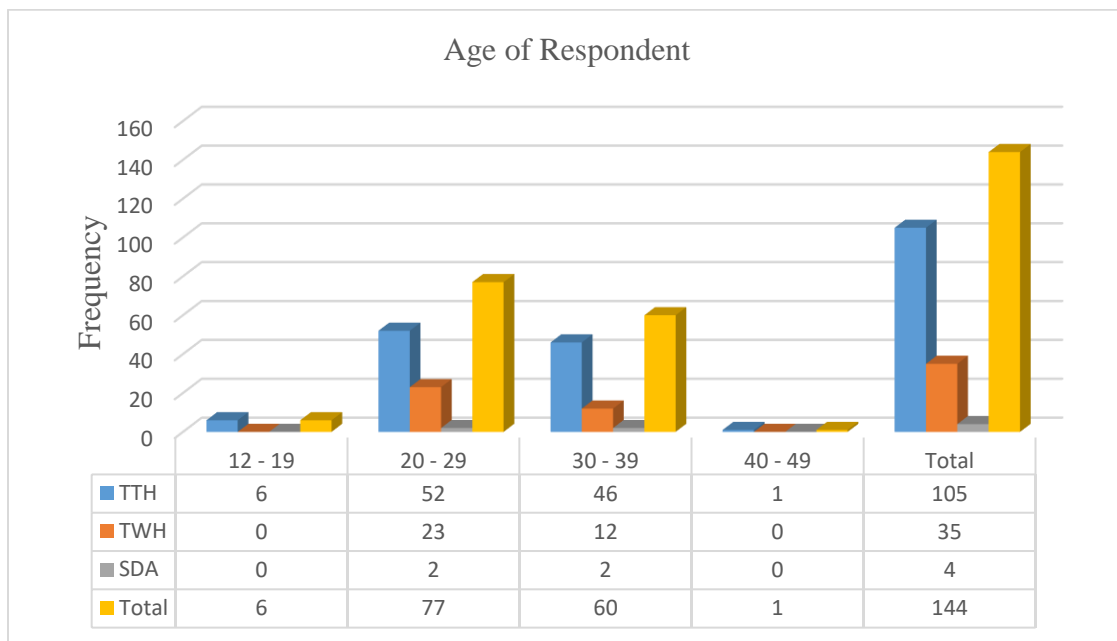


Figure 1: Age distribution of pregnant women in Tamale metropolis

The results presented in figure 1, show the age distribution of respondents across the hospitals. From the figure, 6 (4.17%) of the respondents were in the age group of 12 – 19 years. This is only made up of respondents from the Tamale Teaching Hospital with zero (0) recorded for the Tamale Hospital and Seventh Day Adventist Hospital. The remaining 52(36.11), 46(31.94%), and 1(0.69%) were in the 20 – 29, 30 – 39, and 40 – 49 categories respectively. This puts the majority of the respondents at the hospital in the age 20 – 29 categories.

At the Tamale West Hospital, out of the 35 respondents, the majority of 23(15.97%) respondents were in the 20 - 29 categories. No respondent was in the 12 – 19 and the 40 – 47 categories with 12(8.33) in the 30 -39 group. In all, 35(24.31) pregnant women responded at the TWH. At the SDA hospital, all 4 pregnant women representing 2.78% responded to the questionnaire with 2

(1.39%) each in the 20 - 29 and 30 – 39 age groups. There were no respondents recorded for the other two categories. The overall observation from the sample is that there were relatively younger pregnant women than older women.

Education

Education also contributes largely to the individual’s ability to read and write. It can be formal or informal but whichever form it takes, one must take education seriously. Figure 2 shows the distribution of educational background of respondents.

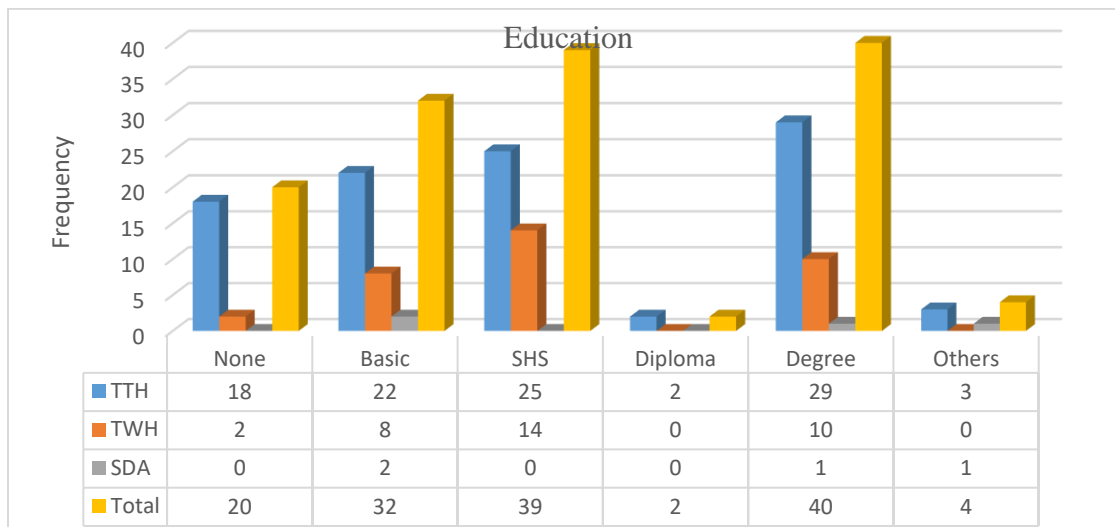


Figure 2: Education of respondents

In Figure 2, the educational levels of the respondents have been presented. It can be seen from the figure that the majority of the respondents had had some level of formal education; thus, from basic school to tertiary level. From the figure, 40 pregnant women representing 29.20% of the respondents had been to a university. Out of the 40 pregnant women who had attended a university, 29 (21.17%) were from the TTH with the least of 1(0.73%) recorded at the SDA Hospital. The remaining ten (10) respondents which represent 7.30% were recorded at the Tamale West Hospital.

Twenty-five representing 18.25% were recorded to have been to SHS at TTH. No respondent was recorded in this category at the SDA hospital with a total of 39(28.47%) reporting to have attended SHS. Two respondents also attended Polytechnic with a Diploma certificate. There were 20(14.60%) who did not have any education at all with 4(2.92) respondents having other forms of education.

Marital Status

Marriage is a union between two people, it goes a long way to unite both families of the two partners involved. The findings, however, revealed that some of the women were not married even though the figure was insignificant compared to those who were married. This segment of pregnant women was those who had dropped out of school and young girls who had no form of education and were engaged in unhealthy relationships. Figure 3 presents the distribution of the marital status of pregnant women sampled for the study in the Tamale metropolis.

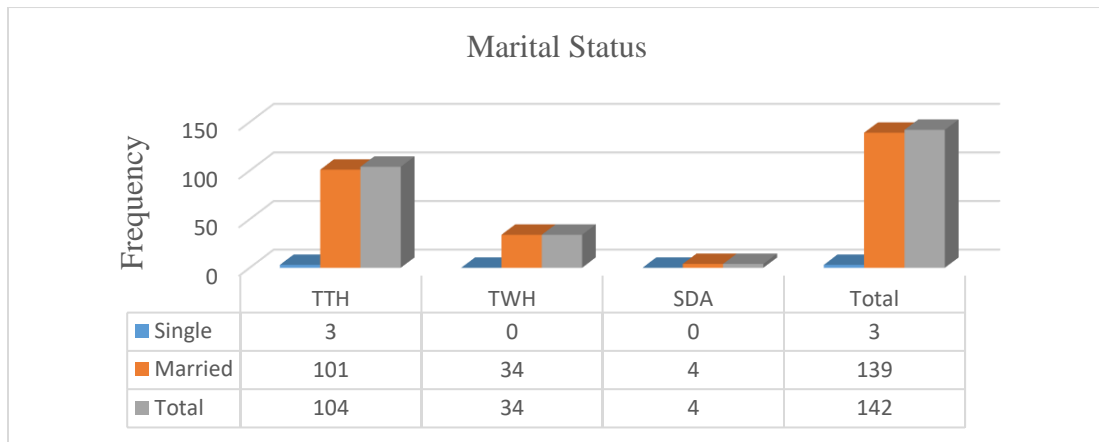


Figure 3: Marital status of respondents

From figure 3, it can be seen that the majority of the respondents (139) representing 97.89% were married with the remaining 3(2.11%) being single. This single group of respondents was recorded only at TTH with zero recorded for the Tamale West Hospital and the Seventh Day Adventist Hospital.

Occupation

The profession or job description of pregnant women was also considered in trying to capture the demographic characteristics of respondents, being employed would also mean being capable of absorbing the cost of some expenditures such as the cost of ultra-scan, medication, transportation, and feeding. When one is gainfully employed, then a healthy lifestyle is better assured. Figure 4 shows the occupation of pregnant women sampled.

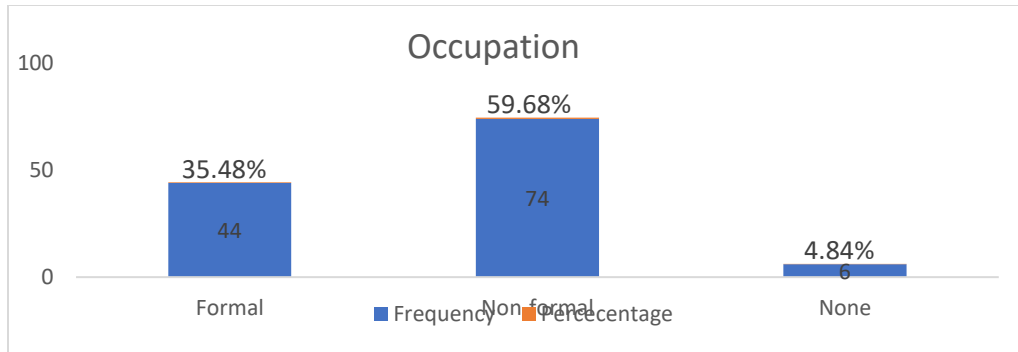


Figure 4: Occupation of respondents

Most of the respondents reported that they were either working in the formal or informal sector with a few of them reportedly not working at all. One hundred and twenty-four (124) pregnant women responded to the question of occupation with the remaining 24 choosing to abstain. Out of this number, 74 (59.68%) were employed in the informal sector which forms the majority as is the case generally in the country. 44 (35.48%) of them were employed in the formal sector with the remaining 6(4.84%) not employed at all. The formal sector had such jobs as teaching, civil and public servants among others. The informal sector comprised trading, dressmaking, farming, and many more. Those who were not employed by either the formal or informal sector consisted mostly of housewives.

Stages of pregnancy at which pregnant women seek information from various sources.

The researchers examined how these pregnant women sought information by way of using the various trimesters against the sources of health information for these pregnant women.

Table 1 presents the stages of pregnancy at which respondents seek information from various sources.

Source of information		Stages of pregnancy			
		First Trim	Second Trim	Third Trim	Pooled
Antenatal lessons	Yes	111	10	1	122
	No	17	3	0	20
Midwives/Nurses	Yes	96	7	1	104
	No	32	6	0	38
Doctor	Yes	101	9	1	111
	No	27	4	0	31
Relatives/friends/Peers	Yes	108	10	1	119
	No	20	3	0	23

TV/Radio programs	Yes	41	8	1	50
	No	87	5	0	92
Internet	Yes	25	2	0	27
	No	103	11	1	115
Visitations by midwives/nurses (Outreach)	Yes	3	0	0	3
	No	125	13	1	139
Newspapers and popular magazines	Yes	4	0	0	4
	No	124	13	1	138

Data collected from the respondents revealed that the majority of the women 111(78.17%) took antenatal lessons in the first trimester of pregnancy thereby seeking information at their early stage of pregnancy, 10(7.04%) percent took the same lessons in the second trimester with less than one percent 1(0.70%) taking lessons in the third trimester of pregnancy.

Out of the 104 respondents who sought information from midwives and/or nurses during pregnancy, about 68% of them did so in the first trimester, about 5% sought information in the second trimester again, with about 1% sought information in the third trimester of pregnancy.

A total of 111 respondents revealed that they sought information from a doctor at the different stages of pregnancy. Out of the number, about 71% of them did so during the first stage whereas some 6% did so in the second stage of pregnancy with less than one percent (0.70) doing so in the third stage. From the analysis so far, one can conclude that the importance of information during the stages of pregnancy is considered very crucial and therefore, respondents had to put in enough effort to seek information early to stay healthy during the period.

In terms of sources that were not mostly used by these respondents during pregnancy, the internet, visitations by midwives and/or nurses, and newspapers and popular magazines were reported. A total of 115 revealed that they did not use the internet either in the first, second, or third trimesters. This number is made up of about 73% in the first trimester, about 8% in the second trimester, and about 1% in the third trimester.

Challenges encountered in seeking information.

Pregnant women encounter many problems due to their condition. Pregnancy comes with its challenges were researched to unearth problems encountered by respondents in their quest for information on various issues during pregnancy and also to meet objective four of the study.

Table 2: Challenges in seeking information.

Challenges	TTH	%	TWH	%	SDA	%	Total	%
Financial	14	17.72	2	2.53	0	0.00	16	20.51
Rude attitudes of midwives	20	25.32	5	6.33	0	0.00	25	32.05
Unreliable network access	5	6.33	1	1.27	0	0.00	6	7.69
Important information in English	5	6.33	1	1.27	0	0.00	6	7.69
Inadequate midwives causing delays in attending to us	10	12.66	3	3.80	0	0.00	12	15.38
Others	11	13.92	2	2.53	0	0.00	13	16.67
Total	65	82.28	14	17.72	0	0.00	79	100.00

The results from the table indicated that the majority constituting 16(20.51%) of the respondents reported that financial constraint was a problem hindering them from seeking information. This was made up of 14(17.72%) at TTH, 2(2.53%) at TWH, and zero (0) at SDA hospital. The most reported challenge was the rude attitudes of midwives and other health workers. A total of 25(32.05%) of the respondents at TTH and TWH reported this as an obstacle in their pursuit of information. This number is made up of 20(25.32%) at TTH and 5(6.33%) at TWH. Other challenges stated were the unreliable network situations, vital information printed in English and/or local language making it a challenge for people who cannot read these languages; and the inadequate number of midwives to attend to them early.

Interview with a midwife at Seventh Day Adventist hospital

Midwife S from SDA hospitals was interviewed for this research since midwives form part of the sample.

Challenges pregnant women face in accessing information were of prime interest to the researchers and when midwife S was asked about the challenges pregnant women face in accessing health information, this was what she had to say:

...Some diseases that are associated with pregnancy are one problem pregnant women face. Anaemia is one, they also suffer from excessive vomiting, UTI preeclampsia, and eclampsia. Anaemia occurs when a pregnant woman lacks or does not have enough blood. During pregnancy, most pregnant women become anemic because the baby at a point begins to extract blood for him or herself. The baby will not say that my mother has not got enough blood so let me leave some for her, the baby will also do everything possible to survive. So, if a pregnant woman does not eat well then it becomes a problem. UTI is also common among pregnant women, sometimes it is a result of a delay in labor. When labor is delayed, the baby's head gets stuck inside the vagina and there's pressure on the anus and the vagina, so a hole is created there you know God didn't create a place like that so after delivery, the place is loose because of the hole. So, if the affected person feels like going to the toilet, by the time she realizes the feces is out likewise urine."

Midwife S was also asked what her outfit was doing to make sure that relevant information was passed to pregnant women without any constraints, and this was the response.

... "My daughter we tried to do something, We wanted to be hosting a program on radio stations, We began by speaking to some people and heads of organizations to help but it got to a point where we realised that it wouldn't work so we decided to hold on small".

So why the delay?

... "Hmm, my daughter because of financial issues"

It was revealed that the Seventh Day Adventist Hospital had no Gynaecologist at the time this study was undertaken, this was confirmed through my interaction with the administrator of the facility. According to Madam E

... "The Gynaecologist was transferred about three months ago and there have been promises of a replacement but up to date no Gynaecologist has been posted to the hospital."

Interview with a midwife at the West Hospital

If you want to outline some challenges these pregnant women go through, what do you have to say?

... *“The lack of a Gynaecologist is a challenge, meanwhile there are so many Gynecologists at the Tamale Teaching Hospital. The pregnant women also find it difficult to approach the midwives here, they feel we are better than them and because some are also not highly educated, they feel intimidated. If you ask me about the diseases that affect them, it is the common ones such as UTI, anemia, preeclampsia”.*

Interview with a midwife at Tamale Teaching Hospital

What are the Challenges faced by pregnant women?

... *“Hyperemesis thus excessive vomiting during pregnancy is often seen during the first trimester and when we realize that it’s too much a problem for the pregnant woman to bear, we give the woman anti-emetics to avoid the vomiting”.*

Pregnancy-induced hypertension can sometimes lead to high blood pressure, and this often occurs after twenty weeks of pregnancy. After (5months) if it’s detected that it is not a result of the pregnancy then the patient is referred to the Gynecology.

Preeclampsia: is a result of high blood pressure and protein in urine coupled with other factors. Gestational diabetes does occur also during pregnancy except for hyperemesis the result may resolve or remain with you forever.

Any project to enhance the flow of information to pregnant women? *Yes, but the project has not commenced yet, it’s called Correlating Neonatal Thyroid Functioning to maternal iodine status. It will involve.*

1. Taking blood samples from newborn (2 weeks) mothers’ urine.

2. Seek to check thyroid hormones and iodine in the urine kind courtesy of professionals. Said midwife T.

Interview with a Gynaecologist at Tamale Teaching Hospital

Gynecology T was asked if he had any idea of the cumbersome nature of seeking information in the hospital by these pregnant women.

... We the Gynaecologist don't deal with the patients directly unless they have a special case that they will be referred to us. For the few that come to me for consultation, I try to find out if they encounter challenges when seeking for health information. Even though they complain about the attitude of some midwives, I try to comfort them and assure them that we will talk to our midwives to behave well towards our patients. Personally, another challenge that they face which I think we have addressed to a large extent is the problem of the language barrier. All the necessary health information that they must be fed with was translated into several languages and I can assure you that even if it remains a problem, it's even insignificant. But that is not to say that the very few pregnant women are not important. We must ensure that everyone is served equally".

Discussion of Findings

Stages of pregnancy at which pregnant women seek information from various sources.

Information at every stage of pregnancy is important to ensure that the general well-being of the pregnant woman is maintained. A total of eight (8) information sources across three (3) trimesters of pregnancy were assessed by pregnant women. The simple case here was to examine at which trimester of pregnancy did respondents used the various information sources. Antenatal lessons, midwives/nurses, doctors, relatives/friends/peers, and TV/Radio programs were the most used sources during the first, second, and third trimesters of pregnancy.

Several studies in agreement with this study have established that pregnant women with different conditions and backgrounds have different ways of seeking health information to address health challenges during pregnancy and they include access to the media, access to healthcare professionals, cost, and women's status in the society.

Pregnant women who are more exposed to the media, for instance, television, radio, Internet, and the like are more likely to attend antenatal care than women who are less exposed (Navaneetham and Dharmalingam, 2002; Tsawe et al, 2015). Kabir and Khan (2013) in their study examined the use of antenatal care among pregnant women in urban slums in Bangladesh. It was proven that the health-related information was better among pregnant women who regularly used antenatal care than women who did not. They further established that information seeking depended on whether

pregnant women accessed antenatal care or not; women who patronized antenatal were considered to have good information-seeking capability while women who did not attend antenatal care did not have broad knowledge on information seeking. Also, midwives were rated quite highly with most of the respondents admitting to using this medium at the first trimester of pregnancy.

In furtherance, this study established that a total of 111 respondents sought information from a doctor at the different stages of pregnancy. Out of the number, 71% of them did so during the first stage whereas 6% did so in the second stage of pregnancy with less than one percent (0.70) doing so in the third stage. In connection with the above, Mpembeni et al, (2007) established that the factors that propel women to seek skilled maternal care are the fear of the unknown and inexperience especially on the part of younger women who have just begun childbearing.

From the above, all three trimesters were important trimesters during which pregnant women sought information from different sources such as antenatal lessons, relatives or friends, mass media, etc.

Challenges encountered in seeking information.

Challenges come in varied forms and with almost all activities, this poses a threat in accessing one's source of information. People search for information from sources that are comparatively easily accessible, trustworthy, relatively cost-effective, and timely, and so on.

Respondents have credited midwives and other health workers for doing their best to give them information. However, they also believe that there are some holdups in discharging their duties at some points. Some of the challenges reported were beyond the job description of a midwife or a nurse. One of such includes the reported financial constraints that make it almost impossible for them to have access to information. This affected such activities as; buying medicines that are unavailable at a hospital's dispensary/pharmacy. Also, to be able to attend antenatal lessons regularly requires that there are funds available to do so, especially for those who come from afar to attend these lessons.

The attitude of health workers especially midwives and nurses has been a cause for worry for most patients in hospitals across the country. Correspondingly, the way maternal health information is conveyed to pregnant women during antenatal visits affects their enthusiasm to ask for supplementary information. It is not surprising that this came up as one of the challenges reported

by pregnant women in seeking information. The first point of call for most pregnant women is the midwife. Therefore, attitudes that are deemed as rude have the tendency of pushing people away from interacting with them especially those who are in need of information. Education has been rife about how midwives and other health workers should treat patients; however, this does not look to be yielding much. Another challenge reported by some groups of respondents is the poor network of service providers in the telecommunication industry. This they said prevented them from getting information regularly and on time.

For some of the respondents especially those who can neither read nor write, having posters printed in English or other local languages is a major challenge in their information-seeking journey. Also, attending antenatal sessions where the lessons were taught in English and Dagbanli was considered an obstacle by some of the respondents in their desire to understand what the pros and cons are during pregnancy. They would have liked that information to be given to them orally and in languages each person understands even though the number of pregnant women with this problem is insignificant, it is seen as an exceptional case because they also have the right to information as their colleagues. Women search for information to make decisions during pregnancy and since these women were disadvantaged, the most suitable means of searching for information was through familiar sources like friends, and family as well as an oral talk from people who understand their dialect which is not always reliable.

The inadequate number of midwives was also, identified as one of the challenges in seeking information by respondents. This has led to pregnant women being attended to in larger groups rather than in smaller groups or individually. The needs of individual pregnant women are different, therefore, putting them all together and teaching them would always not satisfy them. Moreover, because of this inadequate number, these women more often than not have to wait longer hours than is necessary to be attended to when they visit the hospitals.

Furthermore, there were many other reasons reported to be a challenge to them in seeking information. Among them were some people who believed that they always had the same information anytime they visited the hospitals. They believe that the lessons do not teach them anything new. However, the point must be made that these people have had multiple births and therefore would find the lessons repetitive. In addition, some respondents believed that the information given to them is not always satisfactory whereas, others think that the inability of

midwives to give them extra information at home is a challenge to their seeking information behaviour. Aside from the fact that poor quality of care could prevent pregnant women from accessing a health facility, the inability of women to independently decide on their health and its related issues is a major limitation to women's health-seeking. Glenton (2013) asserted that the attitude of some health professionals prevents patients from seeking or accessing health information thereby worsening their problems. Pregnant women are so vulnerable and so emotional that they are easily hurt and therefore, all must endeavour to support them to ensure the safe delivery of their babies. All these were reported at the Tamale Teaching and Tamale West Hospitals respectively with respondents at SDA Hospital reportedly having no challenges in seeking information.

Conclusion and Recommendation

In conclusion, pregnant women encounter a number of challenges while looking for pregnancy-related information. Their access to accurate and trustworthy information, which is essential for their health and well-being, may be hampered by these difficulties. The lack of knowledge about accessible resources and where to acquire reliable information is one of the major problems. Their decision-making and health results may be impacted by this since it might provide confusion and false information. Access to healthcare services and information may be difficult in some areas or groups. This could be brought on by geographical restrictions, a lack of transportation, or a weak healthcare system. As a result, expecting mothers could find it challenging to get the prenatal care, guidance, and support they require.

Furthermore, cultural and societal standards might make it difficult for expectant mothers to get information. Women may be deterred from accessing information or raising their concerns in an open manner by taboos, stigma, and prejudice related to pregnancy and reproductive health. This may make it even more difficult to get access to complete and accurate information.

Furthermore, pregnant women may face significant challenges when trying to get information due to the digital divide and low levels of computer literacy. There is a ton of health information online nowadays because of the digital era. However, not all expectant mothers have access to the internet or the requisite abilities to efficiently use online resources. Lack of access to current, factual information may come from this.

Given the challenges that pregnant women have when trying to get information, it is critical to develop targeted interventions and methods to remove such barriers and guarantee that pregnant women have access to accurate and trustworthy information throughout their pregnancy.

First, during prenatal care visits, healthcare professionals and organizations should place a high priority on providing thorough, fact-based information. This involves addressing typical worries and inquiries that expectant women could have, such as those regarding exercise, diet, and everyday discomforts. Healthcare professionals can equip expectant women with the knowledge and tools they need to make decisions about their health and wellbeing by investing enough time and money in educating and informing them.

The second thing that has to be done is to increase education and awareness about the services that are accessible to pregnant women. Programs for engaging the local community, awareness-raising initiatives, and collaborations with neighborhood groups can all help achieve this. Pregnant women might be better prepared to seek out correct information and assistance if information about trustworthy sources of information is widely disseminated, such as dependable websites, helplines, and support groups.

In today's digital world, it is also crucial to address the digital divide. However, not all pregnant women have the same access to the internet or level of computer competence. The availability of trustworthy internet resources at healthcare institutions, training courses in digital literacy, and the availability of online information in a variety of languages and formats should all be done in an effort to close this gap.

The way in which pregnant women seek for information is greatly influenced by cultural and social standards. Promoting culturally sensitive information distribution strategies is crucial, taking into account the various demands and preferences of various populations. To create specialized educational materials and programs that target certain cultural beliefs and practices, this may entail collaborating closely with community leaders, cultural groups, and healthcare professionals.

The researchers concluded by recommending more longitudinal studies to shed light on the changing nature of information-seeking challenges during the duration of pregnancy. Researchers may study how a cohort of pregnant women's information needs and problems change over time,

as well as the effects on their health outcomes. This can assist in identifying crucial times or transitions where more information and assistance may be necessary.

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