Predisposing Factors and need Factors as Determinants of Health Careseeking behavior of Pregnant Women in Uvwie, Delta, Nigeria

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Abstract

Objective: This study sort to determine the levels of predisposing and need factors of pregnant women towards health-care seeking practice in Uvwie Local Government Area, Delta State.

Methodology: This study adopted a descriptive cross-sectional survey design guided by Anderson and Newman Health-Service Utilization Theory. A 46-item semi-structured questionnaire was used to collect data from four hundred and six pregnant women by multistage and simple random sampling technique, validated at Cronbach alpha 0.826. Data collected were analyzed using IBM SPSS version 23 to compute descriptive and inferential statistics which were statistically tested at a 5% level of significance.

Results: The respondents had a health literacy mean and standard deviation score of (24.6 ± 6.5) ; their perceived health need mean and standard deviation score was (19.455 ± 4.17) and their health-care seeking practice mean and standard deviation score was (11.73 ± 3.34) . It was noted that the respondents had low scores from the determinants of health-care seeking practice among pregnant women; health literacy and perceived health need has an effect on the outcome of adequate utilization of health services during pregnancy. Also, support from family and friends can be a contributing factor.

Conclusion: The health literacy and perceived health needs of the respondents was shown to be inadequate. High health literacy and perceived health need influences health-care seeking practice among pregnant women. Health promotion interventions to include health literacy improvement strategies and its importance in the awareness of first point-of-care from trained health personnel in their health communication and implementation programs.

Keywords: Health literacy, Perceived health need, pregnant women, health-care practice.

Introduction

Comprehensive maternal care is vital in assuring safety, and well-being of pregnant women and newborns ^[1]. Seeking health-care advice as a preventive method is an ideal way of reducing risks associated with pregnancy. Health care seeking behavior involves actions undertaken to seek initial and continued care for perceived health status, with the purpose of finding an appropriate solution.

Maternal mortality accounts for approximately 830 fatalities of women daily as a result of preventable causes related to pregnancy; almost 99% of these deaths occur in developing countries and a higher percentage are from rural areas of these countries ^[2]. It is estimated, that each year throughout the world, approximately 8 million women are suffering pregnancy-related complications ^[2]. Over the last three decades in

Nigeria, studies have shown that Nigeria continues to have one of the highest maternal mortality ratios, with 447-578 deaths per 100,000 live births [3, 4]. About 86% of pregnant women access antenatal care with a skilled health personnel at least once globally, but only three out of five (62%) attend at least four antenatal visits ^[5].

In recent years, health promotion programs premised on the idea that providing knowledge about the ill health, choices, and health care are available. Health literacy plays an important role in reproductive knowledge and may impact behaviors and outcomes. However, there is a difference in people's opinion on where and when to seek health care services ^[6]. In relation to this, the confidence and perceived needs of pregnant women in their personal abilities and capacity of their health literate skills, their values, and beliefs of pregnancy and complications in their pregnant state differ. All these, have an effect on their decision making and health care-seeking behavior.

The utilization of health care by pregnant women involves the use of Antenatal Care (ANC), and an analytical review of world health statistics showed poor ANC coverage of 61%, a three percent increase from 58% in Nigeria of up to a decade ago, and it is highly associated with high maternal mortality rate ^[7].

The rate of visitation to health centers by pregnant women has been reported to be low ^[8]. The record of antenatal clinic visitation has been reported to be 57% ^[9]. This result represents a 10% increase from over a decade yet it is regarded to be a crawling growth as compared to the expected 90% projected increase of the SDG 2030 ^[9, 10]. Women are generally more at risk of morbidity and mortality due to poor health careseeking practices and limited access to health facilities ^[11].

While further research is necessary, healthcare providers should utilize health literacy best practices now to promote high-quality care for patients ^[12]. There has been little focus on health literacy and perception as determinants of healthcare seeking practice among pregnant women. This study seeks to access the role of health literacy and perception in determining healthcare seeking behavior among pregnant women. It further focuses on the cognitive and self-efficacy factors.

The study proposes the following hypotheses:

1. There is a significant relationship between the predisposing factor (health literacy) and the health care-seeking behavior of pregnant women in Uvwie Local Government.

2. There is a significant relationship between the need factors (perceived needs) and the health care-seeking behavior of pregnant women in Uvwie Local Government.

Materials and Methods

Study Design, Population, and Location

This study adopted a descriptive crosssectional design that made use of a quantitative method of data collection from February to March 2020. A 46-item structured questionnaire with reliability of 0.826 was used to collect data from four hundred and fourteen 406 by multistage and simple random sampling of state government hospital, PHCs and traditional birth centres, in Uvwie Local Government, Delta State. Questionnaires were administered to the pregnant women through the guidance the researcher and research assistants; who were properly trained to collect data from participants.

Inclusion criteria

Participants eligible for this study will be consenting pregnant women in Uvwie Local Government Area of Delta State.

Exclusion criteria

Participants excluded from this study will be pregnant women who do not consent to answering the questionnaire.

Instrument for the study

The self-developed semi-structured 46-item questionnaire was used to collect information from respondents: the questionnaire was designed to obtain data and was divided into four sections. SECTION A which is socio-demographic addressed age, gender, ethnicity, marital status, parity and gravity, antenatal clinic registration, number of antenatal visits, occupation and educational levels of the respondents and that of their spouse. Section B assessed health literacy of the respondents under the following domains: ability to access health-related information, understanding health-related information, appraisal of health-related information, ability to apply health-information. Section C collected information on the perceived health needs of the respondents towards use of healthcare services. Section D access the health care-seeking practice of the respondents. Anderson and Newman's Behavioral model was considered as a theoretical framework during development of the questionnaire on health service utilization for this study.

Measures of variables

The Socio-demographic characteristics of participants were determined using 11-items. The first item had 5 options, the second and third had 6 options, the fourth, fifth and sixth items had 4 options, the seventh and eight items had 5 options, the ninth item had 6 options, the tenth and eleventh item had 5 options.

In SECTION B, fifteen questions (15) had options based on Likert scale on a 45-point scale rating. The scale includes; strongly agree (SA), Agree (A), Disagree (D), and Strongly Disagree (SD). The questions were used to measure the health literacy of the respondents. The scale will be coded as follows SA=1, A=2, D=3, SD=4.

In SECTION C, twelve questions (12) had options based on Likert scale on a 36-point scale rating. The scale includes; strongly agree (SA), Agree (A), Disagree (D), and Strongly Disagree (SD). The questions were used measure perceived needs towards the use of healthcare services. The scale will be coded as follows SA=1, A=2, D=3, SD=4.

In SECTION D, eight questions (8) had options based on Likert scale on a 24-point scale rating. The scale includes; never (N), Rarely (R), Sometimes (S), Always (A). The questions were used to measure healthcare-seeking practice of the respondents. The scale will be coded as follows N=1, R=2, S=3, A=4.

Data analysis

obtained filled Data from correctly questionnaires were coded, analyzed and interpreted using descriptive statistical methods and statistical package for Social Science (SPSS) version 23.0. Summaries of descriptive statistics such as frequency, mean, standard deviation were derived and represented using tables. Also, correlation was used to determine the relationships between variables of different sections.

Ethical consideration

Ethical clearance was obtained from the Babcock University Health Research Ethics Committee (BUHREC), The Primary Health Care Board and the Uvwie Local Government Area to conduct the study to protect participant's rights. Informed consent was also given through verbal communication and written consent that was signed. Information provided by respondents was kept confidential and there was no penalty for filling the form or withdrawing at any time.

Results

Socio-demographic characteristics of respondents

Age distribution of respondents was 28-33 years (32.8%) which is the most indicated. Majority 362 (89.2%) of the respondents indicated they were married. About 111 (27.3%) of the respondents indicated to have at least 2 children, while previous pregnancy indicated by the respondents before the current one was computed to be approximately 3 at 149 (36.7%). Almost half of the respondents and respondent's husbands had up to secondary education 202 (49.8%) and while the others attained tertiary

level of education 204 (50.2%). More than half of the respondents are engaged in businesses 240 (59.1%). The predominant ethnic group was Urhobo 129 (31.8%) while some of the respondents 172 (42.4%) were registered with the maternity center in the primary health care centers. A total of 172 (42.4%) had attended least 2 antenatal visits as at the time of the study (Table 1).

Health Literacy (Predisposing Factor) of the Respondents

health The literacy level among the respondents was measured on 45 points rating scale and the mean score for all respondents was 24.6±6.5 valid for 406 respondents (n=406). Majority of the respondents (56.8%) indicated that they had an average level of health literacy, while the rest had a less than average level of health literacy. More than half 233 (57.4%) of the respondents agreed that they know where to get adequate health information on pregnancy and health problems. Most of the respondents 262 (64.5%) showed that they have limited access to health information from several places. Majority of the respondents 329 (81%) indicate that they are able to follow health instructions when given by their doctor. 268 (66%) of the respondents agreed that there are professional things that they do regularly in order to protect themselves from illness based on health information received. 289 (71.2%) of the respondents agree that when they see new information about health, they try to interpret it to know if it will be of good use to them. Most of the respondents 271 (66.7%) indicates that they make sure they spend time to manage and take care of their health and fitness. More than half of the respondents 215 (53%) showed that they are able to read and understand written health information and instructions given to them by their doctor.

Perceived Health Need (Need Factor) of the Respondents

The perceived health needs of respondents in this study was measured on a 36-point rating scale with mean score 19.45 ± 4.17 valid for 406 respondents (n=406). Majority of the respondents (99.8%) showed that the perception of their health need is low. Majority of the respondents 306 (75.4%) indicated that no one in their family have had complications during pregnancy and delivery, so they will not have it. More than half of the respondents 253 (62.3%) disagrees that they are at risk of developing pregnancy problems

that can bring harm to themselves and their baby if they don't make use of the health care services offered in the hospital. Majority of the respondents 322 (79.3%) agree that if they are healthy. they cannot develop pregnancy complications such as excessive bleeding. Most of the respondents 301 (74.2%) knew that complications during pregnancy can kill them and the baby if they do not go to the hospital; about 266 (64.8%) of the respondents acknowledged that they do not have a problem with registering with traditional birth attendants when pregnant. 274 (67.5%) of the respondents disagreed that they will not get better knowledge about their pregnancy if they go to the hospital. More than half of the respondents 250 (61.6%) don't prefer going to traditional birth attendant than the hospital for health services when pregnant. Majority of the respondents 401 (98.8%) believed that going on regular visit to the hospital will be beneficial for the health of both themselves and their baby. Most of the respondents 329 (81.1%) accept that they will be more confident about the health and safe delivery of their baby in the health center.

Health-care Seeking Practice of the Respondents

The health-care seeking practice of respondents in this study was measured on a 24point rating scale with mean score 11.73±3.34 valid for 406 respondents (n=406). Majority of the respondents (71.7%) indicated that they had a poor level of health-care seeking practice, while the rest (28.3%) had a high level of health-care seeking practice. More than half of the respondents 221 (54.4%) indicated that they visit the Traditional Birth Attendants (TBAs) and other traditional means during the period of their pregnancy. Majority of the respondents 326 (80.3%) indicated that they ignore some symptoms during pregnancy because they believe it will resolve by itself. Most of the respondents 245 (60.3%) indicated that they self-medicate whenever they experience minor symptoms or feel ill during pregnancy. Majority of the respondents 346 (85.2%) indicated that they wait for a while (two or three days) to see if symptoms get better whenever they feel ill. Also, 299 (73.6%) of the respondents indicated that they consult a friend or relative for pregnancy related issues. More than half of the respondents 283 (69.7%) indicate that they go on regular antenatal visits during the pregnancy period. 343 (84.5%)

of the respondents indicate they go on regular check-up during their pregnancy period.

The research hypotheses for this study proposed a significant relationship between predisposing factors of respondents and their health care seeking practice, and a significant relationship between the perceived health needs and health care seeking practice of the respondents. When tested at 5% level of significance, the study revealed a significant relationship between the predisposing factors of respondents and their health care seeking practice (r= 0.702; p=0.000). Also, there was a significant relationship between the perceived health needs and health care seeking practice (r= 0.653; p=0.000).

Discussion

The study measured two independent variables; predisposing factors and perceived health need of the respondents; and one dependent variable which is the health-care seeking practice. Result showed that majority of the respondents had average levels of predisposing factors. This could prevent them from seeking appropriate health care while pregnant and after delivery, and can impede their health-care seeking practice. The findings of this study revealed that about 57.4% of the respondents agreed that they know where to get adequate health information on pregnancy and health problems, and 81% of the respondents indicate that they are able to follow health instructions when given by their doctor. This is in contrast to several studies conducted in Turkey and Iran that showed the level of health to be low in pregnant women ^{[13] [14], [15]}. However, the same study showed that pregnant women with excellent health literacy attended a health-care facility earlier in the week of gestation than those with an inadequate health literacy level ^[15]. Though 67.5% of the respondents indicated that they will get better knowledge about their pregnancy if they go to the hospital. It is similar to a report in Thailand which the participants demonstrated health literacy as they believed that giving birth in a hospital is safer than giving birth at home because good equipment and modern medicines are available at the hospital. However, few of the participants accessed the health services as the complained that the distance to the health-care facility which is about 7km prevented them from seeking health-care services^[16].

This study also showed that about 64.8% of the respondents acknowledged that they do not have

a problem with registering with traditional birth attendants when pregnant. This is related to a study conducted in rural Ghana that demonstrated positive perceptions and attitudes toward traditional midwives by the participants ^[17].

Respondents in this study showed varying health literacy and perceived health need to health-care seeking practice during pregnancy. There was a significant relationship between both health literacy and perceived health need; and health-care seeking practice P=0.000, which translates that if health literacy and perceived health need is strong, then the health-care seeking practice among pregnant women can be influenced.

Variables	Respondents in the study N=139		
	Frequency (N)	Percentage (%)	
Age	· · · · · · · · · · · · · · · · · · ·		
16-21 Years	28	6.9	
22-27 years	102	25.1	
28-33 years	133	32.8	
34-39 years	119	29.3	
40-45 years	24	5.9	
Parity	I	•	
0	91	22.4	
1	107	26.4	
2	111	27.3	
3	72	17.7	
4	16	3.9	
Gravity			
0	61	15.0	
1	104	25.6	
2	149	36.7	
3	68	16.7	
4	22	5.4	
Marital Status			
Single	24	5.9	
Married	362	89.2	
Divorced	4	1.0	
Separated	16	3.9	
Educational level		•	
Primary	32	7.9	
Secondary	202	49.8	
Tertiary	156	38.4	
None	16	3.9	
Educational level of spe	ouse		
Primary	10	2.5	
Secondary	169	41.6	
Tertiary	204	50.2	
None	23	5.7	
Occupation	I	I	
Civil servant	53	13.1	
Business	240	59.1	
Housewife	58	14.3	
Civil servant Business	240	59.1	

Table 1. Socio-demographic characteristics of respondents

Student	14	3.4			
Others	41	10.1			
Occupation of spouse					
Civil servant	59	13.1			
Business	222	54.7			
Private sector	63	15.5			
Others	62	15.3			
Ethnicity					
Urhobo	129	31.8			
Igbo	54	13.3			
Itsekiri	45	11.1			
Ijaw	55	13.5			
Isoko	31	7.6			
Others	92	22.7			
Registered at					
P.H.C	172	42.4			
T. B. A	150	36.9			
Faith clinic	39	9.6			
Private hospital	37	9.1			
Others	5	2.0			
Number of antenatal care visits attended					
0	8	2.0			
1	26	2.0			
2	127	31.3			
3	172	42.4			
4	73	18.0			

Table 2. Mean and Standard Deviation

Variables	Respondents in the study N= 405			
	Rating Scale	Mean	SD	
Predisposing factors	45	24.6	6.5	
Need factors	36	19.45	4.2	
Practice	24	11.7	3.34	



Figure 1: Practice of respondents in providing contraceptive services to adolescents

Conclusion

Given that the frequency distribution for one or more question in the independent variable shows a high score, it doesn't necessarily mean that the participant's perceived health need is high, as the mean score for the predictor variable indicates a low perception. This could be as majority of the participants responded positively to questions such as; they being more confident about the health and safe delivery of their baby in the health center, and at the same time responded negatively to questions such as acknowledging that they do not have a problem with registering with a traditional birth attendant when pregnant. This response generates an unclear view towards how much they perceive their health need while pregnant and can really adversely influence their decision of health-care choice. Hence, given that the majority of the respondents had an average level of health literacy, it would be the probable reason why their perceived health need is low and therefore impact their need to access health-care services from the period conception to delivery.

Further studies need to be conducted to ascertain the health literacy of spouse and economic factor in accessing health services by pregnant women. Also, there is a need for indepth research on the role beliefs and health-care workers play in influencing the accessibility of health services by pregnant women. There is a need for health promotion interventions to include health literacy improvement strategies and its importance in the awareness of first pointof-care from trained health personnel in their health communication and implementation programs. In addition, there's need for health professionals to advocate for policy change in the health system, focusing on targeted self-efficacy strategies of individuals in making appropriate healthy decisions.

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References

[1]. Raatikainen K., Heiskanen N., and Heinonen S. 2007. Under-attending free antenatal care is associated with adverse pregnancy outcomes. *BMC Public Health*. 2007; 7:268.

[2]. World Health Organization 2017. Maternal Health. *Retrieved on November 15, 2019 from*

https://www.who.int/maternal-health/en/index.html.

[3]. World Health Organization, United Nations International Children's Emergency Fund, and United Nations Population Fund, 2015. World Bank Group and the United Nations Population Division. Trends in maternal mortality: 1990 to 2015. World Health Organization 2015.

[4]. Kassebaum, N., Bertozzi-Villa, A., Coggeshall, M., Shackelford, K. and Steiner, C., 2013. Global Regional and National Levels and Causes of Maternal Mortality during 1990-2013: a systematic analysis for the Global Burden of Disease Study 2013. *Lancet*, *384*(9947), 980-1004.

[5]. United Nations International Children's Emergency Fund, 2018. Antenatal care. *Retrieved on November 15, 2019 from*

[6]. https://data.unicef.org/topic/maternal-

health/antenatal-care/index.html.

[7]. Egbuniwe, M. C., and Egboka, O. L., 2016. Health-seeking Behavior Amongst Pregnant Women Attending Antenatal Clinic in Primary Health Care Centres in Rural Communities of Nnewi North L.G.A., Anambra state. *Journal of Research in Nursing and Midwifery*, 5(1), 001-010.

[8]. World Health Organisation, 2014. *Retrieved on November 22, 2019, from*

https://www.who.int/mediacentre/factsheets/fs348/en /index.html.

[9]. Adewuyi, E., Auta, A., Khanal, V., Bamidele, O., Akuoko, C., Adefemi, K., and Zhao, Y., 2018. Prevalence and factors associated with underutilization of antenatal care services in Nigeria: A comparative study of rural and urban residences based on the 2013 Nigeria demographic and health survey. *plosone*, 13-21.

https://doi.org/10.1371/journal.pone.0197324.

[10]. Nigeria Demographic and Health Survey, 2018. Abuja, Nigeria, (2018).

[11]. National Population Commission (Nigeria) and Inner-City Fund International: Nigeria Demographic and Health Survey, 2018. Abuja, Nigeria, (2018).

[12]. Ibekwe, P. C., 2010. Healthcare Problems in Developing Countries. Medical Practice and Review, 1(1), 9-11.

[13]. Kilfoyle, K. A., Vitko, M., O'Conor, R., and Bailey, S. C., 2016. Health Literacy and Women's Reproductive Health: A Systematic Review. Journal of Women's Health. 25(12), 1237–1255. https://doi:10.1089/jwh.2016.5810.

[14]. Filiz, E., 2015. The Relationship between Health Literacy Pregnancy and Perception of Health. Selçuk University, Health Science Institutions. [15]. Ghanbari, S., Majlessi, F., Ghaffari, M., and Mahmoodi, M. M., 2012. Evaluation of the Health Literacy of Pregnant Women in Urban Health Centres of Shahid Beheshti Medical University. Daneshvar Medicine, 19, 1-12.

[16]. Kohan, S., Ghasemi, S., and Dodange, M. 2006. Associations between maternal health literacy and pregnancy outcomes. Iranian Journal of Nursing and Midwifery Research, 3(32), 33-42.

[17]. Sharma, S. K., and Vong-Ek, P., 2012. Perceptions and Care Seeking Behavior of Obstetric Complication in Thailand. Kathmandu University Medical Journal, 38(2), 63-70. [18]. Peprah, P., Abalo, E. M., Nyonyo, J., Okwei, R., Agyemang-Duah, W., and Amankwaa, G., 2018. Pregnant Women's Perception and Attitudes toward Modern and Traditional Midwives and the Perceptional Impact on Health Seeking Behaviour and Status in Rural Ghana. International Journal of Africa Nursing Sciences, 8, 66-74. Retrieved *from* https://doi.org/10.1016/j.ijans.2018.03.003.