

INFLUENCE OF AGE AND PARITY ON HEALTH STATUS OF MOTHERS ATTENDING ANTENATAL CLINIC IN UNIVERSITY OF UYO TEACHING HOSPITAL, AKWA IBOM STATE, NIGERIA

Roseline E. Mfon & J. O. Okafor Department of Human Kinetics and Health Education Nnamdi Azikiwe University, Awka, Anambra State E-mail: roselinemfon22@g.mail.com

ABSTRACT: This study was conducted to determine the health status of mothers attending antenatal clinic in University of Uyo Teaching Hospital (UUTH) with respect to age and parity. Two research questions and hypotheses were postulated. Crosssectional research design was adopted. The population consisted of 517 pregnant mothers, who attended antenatal clinic in UUTH. A sample of 258 pregnant mothers was drawn for the study using systematic random sampling technique. "Mothers' Health Status Inventory (MHSI)" was used for data collection. The MHSI was validated by three experts. It was subjected to reliability test using Cronbach Alpha. The result yielded a reliability index of .81. Data from 258 completed copies of MHSI were used for analysis. Frequencies and percentages were used to answer research questions, while Chi-square was used to test hypotheses. Results revealed that 36.9% of mothers below 20 years of age had poor health status. They were affected by excessive vomiting (78.6%), fatigue (71.4%), loss of appetite (64.3%), itching (57.1%), headache (57.1%) and heartburn (57.1%). Similarly, 35.9% of mothers with parity 5^+ had poor health status. They suffered from fatigue (72.5%), vomiting (62.5%), backache (62.5%), oedema (60.0%), headache (60.0%), and cramps (52.5%). There were significant differences in the health status of mothers attending antenatal clinic in UUTH with respect to their ages and parity. These findings call for intervention in order to promote the health status of mothers.

INTRODUCTION

Maternal age and parity are the two most salient factors that exert influence on mothers' health status. In the antenatal clinic, these factors are often used to predict health outcomes of the pregnant mothers. Hutaserani, Jitsuchon and Barker (2002) reported that the mother's age at the time she gave birth and the child's birth order are related to the mother's health status. Considering age, Venkatesh (2005) asserted that women who marry too young (below 20 years) often stand the risk of having complications during pregnancy, labour and delivery. They are particularly at risk of having obstructed labour with its associated complications such as excessive bleeding, vesico vaginal fistulae (VVF) or recto vaginal fistulae (RVF). Even after delivery, teen mothers lack the experience to take care of themselves and

their newly born babies. Hernngs and Polacik (2010) observed that women of lower age group constitute high percentage of antenatal mothers, though they do not adequately attend antenatal clinic. Majority of the teen mothers have lower health status and they are continuously at risk of ongoing health problems which are not usually diagnosed earlier because of their poor clinic attendance (Ondimu, 2010).

The older mothers (35 years and above), according to Sarka, Sam and Leanne (2009), are frequently on higher risk of preterm births and other pregnancy related problems that lead to poor health status than the mothers in their twenties and early thirties. Johnson and Tough (2012) noted that the rate of miscarriage increases steadily with mother's age, so that by the age of 45, they have about one-in-two risk of miscarriages if they conceived naturally with their own eggs rather than donor eggs. Venkatesh (2005) affirmed that pregnancy by older primigravidae can lead to health problems such as miscarriages, diabetes, high blood pressure, low birth weight, preterm birth, neonatal mortality, congenital abnormalities and other complications like excessive bleeding, which may result in death. In the present study, mothers of different age groups, attending antenatal clinic in the University of Uyo Teaching Hospital (UUTH), will be examined to determine their health status.

Regarding parity, Oliver-Williams (2019) observed that parity status has association with the presence of certain health problems among mothers in their post-partum period. Parity is conceptualized as the number of live births or viable pregnancies carried to certain gestational age by one woman. It is the number of children born by a woman, or the number of times a woman has given birth. Levels of parity are categorized under nulliparous (Para o or woman who has not given birth for the first time), primiparous (para 1 or a woman who has given birth to one child), multiparous (para 2-4 or woman who has given birth to more than one child, but not up to five, grand multiparous (para 5-6), and great grand multi-parous (para 7 and above). The nulliparous teenagers (women below 20 years that were pregnant for the first time and had not delivered before) were found to have depressive symptoms, anxiety and at delivery may likely have obstructed labour which may cause the development of recto-vaginal fistulae (RVF), and the resultant faecal incontinence. Moronkola and Okonlawon (2016) observed that parity is a "high risk marker" among the nulliparous and grand multiparous women



(delivered more than 4 to 5 babies) in terms of pregnancy complications. The major health problems related to parity, as reported by Sarka, Sam and Leanne (2009), include backache, bowel problems, and lack of sleep (insomnia), perineal pain, hemorrhoids, excessive or prolonged bleeding, and urinary problem. The primiparas were more likely than multiparas to report perineal pain and sexual problems. Viccars (2017) further reported other health problems that are associated with higher parity such as urinary incontinence as a result of repeated pressure of the gravid uterus on the bladder, and increased risk of vesico vaginal fistula (V. V. F.) due to poor management of labour, especially if delivery was not under skilled-attendants in the health facilities.

Majority of primiparous mothers' usually give birth to low birth weight babies and the incidence get higher among mothers of parity 4 and above (Bai, Wong, Bauman & Mohsin, 2012). World Health Organization (WHO, 2013) reported that a mother who has several pregnancies within a limited number of years enters each successive pregnancy at high risk. In Nigeria, Moronkola and Okonlawon (2016) observed that some women rarely recover from loses of previous pregnancies before starting another one, not minding their poor health and economic status. Nnaemezie (2016) reported that mothers with higher parity are less likely to attend antenatal and postnatal clinics. They feel they can get through the course of pregnancy, labour and delivery based on their past safety experience, having received previous services under skilled attendants. The teen mothers who are experiencing pregnancy for the first time are also less likely to keep clinic appointments with health care providers during pregnancy to evaluate their risks, ensure they are staying healthy and understand what medications they can use (Chambliss & Clark, 2014). These poor habits and behaviours usually predispose the mothers to various health problems which could have been checked at the clinic. Contran, Collins and Kumar (2009) affirm that parity has a statistically significant negative effect on the health status of mothers with inadequate clinic attendance.

Health status is operationally defined as a measure of the extent to which an individual mother is able to function physically, emotionally and socially in her day to day living. It is the sum of all aspects of the physical, mental and social health and their manifestations in daily living as subjectively assessed by the individual mother or through the use of more objective measures such

as physical examination, laboratory tests and self-reported health status questionnaire.

McIntyre and James (2005) opine that the health status of pregnant mothers is determined when they attend antenatal clinic. At the clinic the mother's blood pressure is checked and weight is monitored, and the pregnant mother is screened of any factor that could influence her health and the baby's development such as nutritional deficiencies, infections and potentially hazardous drug therapy. Investigations are done during the first antenatal visit of the pregnant mothers to detect any abnormality (including excessive vomiting, and bleeding), which would other-wise undermine their health. Several surveillance methods can be used in determining the health status of mothers. These may include detailed physical examination of mothers concentrating on general appearance, height, weight, blood pressure and chest examination to detect the functioning of the lungs and heart, breast examination for cracked nipples, engorgement and flow of milk; extremities for oedema and varicose veins, pelvic examination for vaginal discharge, and scars of previous tears and laceration. Other surveillance methods include: [1]. Observation: During which each mother visiting the clinic will be observed using the health status inventory; and (2). Interview Schedule: At each visit, individual mother will be interviewed using the self-reported health status inventory.

However, there is no single "standard" measurement of health status for individual or population group. According to Fry and Keith (2016), the health status of an individual could be measured by a physician who performs an examination for the presence or absence of life-threatening illness, and risk factors for premature death. The individual health status may also be assessed by asking the person to report his/her health perceptions in the domains of interest, such as physical functioning, emotional well-being, pain or discomfort, illness, and overall perception of health. The present study made use of self-reported health status inventory, and complement with observation and interview to assess the health status of mothers attending antenatal clinic in University of Uyo Teaching Hospital (UUTH). UUTH is a tertiary health care institution established by the Federal Government of Nigeria in 1999 and is affiliated to the University Of Uyo College Of Medicine.



According to the rating of the Akwa Ibom State Ministry of Health, Public Health Directorate and Statistics Unit (2019), UUTH has sufficient equipment and specialized medical personnel to take care of the medical and antenatal needs of pregnant women. The hospital has standard laboratories, well-equipped antenatal clinic and sufficient skilled birth attendants. These factors attract many pregnant mothers in Akwa Ibom State and its surrounding to choose to receive antenatal care services in the UUTH. These mothers are of different ages and parity status. The questions being raised are: What is the health status of the mothers attending antenatal clinic in UUTH with respect to their ages and parity? Are there differences in the health status of mothers attending antenatal clinic in the UUTH with respect to age and parity status? Based on these questions, it was hypothesized that there would be no significant difference in the health status of mothers attending antenatal clinic at the UUTH with respect to their ages and parity status. This study, therefore, aimed at assessing the health status of mothers attending antenatal clinic in the University of Uyo Teaching Hospital (UUTH) with respect to age and parity, using specific surveillance methods.

RESEARCH QUESTIONS

- 1. What is the health status of mothers attending antenatal clinic at the UUTH with respect to their ages?
- 2. What is the health status of mothers attending antenatal clinic at the UUTH with respect to their parity status?

HYPOTHESES

- 1. There will be no significant difference in the health status of mothers attending antenatal clinic at the UUTH with respect to their ages.
- 2. There will be no significant difference in the health status of mothers attending antenatal clinic at the UUTH based on their parity levels.

METHODS

This study used cross-sectional research design on the bases that the researchers only collected current data from a cross-section of the study population in respect of the variables of the study, and describe the situation of the subjects as they actually existed, and gives the exact picture of their current status. They did not manipulate the independent (age/parity status) and the dependent (health status) variables of the study. The study was

conducted in University of Uyo Teaching Hospital (UUTH) in Akwa Ibom State, Nigeria. The population of the study consisted of 517 Mothers, who registered for, and attended antenatal clinic in the UUTH between February, 2019 and April, 2019 (Health Records and Statistics Units, 2019). A sample of 258 respondents (pregnant mothers) attending antenatal clinic at the UUTH participated in the study. The sample was drawn using the systematic random sampling technique. The sampling procedure was simple. The researcher obtained a list of the mothers who registered for, and attended antenatal clinic in UUTH within the period under study (February to April, 2019). Then, one in every two mothers on the list was drawn for the study, until the required sample was obtained.

The instrument tagged "Mothers' Health Status Inventory (MHSI)" was developed by the researchers and used for data collection. It consisted of two sections - A and B. Section A collected data on the respondents' age and parity status. Section B consisted of 23 health status inventory items which were used to assess the presence or absence of common health status indicators of mothers during pregnancy. The instrument (MHSI) was given content and face validation by three validators. Two in the Department of Human Kinetics and Health Education, and one from Educational Foundations Nnamdi Azikiwe University, Awka, Anambra State. The MHSI was pre-tested for determination of its reliability on 25 mothers attending antenatal clinic at University of Calabar Teaching Hospital in Cross River State. The respondents had similar characteristics with those in the main study. The researcher conducted observations and interview on the 25 mothers, took their height and weight measurements and the blood sugar level, blood pressure and urine test according to the variables in the MHSI, and recorded. The reliability test analysis was done using Cronbach Alpha. The result gave a reliability coefficient of .81, and the instrument was considered reliable for use in the study.

On methods of data collection, the researchers obtained permission from the Head, UUTH Institutional Health Research and Ethical Committee to conduct a study in the institution. The consents of the respondents were also solicited and obtained before engaging them in the study. The respondents were adequately informed of the purpose of the study and the need to be honest in responding by interview to the items in the research instrument.



The researchers, with three trained assistants, visited the antenatal clinic of UUTH on clinic days (Wednesdays and Fridays), and conducted the surveillance using observation and interview methods on the sampled mothers in the antenatal clinic one after the other. They also took each of the mothers' height and weight measurements and the blood sugar level, blood pressure and urine test according to the variables in the MHS1, and recorded.

For the observation method, the researcher and three trained research assistants observed each mother for the presence of abnormal signs such as varicose veins, oedema and excessive vomiting. For the interview method, each of the respondents was interviewed to determine abnormal symptoms like backache, itching (especially of the vulva), constipation, heart-burn, fatigue, insomnia and headache. This continued till the required numbers of respondents were obtained. The information obtained was used to complete the mother's health status inventory (MHSI) for determination of their health status.

The data generated from completed copies of the instrument were collated and analysed using frequencies and percentages to answer the two research questions. The two null hypotheses were tested using Chi-square statistic at 0.05 level of significance. The decision rule was that any independent variable recording 40% and above for a particular health problem or health problems put together showed poor health status; while an independent variable that had below 40% showed better health status. This meant that the higher the percentage (%), the poorer the health status, and the lower the percentage, the better the health status.

RESULTS

The results were presented and analyzed in Tables 1-4.

Table 1: Percentage Analysis of Health Status Indicators of Mothers Attending Antenatal Clinic at UUTH With Respect to Age

	Health Status	Age Below 20yrs		2I-30YI5		31 ⁺ yrs		Total		
5/N	Indicators	(n=1)	• /	(n=13)		(n	=145)	(n=2)	<i>,</i>	
		t	%	t	%	t	%	t	%	

							of Mothers Akwa Ibom		g Antenatal geria
г.	Vomiting	II	78.6	74	55.6	76	52.4	161	55.1
2.	Inflamed gum	6	42.9	23	17.3	26	17.9	55	18.8
3.	Bad breathe	5	35.7	31	23.3	33	22.8	69	23.6
4	Oedema	7	50	53	39.8	51	35.2	III	38.0
5.	Varicose vein	5	35.7	35	26.3	27	18.6	67	22.9
6.	Fatique	10	71.4	78	58.6	98	67.6	187	64.0
7.	Loss of appetite	9	64.3	25	18.8	21	14.5	55	18.8
8	Excessive weight	Ι	7. I	20	15.0	48	33.1	69	23.6
9.	ltching	8	57.1	50	37.6	50	34.5	108	39.6
10	Backache	4	28.6	53	39.8	70	48.3	127	43.5
II	Insomnia	3	21.4	37	27.8	51	35.2	91	31.2
12	Cramps	6	42.9	58	43.6	84	57.9	148	50.7
13	Constipation	6	42.9	29	21.8	46	31.7	81	27.7
14	Headache	8	57.1	43	32.3	59	40.7	110	37.7
15	Heartburn	8	57.1	65	48.9	81	55.9	154	52.7
16	Perineal pains	4	28.6	32	24.1	33	22.8	69	23.6
17	Excessive bleeding	Ι	7. I	14	10.5	20	13.8	35	11.9
18	Urinary incontinence	२ ४	28.6	31	23.3	31	21.4	66	22.6
19	Anemia	6	42.9	12	9.0	9	6.2	27	9.2
20	Albuminuria	Ι	7.1	13	9.8	19	13.1	33	11.3
21	diabetes	3	21.4	9	6.8	6	4. I	18	6.2
22	Hypertension	2	14.3	10	7.5	17	11.7	29	9.9
23	Waist pain	Ι	7.1	13	9.8	II	7.6	25	8.6
Ove	rall %		36.9		26.4		29.0		28.2

Table I shows that the mothers in all age brackets attending antenatal clinic at the UUTH were affected by fatigue (64.0%) and vomiting (55.1%). The specific age group mostly affected by vomiting (78.6%) and fatigue (71.4%) was the mothers below 20 years of age. The overall mean percentage scores indicate that 36.9% of antenatal mothers below 20 years of age had poor health status. While 29 per cent of mothers in the age bracket of 31 years and above, and 26.4% of them in the age bracket of 21-30 years also had poor health status. The overall mean per cent further indicates that generally 28.2 per cent of the mothers attending antenatal clinic at UUTH had poor health status.

Table 2: Percentage Analysis of Health	Status Indicators of Mothers Attending Antenatal
Clinic at UUTH With Respect to Parity	

		Parity					
5/ N	Health Status Indicators	Para o (n=255 f	•	Para ((n=4 f	5 and abov 0) %	e Total (n=29 f	



	4.7						
Ι.	Vomiting	128	50.8	25	62.5	153	52.4
2.	Inflamed gum	37	15.1	IO	25	47	16.8
3.	Bad breathe	55	21.8	II	27.5	66	22.8
4	Oedema	86	34.1	24	60	IIO	37.7
5.	Varicose vein	47	18.7	13	32.5	60	20.5
6.	Fatique	148	58.7	29	72.5	177	60.6
7.	Loss of appetite	47	18.7	3	7.5	50	17.1
8	Excessive weight	55	21.8	15	37.5	70	23.9
9.	ltching	86	34.1	16	40	102	34.9
10	Backache	116	46.0	25	62.5	141	48.3
II	Insomnia	74	29.4	15	37.5	89	30.5
12	Cramps	119	47.2	21	52.5	140	47.9
13	Constipation	65	25.8	15	37.5	80	27.4
14	Headache	80	31.7	24	60	104	35.6
15	Heartburn	123	48.8	22	55	145	49.7
16	Perineal pains	62	26.6	8	20	70	23.9
17	Excessive bleeding	25	9.9	5	12.5	30	10.3
18	Urinary incontinence	55	21.8	9	22.5	64	21.9
19	Anemia	20	7.9	4	10	24	8.2
20	Albuminuria	25	9.9	5	12.5	30	10.3
21	Diabetes	13	5.2	4	10	17	5.8
22	Hypertension	16	6.3	12	30	28	9.6
23	Waist pain	24	9.5	15	37.5	29	9.9
-	rall %		26.0	-	35.9	-	30.6

Table 2 shows that 35.9 per cent of mothers attending antenatal clinic at the UUTH with parity level of 5 and above had poor health status. They suffered from fatigue (72.5%), vomiting (62.5%), backache (62.5%), oedema (60.0%), headache (60.0%), and cramps (52.5%). More than one-half of those with parity level of 0-4 suffered mostly from fatigue (58.7%) and vomiting (50.8%).

Table 3: Summary of Chi-square Ana	lysis on the Hea	alth Status of Mothers	Attending							
Antenatal Clinic at UUTH with Respect to their Ages $(n=202)$										

				A	ge						
		Below 20yrs		21-30yrs		31 ⁺ yrs		χ^2_{cal} .	df	$\chi^{^{2}}{}_{^{crit}}.$	р
5/ N	Health Status Indicators	fo	fe	fo	fe	fo	fe				
г.	Vomiting	II	10.1	74	68.7	76	82.2				
2.	Inflamed gum	6	3.5	23	23.5	26	28.1				
3.	Bad breathe	5	4.3	31	29.4	33	35.2				
4	Oedema	7	6.9	53	47.4	51	56.7				
5.	Varicose vein	5	4.2	35	28.6	27	34.2				

Roseline et.al |34

								others Atte a Ibom Stat			
6.	Fatique	IO	11.7	78	79.8	98	95.5				
7.	Loss of appetite	9	3.5	25	23.5	21	28.1				
8	Excessive weight	I	4.3	20	29.4	48	35.2				
9.	ltching	8	6.8	50	46.1	50	55.1				
10	Backache	4	7.9	53	54.2	70	64.8				
II	Insomnia	3	5.7	37	38.8	51	46.5				
12	Cramps	6	9.3	58	63.1	84	75.6	122.36	44	60.48	.05
13	Constipation	6	5.1	29	34.6	46	41.4				
14	Headache	8	6.9	43	46.9	59	56.2				
15	Heartburn	8	9.7	65	65.7	81	78.6				
16	Perineal pains	4	4.3	32	29.4	33	35.2				
17	Excessive bleeding	I	2.2	14	14.9	20	17.9				
18	Urinary incontinence	4	4.2	31	28.2	31	33.7				
19	Anemia	6	1.7	12	11.5	9	13.8				
20	Albuminuria	I	2.1	13	14.1	19	16.8				
21	Diabetes	3	I.I	9	7.7	6	9.2				
22	Hypertension	2	1.8	IO	12.4	17	14.8				
23	Waist pain	I	1.6	13	10.7	II	12.8				

Significant at .05 alpha level

Table 3 shows that the calculated Chi-square $(\chi^2_{cal.})$ value of 122.36 was greater than the critical Chi-square value $(\chi^2_{crit.})$ of 60.48 at .05 alpha level and df of 44. The result was significant. This means that mothers of different age brackets attending antenatal clinic at the UUTH suffered various health problems that are distinct from other groups. Hence, they differed in their health status in relation to their ages. This implied that there was significant difference in the health status of mothers attending antenatal clinic at the UUTH with respect to their ages. Consequently, the null hypothesis 1, which states that there would be no significant difference in the health status of mother attending antenatal clinic at UUTH with respect to their ages was rejected.

Antei	Antenatal Clinic at UUIH based on their Parity Levels (n=292)												
	Parity												
	Health statu	s Para	0-4	Para 5 and		d							
S/N	indicators			abo	ve	χ^2_{cal} .	df	χ^2_{crit}	р				
		fo	fe	fo	fe								
І.	Excessive	128	127.9	25	27.5								
	vomiting												
2.	Inflamed gum	37	38.6	10	8.4								
3.	Bad breathe	55	54.1	II	11.9								
4	Oedema	86	90.2	24	19.8								

Table 4: Summary of Chi-square Analysis on the Health Status of Mothers Attending Antenatal Clinic at UUTH based on their Parity Levels (n=292)



5.	Varicose vein	47	49.2	13	10.8				
6.	Fatique	148	145.2	29	31.8				
7.	Loss of appetite	47	41.0	3	8.9				
8	Excessive weight	55	57.4	15	12.6				
9.	ltching	86	83.7	16	18.3				
10	Backache	116	115.7	25	25.3				
II	Insomnia	74	73.0	15	15.9				
12	Cramps	119	114.8	21	25.2	50.16	22	33.92	.05*
13	Constipation	65	65.6	15	14.4				
14	Headache	80	85.3	24	18.7				
15	Heartburn	123	118.9	22	26.1				
16	Perineal pains	62	57.4	8	12.6				
17	Excessive bleeding	25	24.6	5	5.4				
18	Urinary	55	52.5	9	11.5				
	incontinence								
19	Anemia	20	19.7	4	4.3				
20	Albuminuria	25	24.6	5	5.4				
21	Diabetes	13	13.9	4	3.1				
22	Hypertension	16	22.9	12	5.0				
23	Waist pain	24	31.9	15	7.0				
+ ~ ·		1 1	1						

* Significant at .05 alpha level

As shown in Table 4, the calculated chi-square $(\chi^2_{cal.})$ value of 50.16 was greater than the critical Chi-square $(\chi^2_{crit.})$ value of 33.92 at .05 alpha level and df of 22. The result was significant. This means that mothers of different parity levels attending antenatal clinic at the UUTH suffered various health problems that are distinct when compared between parity levels. Hence, they differed in their health status in relation to their parity levels. This implies that there was significant difference in the health status of mothers attending antenatal clinic at the UUTH based on their parity levels. Therefore, the null hypothesis 2, which states that there will be no significant difference in the health status of mothers attending antenatal clinic at UUTH based on their parity levels was rejected

DISCUSSION

The results in Table 1 showed that majority of mothers (36.9%) attending antenatal clinic at UUTH under the age bracket of 20 years and below had poor health status. These mothers were mostly affected by excessive vomiting (78.6%), fatigue (71.4%), loss of appetite (64.3%), itching (57.1%), headache (57.1%) and heartburn (57.1%). This finding was anticipated because Venkatesh (2005) had earlier reported that pregnant women who are too young (under the age of 20 years) often stand the risk of having

complications during pregnancy, labour and delivery. The reason for the finding may likely be that the younger mothers did not adequately attend antenatal clinic, and their health problems were likely not diagnosed earlier for treatment. This situation was observed by Hernngs and Polacik (2010) who reported that Kenya women of lower age group did not adequately attend antenatal clinic, though they constituted higher percentage of antenatal mothers. Another reason for the poor health status of the younger mothers might be that their reproductive apparatus are not mature enough for pregnancy. The intra-abdominal reactions of pregnancy resulting in excessive vomiting, loss of appetite and heartburn may likely be associated with their physiological un-readiness to bear pregnancy. These conditions (excessive vomiting, loss of appetite and heartburn) may certainly have implication on the nutritional health of the affected mothers. They would likely lose weight, and have their nutritional storage depleted, and consequently develop nutritional deficiencies, with resultant effect on their health status.

Further examination of the findings in Table 1 revealed that 29 per cent of mothers in the age bracket of 31^+ years also had poor health status. They suffered fatigue (67.6%), cramps (57.9%), heartburn (55.9%) and vomiting (52.4%). These are serious health conditions. Fatigue, for example, can lessen body tone, decreases efficiency and eventually incapacitates the body. Kravchenko (2019) explained that chronic fatigue reduces vitality, banishes enthusiasm, lowers body resistance to infection, and contributes to nervousness, irritability and insomnia. Barney (2015) added that fatigue reduces efficiency, makes concentration difficult, distorts viewpoints, and makes life seems worthless.

Further analysis with Chi-square statistics (Table 3) confirmed that there was significant difference in the health status of mothers attending antenatal clinic at UUTH with respect to their ages. In this context, significant difference means that mothers in respective age brackets were affected with health problems that were comparatively distinct by groups. This marked the difference in their health status in relation to their ages. The present finding was in harmony with Deveraji and Bheenayyal (2015) who found that the age of mother in pregnancy has huge impact on her health status, especially in setting with poor clinic attendance.



Considering parity and health status of mothers attending antenatal clinic at UUTH, findings in Table 2 show that 35.9 per cent of the mothers with parity level of 5 and above who were attending antenatal clinic at the UUTH had poor health status. The figure was high when compared to the 26.0 per cent of the mothers with poor health status in the parity group of 0-4. This result agrees with Bai, Wong, Baiman and Mohsin (2012) who found that multi-parity level exerts greater influence on the health status of multiparous mothers. Mothers with low parity level did not have such experience.

Findings in Table 2 further revealed that majority of mothers with parity level of 5 and above suffered intense fatigue (72.5%), vomiting (62.5%), backache (62.5%), oedema (60%), headache (60%) and cramps (52.5%). Considering these results, one would agree that the mothers with parity level 5 and above may likely develop severe pregnancy complications. They will also require more intense antenatal screening and care.

The result of Chi-square analysis in Table 4 affirmed that there was significant difference in the health status of mothers attending antenatal clinic at the UUTH based on their parity levels. This result did not occur by chance. It was expected because previous investigation by WHO (2013) had earlier informed that mothers with several pregnancies under limited number of years were at high risk of experiencing poor health conditions, especially when they had poor clinic attendance.

CONCLUSION

The maternal variables assessed in this study (age and parity status) exerted high influence on the health status of mothers below 20 years of age, and those with parity 5 and above. Specifically, 36.9 per cent of mothers below 20 years of age had poor health status. They were mostly affected by excessive vomiting, fatigue, loss of appetite, itching, headache and heartburn. Similarly, 35.9 per cent of mothers with parity 5 and above had poor health status. They suffered from fatigue, vomiting, backache, oedema, headache, and cramps. There were significant differences in the health status of mothers attending antenatal clinic in UUTH with respect to their ages and parity levels.

RECOMMENDATIONS

- Health educators should impart adequate information and knowledge on antenatal care and the importance of regular attendance at antenatal clinic to mothers, particularly the younger ones, using suitable channels and settings.
- 2. The Federal Ministry of Health should supervise and certify the standard of antenatal care given to mothers at UUTH to ensure that the care is adequate enough to improve the health status of the mothers.
- 3. The management of UUTH should commission a research team to develop intervention that will encourage antenatal clinic attendance of mothers below 20 years of age, and those with parity 5 and above.

REFERENCES

- Akwa Ibom State Ministry of Health, Public Health Directorate and Statistics Unit (2019). Assessment report on University of Uyo Teaching Hospital (UUTH), MOH, Uyo. Unpublished
- Bai, A., Wong, A., Bauman, S. & Mohsin, P. (2012). Effectiveness of detection of intrauterine growth retardation by abdominal palpation as screening test in a low risk population: an observational study. European Journal of Obstetrics, Gynecology, and Reproductive Biology, 116(2), 164-9.
- Barney, J. (2015). Health problems and complications associated with pregnancy. In S. A. Kings (Eds.), *Reproductive Health* (212-219). Mumbai: Jebs Publisher.
- Chambliss, L. R. & Clark, S. L. (2014). "Paper gestational age wheels are generally inaccurate" United States National Library of Medicine, National Institute of Health; 186 (2), 274-278.
- Contran, D. R., Collins, M. & Kumar, H. (2009). *Parity Status: Possible Risk Factor or Pre-Eclampsia and Eclampsia.* Philadelphia: Cudbest Printing Press.
- Deveraj, P. P. & Bheenayyal, B. (2015) A study on health status of pregnant women and their health care utilization in rural area of Karnataka – India. International Journal of Recent Trends in Science & Technology, 14(1), 144-149
- Fry, B. and Keith, M. (2016). *Methods for mothers' health research*. South Hadley: Bergin and Garvey Company.
- Health Records and Statistics Unit (2019). The antenatal clinic attendant register for 2019. Unpublished. Uyo: UUTH.



- Hernngs, B. & Polacik, R. (2010). Pregnancy complications: a project of the US Department of health and human services on women's health. Retrieved:///c:/users/*http*/desktop/pregnancy complications on women's health.
- Hutaserani, A., Jitsuchon, K. & Barker, G. (2002). A six year study of the antenatal detection of fetal abnormality in six Scottish health boards. *British Journal of Obstetrics and Gynaecology*, 106(3), 206–12.
- Johnson, R. & Tough, C. (2012). Economic modelling of antenatal screening and ultrasound scanning programmes for identification of fetal abnormalities. BJOG: an International Journal of Obstetrics and Gynaecology, 112(7), 866–874.
- Kravchenko, H. (2019). Public health. Haryana: Marvier publisher.
- McIntyre, G. & James, D. (2005). The clinical usefulness of glucose tolerance testing in gestational diabetes to predict early postpartum diabetes mellitus. Clinical Chemistry and Laboratory Medicine. An International Multi-Disciplinary Journal, Ethiopia. 5(3), 28-39.
- Moronkola, O. A, & Okonlawon, F. A. (2016). *Fundamentals of Public and Community Health Education*. Ibadan: Royal People (Nig.) Ltd
- Nnaemezie, N. O. (2016). Determination of demographic variables associated with common pregnancy related illnesses among pregnant mothers in Anambra State. (Unpublished Master's Thesis,. Nnamdi Azikiwe University, Awka.
- Oliver-Williams, L. (2019). The association between parity and subsequent cardiovascular diseases in women. *Journal of Women's Health*, 28(5), 716-725.
- Ondimu, K. N. (2010). Determinants of adolescent reproductive problems in Kenya: evidence of health services data. *Journal of Obstetrics and Gynecology of Eastern and Central Africa,* 78(3), 54-62.
- Sarka, P, Sam, S. & Leanne, F. (2009). The effect of parity on the association between older maternal age and adverse birth outcomes. *Journal of Obstetrics and Gyneacology*, 32(6), 541-548.
- Venkatesh, U. (2005). Safe motherhood status in the urban slums of Davangere City: Indian Journal of Community Medicine, 30(1), 6-8.
- Viccars, A. (2017). Antenatal care. In Fraser D.M. & Cooper M.A (eds) Myles textbook for Midwives, twentieth edition. London: Elsevier Science, 251-272.
- WHO (2013). Integrated management of pregnancy, childbirth, postpartum and newborn care: A guide for essential practice. Singapore: WHO