Antenatal Care Utilization Factors Among Pregnant Women Attending Antenatal Care Clinic at Kakanju Health Centre III Bushenyi District

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ABSTRACT

The study aimed to determine the factors influencing the utilization of antenatal care (ANC) among pregnant women aged 18-40 attending ANC clinics at Kakanju Health Centre III in Bushenyi District. The research used a descriptive cross-sectional study design, with a sample size of 384 respondents. The results showed that 86.2% of participants had adequate knowledge about ANC utilization, while 13.8% had inadequate knowledge. Women aged 15-20 years, house wives, maids, and shop attendants were also more likely to have inadequate knowledge. Women without education were six times more likely to have inadequate knowledge about ANC utilization. Women in their first pregnancy were three times more likely to have inadequate knowledge. Women with a history of previous stillbirth were three times more likely to have inadequate knowledge. Women with a history of previous cesarean section were two times more likely to have adequate knowledge about ANC utilization. Age, occupation, marital status, and education level were found to be statistically significantly associated with knowledge regarding ANC utilization.
Keywords: ANC utilization, Pregnant women, Cesarean section, Stillbirth, ANC services.

INTRODUCTION

Early entry to antenatal care (ANC) is important for early detection and treatment of adverse pregnancy-related outcomes. The World Health Organization (WHO) recommends that pregnant women in developing countries should seek ANC within the first 4 months of [1]. The benefits of antenatal care (ANC) cannot be over-emphasized especially when we talk of a reduction in well-being as quoted by [2]. They further state that Antenatal care is a key strategy for reducing attributed to and or aggravated by pregnancy and childbirth that has a negative impact on the woman's maternal mortality, but millions of women in developing countries do not receive it. [3]. ANC Model aims to provide pregnant women with respectful, individualized, person-centred care at every contact and to ensure that each contact delivers effective, integrated clinical practices (interventions and tests), provides relevant and timely information, and offers psychosocial and emotional support by practitioners with good clinical and interpersonal skills working in a well-functioning health system. Given evidence that perinatal death increases with only four ANC visits and that an increase in the number of ANC contacts, regardless of the country is associated with an increase in maternal satisfaction, WHO recommends a minimum of Eight (8) contacts: five contacts in the third trimester, one in the first trimester, and two in the second. Globally 30% of women between the age group of 15-40 years do not attend ANC. This low use of services leads to death and disability due to untreated hypertensive disorders or due to mal- or sub-nutrition like iron deficiency anaemia [1]. In sub-Saharan Africa 34% of the women do not attend ANC [1]. Approximately 536,000 maternal deaths occur annually of which over 95% occur in sub-Saharan Africa and Asia. 46%

of the women in South Asia do not attend ANC [1]. In Africa, the highest burden of maternal mortality in the world and sub-Saharan Africa is largely responsible for the dismal maternal death figure for that region, contributing approximately 98% of the maternal deaths for the region. Effects of antenatal care services on birth weight, the importance of model specification and empirical procedure were used in estimating the marginal productivity of health inputs [4]. According to a report by Mexican DHS, socioeconomic and other factors are linked to differentials in maternal mortality. For instance, women with no formal education are 9 times more likely to die than those women who have finished high school and women who live in highly marginalized areas are 3 times more likely to die than those who live in the least marginalized areas maternal and prenatal morbidity and mortality [5]. In Uganda, 265,000 mothers die due to complications of pregnancy and was expected to reduce its maternal mortality ratio to 131 per 100,000 births in 2015 in line with the Millennium Development Goals (MDGs) [6]. However, according to a recent report, maternal mortality has increased to 438 per 100,000 births. Moreover, the expectation that all births would be attended by skilled health personnel by 2015 has similarly been attended by skilled personnel [7].

Globally, approximately 303,000 women and adolescent girls died from pregnancy and childbirth-related complications in 2015 [8], That same year, 2.6 million babies were stillborn. Almost all of the maternal deaths (99%) and child deaths (98%) occurred in low- and middle-income countries. These maternal deaths could have been prevented if the pregnant women or adolescent girls had been able to access quality antenatal care (ANC) [3]. Sixty per cent of the stillbirths (1.46 million) occurred during the antepartum period and mainly due to untreated maternal infection, hypertension, and poor fetal growth [9]. Pregnancy-related complications are a leading cause of death among women in the reproductive age in the developing world. According to the United pregnancy or childbirth and twenty times that number suffer serious injury or disability. Some Nations (2005) more than half a million women in developing countries die each year during of global population, but it accounts for half of all maternal deaths and half the deaths progress has been made in reducing maternal deaths in developing regions, but not in the countries where giving birth was most risky [6]. Africa has just 12% of children under five year of age. Nearly 4.7 million mothers, newborns, and children die each childbirth [10]; [11]. Uganda has it that, 265,000 mothers die due to complications of pregnancy and was expected to reduce its maternal mortality ratio to 131 per 100,000 births in 2015 in line with the Millennium Development Goals (MDGs) [6]. However, according to a recent report, maternal mortality has increased to 438 per 100,000 births. Moreover, the expectation that all births would be attended by skilled health personnel by 2015 has similarly been attended by skilled personnel [7]. Measures of maternal been elusive as only 59% of African Population Studies, Vol. 28, No. 1, April 2014) the births and deaths are critical as they reflect a woman's access to and use of essential health care services during pregnancy and childbirth, their general health and nutritional status, as well as their access to reproductive care services, including family planning [12]. Recent evidence suggests that the focused antenatal care (FANC) model, which was developed in the 1990s, is associated with more perinatal deaths than ANC models that comprise at least eight contacts between the pregnant woman or adolescent girl and the health care provider [13]. A secondary analysis of the World Health Organization's (WHO's) ANC Trial suggests that the increase in perinatal mortality rate is more likely due to an increase in stillbirths [14].

METHODOLOGY

Study design

A Descriptive cross-sectional study design involving both qualitative and qualitative approaches was used.

Area of Study

The study was conducted in the antenatal clinic at Kakanju Health Center 111 which is in the Kakanju sub-county, it is 10 km away from the main road and is located in the north of Bushenyi -Ishaka Municipality, west of Kyabugimbi sub-county and east of Kyamuhunga sub-county in Bushenyi district, west of Mbarara district and around 78km from Mbarara municipality. Bushenyi district is also located around 361km in the south west of Kampala (capital city). Kakanju Health Center III antenatal clinic comprises three midwives and on average about 20 patients visit the antenatal clinic per day.

Study population

The study population comprises mothers and pregnant women in the aged group (18–40 years) seeking antenatal care services at Kakanju Health Centre III in Bushenyi District coming from the underserved regions of western Uganda.

Inclusion criteria

Pregnant mothers in the age group of 18-40 years.
This included pregnant mothers attending ANC at Kakanju HC III.
Pregnant mothers who were available at the time of data collection.
Pregnant mothers who consented and finished answering the questionnaire.

Exclusion criteria

Pregnant mothers not in the age group of 18- 40 years.
Pregnant mothers not in ANC.
Pregnant mothers who declined to participate in the study were not included.
Pregnant mothers who were not available at the time of data collection were not included in the study.
Pregnant mothers who consented but withdrew before they finished answering the questionnaire were not included in the study.

Sample size determination

We shall use the kish Leslie (1965) formula:
$N=Z^2 P(1-P)/E^2$,
Where;
n=Estimated minimum sample size required,
P=proportion of a characteristic in a sample (50%).
Z=1.96(for 95% confidence Interval),
e=Margin of error set at 5%.
$N=1.96^2 \times 0.5(1-0.5)/0.05^2$
N=384

Sampling technique

Scientific sampling methods like simple random sampling were used where every individual in the target population had an equal chance of being part of the sample. A closed and structured questionnaire was used focusing on socio-demographic factors, obstetric factors and women's knowledge affecting utilization of ANC. Interviews (structured and focused) on the target group.

Research instruments

The instruments that were used to collect data were Questionnaires (closed and structured) and interviews (structured and focused). Also In–depth, interviews were conducted with ANC attendees.

Data collection procedure

Data collection was followed by consent from the responsible Kakanju HCI. To the participants in the study, data will be collected using a questionnaire. The interview was conducted among pregnant mothers in Kakanju HC III. The responses of the participants were filled into the questionnaire by the researcher and research assistants. This method was used because it allows for accurate records of responses from both illiterate and literate respondents.

Data management

Questions in the tools were pre-coded to help the researcher get uniform qualified data, and coding frames were met, facilitated by the codes given to

responses in the tool (questionnaire). This made the process of presentation and analysis easy. The research instruments were checked for errors and omissions in order to ensure consistency, completeness and accuracy. This was done in the field before going to respondents. Both electronic and non-electronic data were used to store data with codes so that it could be assessed by unauthorized persons, and help to enhance confidentiality.

Data analysis

Data was analyzed using soft Excel, and SPSS Software, the data was presented using variant tables, and charts, and put in representative figures to ease the process of interpretation of findings.

Quality assurance and quality control

Quality assurance started with the recruitment of a qualified research assistant, appropriate training and orientation of the interviewers before the survey for example when reading the questions: Questions were read exactly as they were written only questions relevant to the respondents would be asked (skip rules are to be followed). Exact answers of the respondents were coded, and interviewers were not allowed to interpret responses where the respondents had difficulty understanding the questions: the question or part of it was repeated, and probing was used according to the general instructions that were given. The appearance and behaviour of the interviewers were professional; none were shown any reactions to the respondents' answers.

Ethical Considerations.

A letter of introduction was obtained from Kampala International University's western campus, faculty of clinical Medicine and dentistry which introduced the researcher to the head of the department Kakanju HCI and sought permission to carry out the study. In addition, the researcher explained the purpose of the study to each study participant after which informed consent was obtained from the participants before participating in the study [15]. In order to ensure confidentiality, the names of the respondents were not taken and the information given during the interview sections was not released to anyone. To further gain the trust and safeguard the privacy of respondents, the interviews were done privately and in secured areas of the health centres.

Study limitations and problems that may be encountered.

The proposed study was done at Kakanju health center's three antenatal clinics, where the sample was small due to a small number of patients attending the clinics and consequently data was too small to represent Kakanju as a sub-county. Time was also a limiting factor since the researcher had many ongoing events to do. There's also a financial challenge as put clearly in the budget executed in the same time frame. Pre-testing of the tools was done and data management was executed professionally. Respondent bias and researcher bias was checked by random selection of eligible. Questions were read at normal speed (not too fast nor too slow)

RESULTS

Socio-demographics of the respondents
A total of 384 pregnant women were enrolled in the study. The majority of the participants 138(36.0%) were in the age range of 33-35 years, and the least 57(14.8%) were in the age range of 36-40 years as shown below;
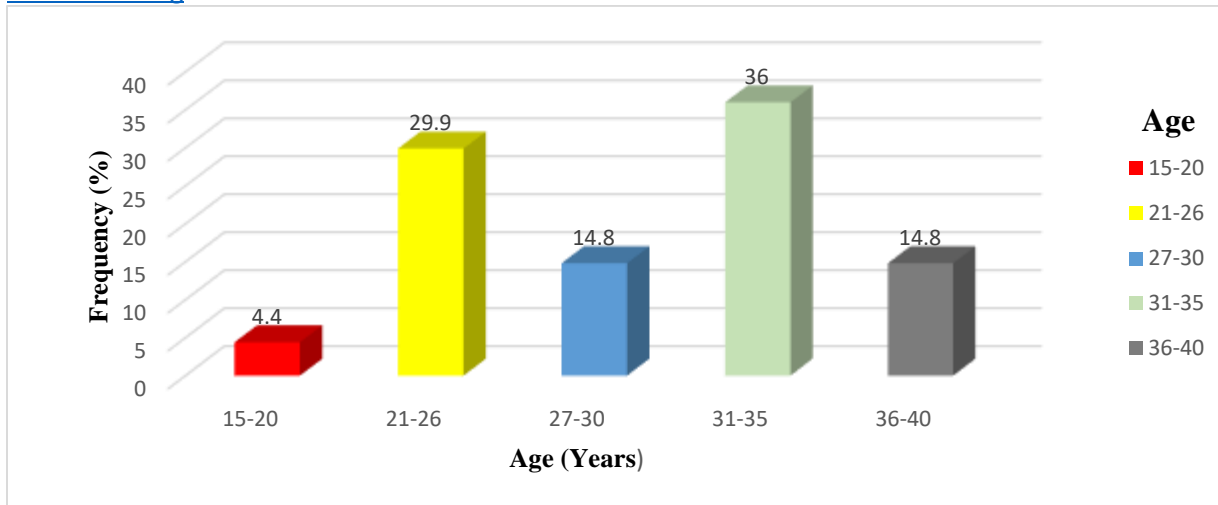
Figure 1: shows the age

The majority of the participants 268(69.0%) were from rural areas and the least 119(31.0%) were from urban areas as shown below.
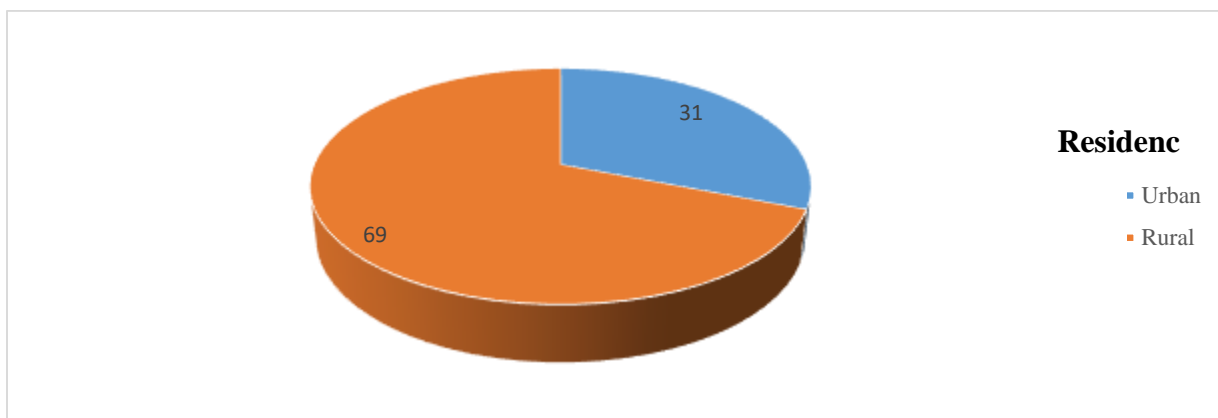

Figure 2: shows residence of the pregnant mothers

Majority of the respondents 143(37.3%) were Catholics and the least 29(7.4%) were Adventists.
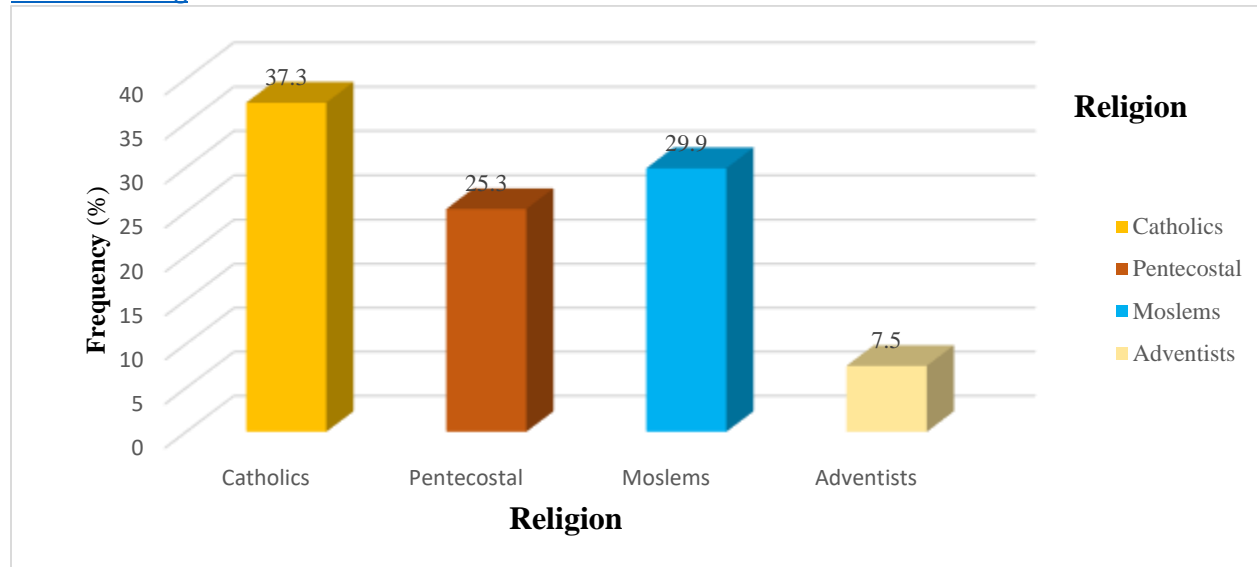
Figure 3: shows the religion

The majority of the respondents 205(53.4%) were house wives, maids and shop attendants, then the least 58(15.1%) were self-employed.
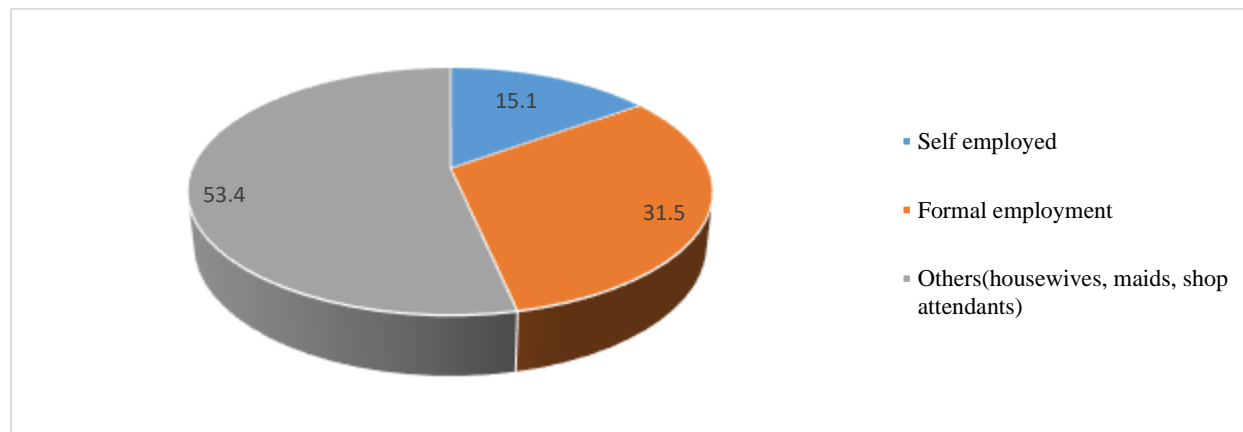

Figure 4: shows the employment status

Most 228 (59.4%) of the participants were married and the least 12(3.1%) were widowers. Majority of the respondents 180(46.9%) had attained secondary and the least 29(7.5%) were not educated at all. The results are shown in figure 5 below.
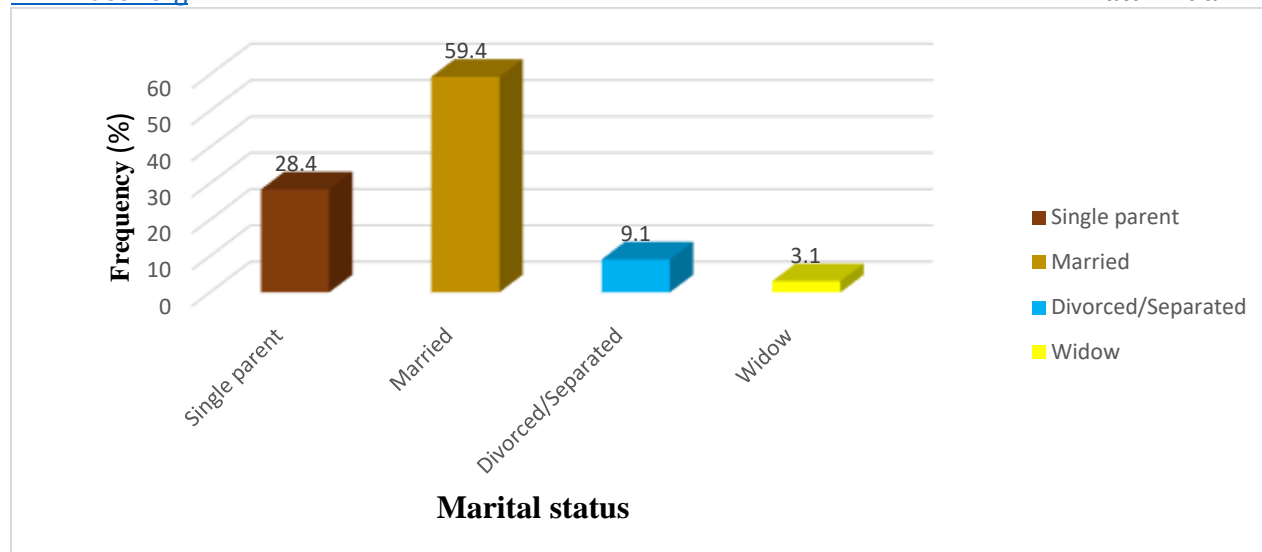
Figure 5: shows the marital status

The majority of the respondents 112(29.2%) always receive support from their husbands while the least 59(15.4%) received the support from their husbands most of the time.

Table 1: shows the demographic characteristics of the sample

Variable	Frequency[n]	Percentage (%)
Age (years) of respondents (n =384)		
15-20	17	4.4
21-26	115	29.9
27-30	57	14.8
31-35	138	36.0
36-40	57	14.8
Residence of the pregnant mother		
Urban	119	31.0
Rural	268	69.0
Religion		
Catholics	143	37.3
Pentecostal	97	25.3
Moslems	115	29.9
Adventists	29	7.5
Occupation		
Self employed	58	15.1
Formal employment	121	31.5
Others(house wives, maids, shop attendants)	205	53.4
Marital status		
Single parent	109	28.4
Married	228	59.4
Divorced/Separated	35	9.1
Widow	12	3.1

Level of education		
None	29	7.5
Primary	118	30.8
Secondary	180	46.9
Tertiary	57	14.8
Husband's support		
Always	112	29.2
Most of the time	59	15.4
Some of the time	103	26.8
Rarely	110	28.6

Score based on knowledge attitude and perception regarding ANC

The scores from SPSS showed that majority, 331(86.2%) of the participants has adequate knowledge about antenatal care utilization while the least, 53(13.8%) participants had inadequate knowledge.

The majority, 199(51.8%) had good attitude towards ANC utilization while the least, 185(48.2%) had poor attitude. Most 194(50.5%) of the participants had good perceptions while the least 190(49.5%), had poor perceptions about ANC service utilization.

Table 2: shows the score based on knowledge, attitude and perception regarding ANC

Score (%)	Frequency (%)		
	Knowledge	**Attitude**	**Perception**
Adequate/good (>70%)	331(86.2%)	199(53.8%)	194(50.5%)
Inadequate/Poor (<70%)	53(13.8%)	185(48.2%)	190(49.5%)
Total	**384(100%)**	**384(100%)**	**384(100%)**

Association of overall knowledge regarding ANC with socio-demographic factors

Age, occupation, marital status and education level were statistically significantly associated with knowledge regarding ANC in Kakanju Health Centre III in the model at 5% level. Pregnant women in the age bracket 15-20 years were 3 times more likely to have inadequate knowledge about ANC utilization as compared to those in age group 39-44 years (OR=3.23: 95%CI, (0.42-20.17): P=0.042). Pregnant women who were house wives, maids and shop attendants were 3 times more likely to have inadequate knowledge about ANC utilization compared to those in formal employment (OR=3.11: 95%CI, 2.17-12.41: P=0.001). Widows were 4 times more likely to have inadequate knowledge about ANC utilization compared to the married women (OR=4.36: 95%CI, 3.18-29.63: P=<0.001). Women who were not educated were 6times to have inadequate knowledge about ANC utilization compared to the Anglicans (OR=6.24: 95%CI,1.96-76.35:P=0.012).

Table 3: Shows association of overall knowledge regarding ANC with socio-demographic factors

Variable	Knowledge		OR (95% CI)	P-Values
	Adequate	**Inadequate**		
Age (years)	**n=331**	**N=53**		
15-20	06(35.3%)	11(64.7%)	**3.23(0.42-20.17)**	**0.042**
21-26	115(100%)	00(00)	1	1
27-30	46(80.7%)	11(19.3%)	1.52(0.38-65.40)	0.12
31-35	138(100.0%)	00(00)	1	1
36-40	26(45.6%)	31 (54.4%)	ref	
Religion				
Catholics	131(91.6%)	12(8.4%)	1.63(0.01-128.83)	0.400
Pentecostal	80(82.4%)	17(17.6%)	1.28(0.69-29.16)	0.620
Moslems	103(89.6%)	12(10.4%)	0.91(0.01-39.07)	0.948
Adventists	17(58.6%)	12(41.4%)	ref	
Occupation				
Self employed	58(100%)	00(00)	1	1
Formal employment	108(89.3%)	13(10.7%)	ref	
Others(housewives, maids, shop attendants)	165(80.5%)	40(19.5%)	**3.11(2.17-12.41)**	**0.001**
Marital status				
Single parent	74(67.9%)	35(32.1%)	1.33(0.15-6.46)	0.023
Married	217(95.2%)	11(4.8%)	ref	
Divorced/Separated	35(100%)	0(00)	1	1
Widow	6(50%)	6(50%)	**4.36(3.18-29.63)**	**<0.001**
Education level				
None	6(20.7%)	23(79.3%)	**6.24((1.96-76.35)**	**0.012**
Primary	99(83.9%)	19(16.1%)	1.28(0.69-29.16)	0.620
Secondary	177(98.3%)	3(1.7%)	0.91(0.01-39.07)	0.948
Tertiary	51(89.5%)	6(10.5%)	ref	

Association of overall knowledge regarding ANC with obstetric factors

First pregnancy, history of previous abortion, history of previous stillbirth and history of previous cesarean section were statistically significantly associated with knowledge regarding ANC in Kakanju Health Centre III in the model at 5% level. Pregnant women in their first pregnancy were 3 times more likely to have inadequate knowledge about ANC utilization as compared to those in with more than one pregnancy (OR=3.23: 95%CI, **(0.42-20.17)**: P=0.002). Pregnant women who did not have history of previous abortion were 1 time more likely to have inadequate knowledge about ANC utilization compared to those who had history of previous abortion (OR=3.11: 95%CI, 2.17-12.41: P=0.001). Pregnant women with history of previous stillbirth 3 times more likely to have inadequate knowledge about ANC utilization compared to those who did not (OR=3.11: 95%CI, **2.17-12.41**: **P=<0.004**). Women who had history of previous cesarean section were 2times to have adequate knowledge about ANC utilization compared to the women who had virginal birth (OR=6.24: 95%CI, **0.92-9.63**: P=0.004).

Table 4: Shows association of overall knowledge regarding ANC with obstetric factors

Variable	Knowledge		OR (95% CI)	P-Values
	Adequate	**Inadequate**		
First pregnancy	**n=331**	**N=53**		
Yes	135(76.7%)	41(23.3%)	**3.23(0.42-20.17)**	**0.002**
No	196(94.2%)	12(5.8)	ref	
History of previous abortion				
Yes	11(91.6%)	00(00)	1	
No	320(85.8%)	53(14.2%)	1.28(0.69-29.16)	0.053
History of previous stillbirth				
Yes	93(93%)	07(7%)	ref	
No	238(83.8%)	46(16.2%)	**3.11(2.17-12.41)**	**0.004**
History of previous cesarean section				
Yes	57(95.2%)	(00%)	ref	
No	274(83.8%)	53(16.2)	**2.70(0.92-9.63)**	**0.004**

Association of overall attitude regarding ANC with socio-demographic factors

Age, occupation, marital status and education level were statistically significantly associated with knowledge regarding ANC in Kakanju Health Centre III in the model at 5% level. Pregnant women in the age bracket 21-26 years were 6 times more likely to have poor attitude towards ANC utilization as compared to those in age group 39-44 years (OR=6.42: 95%CI, **(0.96-13.45)**: P=0.004). Pregnant women who were house wives, maids and shop attendants were 2 times more likely to have poor attitude towards ANC utilization compared to those in formal employment (OR=2.31: 95%CI, **1.16-11.66**: P=0.040). Widows were 5 times more likely to have inadequate knowledge about ANC utilization compared to the married women (OR=4.36: 95%CI, **2.31-29.3**: P=<0.024). Women who were not educated were 7times more likely to have poor attitude towards ANC utilization compared to the Anglicans (OR=6.24: 95%CI, **2.17-19.13**: P=0.001).

Table 5: shows association of overall attitude regarding ANC with sociodemographic factors

Variable	Attitude		OR (95% CI)	P-Values
	Good (n=199)	**Poor (n=185)**		
Age (years)				
15-20	01(33.3%)	02(384.7%)	ref	
21-26	09(45%)	11(55%)	**6.42(0.96-13.45)**	**0.004**
27-32	06(60%)	04(40%)	0.63(0.07-7.49)	0.788
33-38	13(54.2%)	11(45.8%)	2.56(0.19-26.99)	0.075
39-44	07(70%)	03(30%)	0.11(0.32-52.69)	0.26
Religion				
Catholics	15(60%)	10(40%)	ref	
Pentecostal	07(70%)	10(30%)	1.18(0.28-5.52)	0.769
Moslems	11(55%)	09(45%)	1.07(0.26-4.35)	0.923
Adventists	02(40%)	03(60%)	1.15(0.18-7.10)	0.877
Occupation				
Self employed	07(70%)	03(30%)	1.28(0.32-11.48)	0.316
Formal employment	14(66.7%)	07(33.3%)	ref	
Others(house wives, maids, shop attendants)	14(53.8%)	**22(46.2%)**	**2.31(1.16-11.66)**	**0.040**
Marital status				
Single parent	06(31.6%)	13(68.4%)	1.50(0.19-11.45)	0.696
Married	25(62.5%)	15(37.5%)	2.20(1.31-31.41)	0.073
Divorced/Separated	03(50%)	03(50%)	ref	
Widow	01(50%)	01(50%)	**5.11(2.31-29.3)**	**0.024**
Education level				
None	01(20%)	04(80%)	**7.75(2.17-19.13)**	**0.001**
Primary	05(25%)	15(75%)	1	1
Secondary	22(68.8%)	10(31.2%)	1.26(0.13-11.93)	0.840
Tertiary	07(70%)	03(30%)	ref	

Association of overall perception regarding ANC with sociodemographic factors among pregnant women attending Kakanju Health Centre III, Bushenyi district.

Age, occupation, marital status and education level were statistically significantly associated with knowledge regarding ANC in Kakanju Health Centre III in the model at 5% level. Pregnant women in the age bracket 15-20 years were 6 times more likely to have poor attitude towards ANC utilization as compared to those in age group 39-44 years (OR=6.75: 95%CI, **(1.09-41.61)**: P=0.043). Pregnant women who were house wives, maids and shop attendants were 10 times more likely to have poor attitude towards ANC utilization compared to those in formal employment (OR=10.07: 95%CI, **1.30-94.07**: P=0.032). Single parents were 16 times more likely to have inadequate knowledge about ANC utilization compared to the married women (OR=16.98: 95%CI, **5.05-71.22**: P=<0.001). Women who were not educated were 4times more likely to have poor attitude towards ANC utilization compared to the Anglicans (OR=6.24: 95%CI, **1.06-31.83**: P=0.042).

Table 6: shows association of overall perception regarding ANC with socio-demographic factors

Variable	Perceptions		OR (95% CI)	P-Values
	Good	Poor		
Age (years)	n=194	n=190		
15-20	01(20%)	**02(80%)**	**6.75(1.09-41.61)**	**0.043**
21-26	05(25%)	15(75%)	2.14(0.51-8.87)	0.293
27-32	06(60%)	04(40%)	ref	
33-38	12(50%)	12(50%)	1.73(0.52-24.00)	0.185
39-44	10(100%)	00	1	1
Religion				
Catholics	16(64%)	09(36%)	ref	
Pentecostal	05(29.4%)	12(70.6)	2.59(0.84-15.28)	0.481
Moslems	10(50%)	10(50%)	0.33(1.23-5.12)	0.614
Adventists	03(60%)	02(40%)	0.12(0.07-3.49)	0.788
Occupation				
Self employed	06(60%)	04(40%)	3.11(0.132-38.26)	0.575
Formal employment	12(57.1%)	0942.9%)	**ref**	
Others(house wives, maids, shop attendants)	16(44.4%)	20(55.6%)	**10.07(1.30-94.07)**	**0.032**
Marital status				
Single parent	05(26.3%)	14(73.7%)	**16.98(5.05-71.22)**	**<0.001**
Married	25(62.5%)	15(37.5%)	ref	
Divorced/Separated	03(50%)	03(50%)	3.31(0.38-48.11)	0.235
Widow	01(50%)	01(50%)	2.99(0.24-27.81)	0.235
Education level				
None	01(20%)	04(80%)	**4.83(1.06-31.83)**	**0.042**
Primary	06(30%)	14(60%)	1.40(0.260-11.15)	0.578
Secondary	20(62.5%)	12(37.5%)	1.60(0.49-23.36)	0.212
Tertiary	07(70%)	03(30%)	1.32(0.24-15.26)	0.536

DISCUSSION

Biographic data

The majority of the participants 138(36.0%) were in the age range of 33-35 years, and the least 57(14.8%) were in the age range of 36-40 years. Pregnant women in the age bracket 15-20 years were 3 times more likely to have inadequate knowledge about ANC utilization as compared to those in age group 39-44 years (OR=3.23: 95%CI, **(0.42-20.17)**: P=0.042). The above findings are in line with the study findings by Scholars such as [16] who argue that younger (aged less than 20years) and middle aged mothers (aged 20-34years) are more likely to seek pregnancy-related care services from skilled attendants compared to mothers aged 34 and above years in Uganda. Majority of the participants 268(69.0%) were from rural areas and the least 119(31.0%) were from urban areas. The study findings are in line with the findings of the study by [17] which found out that women living in rural areas had a 69% less odds of delivering by assistance from health professionals when compared to urban women. Majority of the respondents 143(37.3%) were Catholics and the least 29(7.4%) were Adventists. The study by [17] also revealed that religion was found to be associated with the use of maternal health care services.

Naturinda

The study had different findings because it found out that women who followed traditional beliefs had a 50% lower chance of receiving antenatal care compared with those who followed Orthodox/Catholic faiths. Majority of the respondents 205(53.4%) were house wives, maids and shop attendants, then the least 58(15.1%) were self-employed. Pregnant women who were house wives, maids and shop attendants were 3 times more likely to have inadequate knowledge about ANC utilization compared to those in formal employment (OR=3.11: 95%CI, 2.17-12.41: P=0.001). Most 228(59.4%) of the participants were married and the least 12(3.1%) were widowers. Majority of the respondents 180(46.9%) had attained secondary and the least 29(7.5%) were not educated at all. Widows were 4 times more likely to have inadequate knowledge about ANC utilization compared to the married women (OR=4.36: 95%CI, **3.18-29.63**: P=<0.001). The above study findings are supported by the findings of the study by [18] who revealed that there is a strong belief that women in unions are more likely to access maternal health care services during their first trimester compared to those who are not. This is because of the likelihood that married women are more likely to be supported by their spouses, and are more likely to have disposable income required to access maternal health services and are less likely to be autonomous [18]. Majority of the respondents 112(29.2%) always receive support from their husbands while the least 59(15.4%) received the support from their husbands most of the time. These findings were supported by the study findings by [18] who revealed that there is a likelihood that married women are more likely to be supported by their spouses, and are more likely to have disposable income required to access maternal health services and are less likely to be autonomous [18].

Knowledge of women regarding Antenatal care among pregnant women attending Kakanju Health centre III, Bushenyi district.

In this study most of the respondents 331(86.2%) of the respondents strongly agreed in relation to whether respondents have ever heard about ANC [19], argue that education and information and education gap deters mothers from utilizing antenatal care services. Unlike in [20] study that found inadequate knowledge 48.3% among adolescents, mothers interviewed in this study had a fair knowledge. On the issue of whether the ANC is a clinical assessment of mother and fetus during pregnancy 36(53.7%) strongly agreed while the minority 1(1.5%) was not sure. This is supported by the study carried out by [2], where it was observed that the ANC process requires the use of guidelines that health providers should follow while offering care to ensure prevention, diagnosis and treatment of complications. Some studies carried out in Kakanju Health Centre III on the quality of ANC services indicated that there is overall late booking and actual no use of ANC services which can be due to many reasons. In addition to the above, the response to whether regular ANC visits lead to a healthy baby and a healthy mother the majority 183 (47.7%) strongly agreed while 23(6%) was not sure. More so, responses on whether ANC should be started as early as possible between 1-20 weeks of pregnancy 114(29.7%) agreed while the least 1.5% were not sure. In response to whether total number of ANC visits should be 4 times or above the majority 143(37.2%), while the least 1.5% were not sure. Results of a study by [21] showed that women who had received antenatal care, 54.5% did not have sufficient knowledge of the service, only 45.5% had good knowledge [21]. Some considered antenatal care as administration policy so they attended in order to achieve their requirement. Some of them considered it a waste of time due to protocol and delays at antenatal care clinics [21].

Attitude of women regarding the Antenatal care among pregnant women attending Kakanju Health centre III, Bushenyi district.

The study established that the responses on the attitude of women regarding the Antenatal care among pregnant women

attending Kakanju Health centre III, Bushenyi district include; Satisfaction with the overall care can make more women attend ANC given by 43.3%, religious beliefs affects women attendance to ANC given by 61.2%, cultural beliefs hinders women from attending ANC given by 58.2%, illiteracy hinders women from attending ANC given by 49.3%, ignorance hinders women from attending ANC given by 384.2%, husband's education and acceptance of the services given by 43.3%, poor economic status may make it difficult for women to make informed decisions about using health preventive services given by 59.7% and women accept the services given to them by health workers given by 41.8%. The above results are supported by study findings of [22]-[27].

The perceptions of pregnant women regarding Antenatal care among pregnant women attending Kakanju Health Centre III, Bushenyi district

The responses on whether having experience of delivery in their previous pregnancies influences their perception towards ANC, it is indicated that the majority 28(41.8%) strongly agreed while the minority 2(3%) were not sure. This agrees with the study carried out in Nigeria by [23], the respondent's knowledge about ANC was evaluated using three questions. Ninety-nine percent (99%) of the respondents affirmed that ANC was important not only for the mother but for the foetus as well. The other two questions concerned the timing of the first visit and the total number of ANC visits. These responses were compared to the socio-demographic characteristics; marital status, age groups, number of pregnancy (primigravidavs2 pregnancies), number of visits and educational level. Women who had attended antenatal visits in their previous pregnancy thought that it was beneficial to start ANC early in pregnancy unlike those who did not have this experience and who opted for third trimester enrollment. This study agrees with the study carried out in Ogun State, Nigeria,

[24]. The overall satisfaction of the women attending ANC in the study health district was high (91.4%). These results are similar to other studies of patient satisfaction; (96.5%) in Ibadan, Nigeria and 86.4%. However, it has been said that the views of pregnant women concerning their care is generally positive as they tend to be uncritical of healthcare, accepting whatever care they receive as appropriate, [25]. The study established the factors that influence the perceptions of pregnant women regarding Antenatal care among pregnant women attending Kakanju Health centre III, Bushenyi district include; fear of complications during pregnancy can make women attend to ANC services given .2%, home delivery is still a preferred practice among mothers given by 62.7%, most women do not seek ANC until their sixth month or later given by 73.1%, early attendance intervention at the antenatal care service in those with and without risk group pregnant women is beneficially in relation of their health given by 56.7%, women present for ANC early in their pregnancy period allow enough time for essential and feasible interventions and early identification of underlying conditions given by 22.4%, hospital bills affects the attendance of women to ANC given by 28.4% and patient satisfaction given by 55.2%. The influence of the educational level of respondents is predominant here as it is noticed that those at a high educational level are more likely to be critical about care received and defer a positive satisfaction. This issue was also revealed in [23] study where they hypothesized that as the level of education in the community steadily increases, pregnant women may become more and more critical of health care [28-30].

The study aimed to understand the knowledge of pregnant women regarding Antenatal Care (ANC) in Kakanju Health Centre III, Bushenyi district. The majority of respondents strongly agreed that they had heard about ANC, with age, occupation, marital status, and education level being statistically significantly associated with knowledge. However, first pregnancy, history of previous abortion, stillbirth, and cesarean section were also significantly associated with knowledge. The majority agreed that regular ANC visits lead to a healthy baby and mother, and whether ANC should be started as early as possible between 1-20 weeks of pregnancy was agreed upon. Traditional and refocused types of ANC were also agreed upon. The total number of ANC visits should be 4 times or above, and history taking, physical examination, laboratory tests, and medication were done during ANC visits. Folic acid iron supplements and fansidar were also agreed upon. Tetanus Toxoid and hepatitis B vaccines were also agreed upon.

The study found that satisfaction with overall care can make more women attend ANC, religious beliefs affect attendance, cultural beliefs hinder women from attending ANC, illiteracy hinders women from attending ANC, ignorance hinders women from attending ANC, husband's education and acceptance of services, poor economic status may make it difficult for women to make informed decisions about using health preventive services, and women accept the services given to them by health workers. Patient satisfaction and experience of delivery in previous pregnancies also influenced perceptions of ANC. Fear of complications during pregnancy can make women attend ANC services, home delivery is still a preferred practice, most women think they should go to the health facility only to deliver, pregnant women still prefer TBA'S over midwives, pregnant women only attending ANC when they feel pain, ANC bills affect women's attendance, and patients are satisfied with ANC services.

Recommendations

The study put down the following recommendations to improve on the utilization of antenatal care among the mothers in their area. They include;

i. The health workers should routinely sensitize the community members on antenatal care methods and their respective advantages in order to create awareness and avoid misconceptions.

ii. There is need of more health centers to provide health services and antenatal care services readily available and easily accessible by mothers including adolescents.

iii. There is also need for recruitment of more expertise (medical personnel) in the field of antenatal care services at the available health units to prevent understaffing.

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