

Assessment of Factors Affecting Attendance of Antenatal Care in Kagote Health Center III, Kabarole District, Uganda.

Margaret Apiso^{a,1,2}

^a FORTPORTAL SCHOOL OF CLINICAL OFFICERS,
FORTPORTAL, UGANDA

Abstract



Background:^a

Antenatal care is generally thought to be an effective method of improving outcomes in pregnant women and their babies, although many specific Antenatal Care practices have not been subject to rigorous evaluation

Methodology:

A descriptive cross-sectional study was carried out in Kagote HCIII aimed at assessing the factors affecting ANC attendance in the Kabarole district. Using a convenience sampling method, Kagote HCIII was chosen by the random sampling method. A sample of 100 respondents was interviewed. Questionnaires were used to obtain data from the individuals and these were in form of closed and open-ended questions.

Results:

The majority of the respondents 92(92%) used ANC information in subsequent pregnancies. 48(48%) said that multiparous women did not need to attend ANC if they were healthy while 12% were not sure. Challenges include long distance from the ANC clinic 32(13%), harsh health service providers 8(3%), lack enough support from husbands 22(9%), segregation and discrimination 12(5%), negative attitude towards ANC 16(7%), high transport costs 37(15.4%), lack of enough money 43(18%), lack of enough time 10(4%), too much workload at home 16(7%), long waiting time 20(8.3%), unavailability of some drugs at times 24(10%).

Conclusion and recommendation:

The factors affecting ANC attendance in Kagote HCIII are; age, occupation, education level, marital status, address, the number of health workers, their cadre, skill, authority, knowledge, nature, the services they and how they offer them, availability of incentives like drugs, multiparity, the order of pregnancy and the challenges mentioned above.

There is a need for the MOH to continue sensitizing people about the importance of ANC attendance, outreaches by the health facility to the community to offer the service and encourage attendance, a collaboration between the health facility and the village health team continued health education of women of reproductive age about ANC and its attendance.

^a Email: apisomargret@gmail.com
Received: 9th/12/2020 Accepted:
11th/02/2021 Journal of Obstetrics and
Gynecology

1 Background

Antenatal care is generally thought to be an effective method of improving outcomes in pregnant women and their babies, although many specific Antenatal Care practices have not been subject to rigorous evaluation (Jennifer *et al.*, 2009). Antenatal care is a key strategy to improve maternal and infant health. (Christopher *et al.*, 2013). Antenatal care is a key element of the package of services aimed at improving maternal and infant health.

In light of evidence from a 2001 systematic review, the World Health Organization began promoting a new model of ANC for low-income countries, moving away from the traditional model, based on 'reduced but goal-oriented clinic visits; that is, 'focused' ANC, consisting of (at least) four visits to a health facility during an uncomplicated pregnancy. (Christopher, 2013).

World Health Organization estimates that every year approximately 8 million women endure pregnancy-related complications and around half a million die as a result. According to a WHO report, (2010), Almost 9 million children die every year, of which 4 million new born babies die within the first month of life. Also, 3.3 million babies are dead. (St. Mary's Midwifery Training School- 2013). However, linkages with higher-level health services need to be strengthened since the vast majority of women are still giving birth at home and without a skilled attendant.

Nearly 4 million neonatal deaths and 500,000 maternal deaths are estimated to occur annually in the world. About 98% of these occur in low and middle-income countries. Antenatal care has been proven to be effective in improving pregnancy outcomes through early detection and management of pregnancy complications. (Toan, 2012).

The minimum ANC visits recommended by WHO (4 visits) was possible for less than about a third of the pregnant women in Sub Sahara Africa (SSA) countries. (Yifru *et al.*, 2014). The causes of maternal deaths preventable by ANC and delivery care include; pre-eclampsia, eclampsia, obstructed labor, malaria, anemia, ectopic pregnancy, PPH, postpartum sepsis. The Health Sector Strategic Investment Plan (HSSIP) has no written reports about antenatal care in Kagote Health Center III (HC III).

Twelve of the twenty-five countries that achieved 50% and more coverage of pregnant women with at least 4 ANC visits included SSA countries. The

minimum antenatal care visits recommended by WHO (4 visits) was possible for less than about a third of the pregnant women in some SSA countries like Niger (5%), Ethiopia (19%), Chad (23%), Burundi (33%), Mali and Rwanda (35% each). (Yifru, 2014)

Although scientific debate concerning the design of ANC continues, research suggests that in low-income countries particularly SSA, pregnant women do not often receive the recommended ANC. Moreover, amongst the sub-Saharan countries, the trend over the last 10 to 20 years in the proportion of women making at least 4 visits varies markedly: DHS survey data indicate that in West Africa, 8 to 10 countries have illustrated increases, whereas, in Southern and East Africa, 6 of 11 countries have experienced declines. (Christopher *et al.*, 2013). Despite the increase in staffing levels, the availability of EMHS, Reproductive Health (RH) indicators is still below the HSSIP targets. The percentage of pregnant women attending at least 4 ANC sessions only slightly increased from 32.4% in 2013/14 to 36.6% in 2014/15 (target was 60%). The percentages of pregnant women attending ANC sessions in respect to districts; Gulu - 45.2%, Jinja -42.3%, Kaberamaido -23.0%, Rukungiri- 42.6%, Kabarole 46.6%. (Annual Health Sector Performance Report (AHSPR) 2014/2015).

According to the report, only 8% of rural women in Uganda received ANC from a doctor. Regionally, South-Western were more likely to receive skilled care (20%), than Eastern women (3%), while only 2% of women in Karamoja were reported to seek the same. It was reported that women in Uganda tend to seek ANC very late- 37% attending for the first time at 6 months or more. (Uganda Bureau of Statistics, 2007).

According to Kagote HC III records 56% of pregnant women attend the 4 four visits of ANC in 2015. This is low compared to the target of 60%. Due to this low attendance, it is important to find out the factors affecting the attendance of the four ANC visits in Kagote HC III in the Kabarole district.

Kabarole district is found in the mid-western part of the country - Uganda, approximately 290 kilometers west of the capital city of Uganda - Kampala. It's bordered by Ntoroko district to the North, Kibale district to the Northeast, Kasese to the South, and Bundibugyo district, across the mountains to the West, Kyenjojo to the East and Kamwenge to the South East. In August 2014, the national population census put the population of Kabarole at

54,275. Antenatal care (ANC) is the care offered to women during pregnancy aiming at proper delivery of the baby and preventing any serious complications during or after delivery on both the mother and the baby. The activities involved in ANC include measurement of body weight and height, blood pressure; symphysis-fundus measurement, abdominal circumference, fetal heart rate, vaginal examination, investigations like urine protein test, blood tests for anemia and HIV; giving tetanus vaccination, folate combined iron supplement; malaria chemoprophylaxis and prenatal medical consultation.

2 METHODOLOGY

Study area

The study was carried out in Kagote health center III, Fort Portal Municipality, Kabarole District, Western Uganda, and details of the District are shown in the map and table below:

Figure 1: Map of Uganda showing the location of Kabarole District.

Source: district planning unit- Kabarole 2010/2011-2012/2013

From table 1 above, the Kabarole district has three counties, twenty-two sub-counties, 85 parishes, and 750 villages.

Study design

The research used descriptive and cross-sectional study applying both qualitative and quantitative strategies. Qualitative explored the view of the respondents and quantitatively explored the numerical findings concerning factors affecting ANC attendance in Kagote HC III. Face to face interviews using a structured questionnaire were the data collection method.

Study population

The study was focused on women of childbearing age.

Sampling procedure

Random sampling was done and only women of childbearing age were selected into the sample.

Sample size determination

The sample size was determined using Kish Leslie's formula:

$$n = (z^2 p(1 - p)) / d^2$$

Where;

n=desired sample

z=standard normal deviation usually set as 1.96 corresponding to 95%

p=proportion in a population estimated to have a particular characteristic given as 56% which is equivalent to 0.56

d=the degree of error set at a range of 0.05_0.1

$$n = ([1.92]^2 \times 0.56 \times 0.44) / [0.05]^2$$

Thus, n= 378

However, due to financial constraints and time, the study enrolled 100 respondents.

Sampling unit

The investigator used a woman of childbearing age as the sampling unit.

Study variables

Independent variable

The independent variable of the study was the attendance of ANC.

Dependent variables

The dependent variables for the study were demographic data, workers, the service delivery of health workers, their number, their level of training, availability of materials to be used in ANC, and the ANC attendance practice of mothers.

Data collection and management

Data collection procedure

Data was collected using a pretested questionnaire. The questionnaire contained both open-ended and closed-ended questions. Two research assistants were chosen and trained depending on their willingness to participate in the study and ability to understand, speak, and interpret the local languages. The respondents were met at the health center and each was requested to consent to participate as a respondent in the study.

Data management

Collected data was cross-checked for errors and corrected it, then analyzed. After this, the questionnaire was kept under a lock and key for future reference.

Data collection tools

A pen, a clipboard, and a simple electronic calculator were used to ease data collection through writing, backing the questionnaire, and computing the percentages.

Inclusion and exclusion criteria

Inclusion criteria

- All women aged between 18 to 49 years attending Kagote HC III during the time of data collection were included in the study.

- Only those who consented to participate in the study were included.

- Only those with a sound mind at the time of data collection were included in the study.

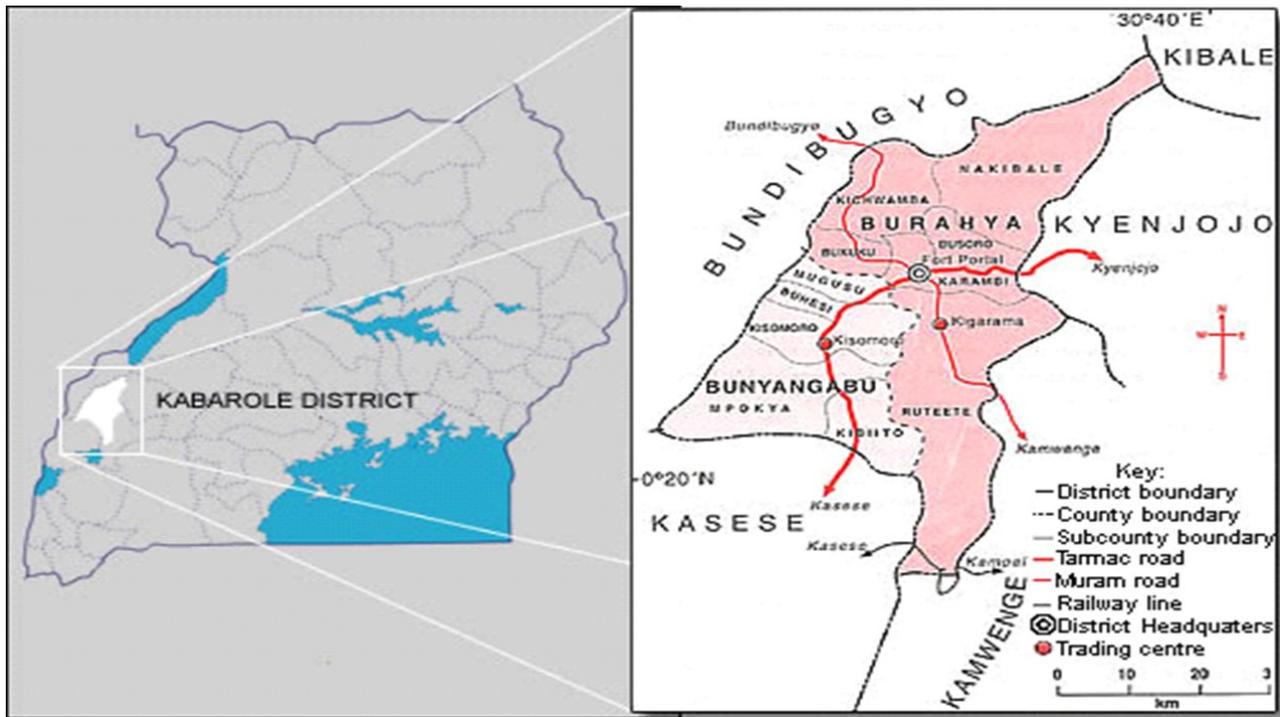


Figure 1. Shows details of kabarole district

Exclusion criteria

- All women below 18 years and above 49 years were excluded from the study.
- All women who did not consent were excluded from the study.

Ethical considerations

The research proposal was approved by the principal of the School of Clinical Officers Fort Portal, who then provided a research request letter. This was presented to the clinical officer-in-charge of Kagote HC III to permit the investigator to carry out the research project at her health unit. The investigator explained the purpose of the research to the participants and those who were willing to participate signed a consent form. Respondents' names were not written on the questionnaire though a unique numbering was used to enable better organization. Withdrawal from the research study was free with no effect on health service provision on participants. The data collected was kept confidential.

3 RESULTS

Demographic characteristics

Demographic characteristics of the respondents

N=100, (n=25)

Referring to table 2, twenty-eight percent (28) of respondents were between the ages of 25-29 years, and only 4% (4) were between 45-49 years. Forty percent (40) of the respondents were Batooro while at least 16% (16) were Banyankole. Thirty-six percent (36) belonged to the catholic faith, and the least 12% (12) were Moslems. On occupation, 32% (32) of the respondents were housewives, and 16% (16) were civil servants. Sixty percent (60) of the respondents were married, and 2(2%) of them were widowed. Forty (40%) of the respondents had attained a secondary level of education while 12(12%) never attended formal education. Fifty-six (56%) of the respondents lived in villages, and a significant number 12(12%) lived in large towns.

3.1 Provider- related factors affecting ANC attendance

Figure 2: Number of health workers offering ANC services at Kagote HC III.

N=100, (n=25)

Fifty-six percent (56) of respondents reported that 2 health workers offered ANC services while twenty percent (20) reported 1 health worker did so.

ANC services offered at Kagote HC III

N=100, (n=240)

Table 1. Kabarole District local government administrative units as of 1st July 2010

County	Sub-counties/Town councils/Division	Parishes	Number of villages	
Burahya	Bukuku	Karago, Kiguma and Kazingo	25	
	Busoro	Busoro, Mwibaale, Kaswa and Rwengaju	50	
	Kasenda	Kasenda, Nyabweya, Isunga, Rwankezi, Kasenda p, and kabata	51	
		Karambi	Karambi, Rubingo, Butebe, Rubingo B, Gweri	60
	Mugusu	Kiboha, Kiraaro, Burungu and Nyabuswa	43	
	Kicwamba	Nyantaboma, Bwanika and Kihondo	45	
	Ruteete	Kyamukoka, Kiko and Rurama	32	
	Kyeitamba TC	Kijura, Kyererezi, Kasaigara and Kahuna	14	
	Hakibaale	Kiburara, Kahangi, Kibasi, Kitule and Kabende	48	
	Bunyangabu	Kisomoro	Lyamabwe, Kicuucu and Kisomoro	33
		Rubona TC	Rubona and Kahondo	14
		Karangura	Nyarukamba and Kabango	12
		Kateebwa	Bunaiga, Mitandi, Mutumba, Kateebwa, Nsura and Kyamukube	44
		Kibiito	Mujunju, Kasunganyanja and Kabale	21
Kabonero		Kabonero, Bukara and Nyarugongo	42	
Rwimi		Kaina, Kakooga and Kadindimo	21	
Buheesi		Rwesene, Kiremezi, Kabahango, Nyamiseke, Kiyombya and Kiboota	64	
		Kibiito TC	Central, South, East, West and S/East	18
Rwimi TC		Central, West, Nyabwina and East	19	
Fort-Portal	East Division	Bukwali, Kitumba, Njara, Nyakagongo	36	
	South Division	Bazaar, Kasusu and Kijanju	33	
	West	Kagote, Kibimba, Nyabukara, Rwengoma	24	
3 counties	22 sub-counties	85 parishes	750	

Seventy-two (30%) of the respondents pointed at routine physical examination of a pregnant woman as the major ANC service offered while a significant number 24(10%) pointed at tetanus vaccination.

Figure 3: Showing how health workers handle pregnant women at the ANC clinic.

N=100, (n=25)

From figure 3 above, forty-six percent (46) reported that they were handled well and only 10(10%) harshly.

Medications offered at the ANC clinic

N=100, (n=138)

Majority 88 (63.7%) of respondents reported that they always received the medications and only 2(1.4%) respondents who reported that they at times never got fansidar.

Figure 4: Characteristics of health workers offering ANC services at the health unit

N= 100, (n=25)

Forty percent (40) reported that the health workers were knowledgeable and a significant number 16% (16) reported others like supportive, caring. The rest were as shown in figure 4.

Cadre of health workers of health workers offering ANC services at Kagote unit

N=100, (n=180)

Most of the respondents 84 (47%) of the respondents reported that they were worked on by midwives while only 12(7%) of them reported that nursing assistants offered the service.

3.2 Other factors affecting ANC attendance

Figure 5: Whether information mothers have about ANC can help them in subsequent pregnancies

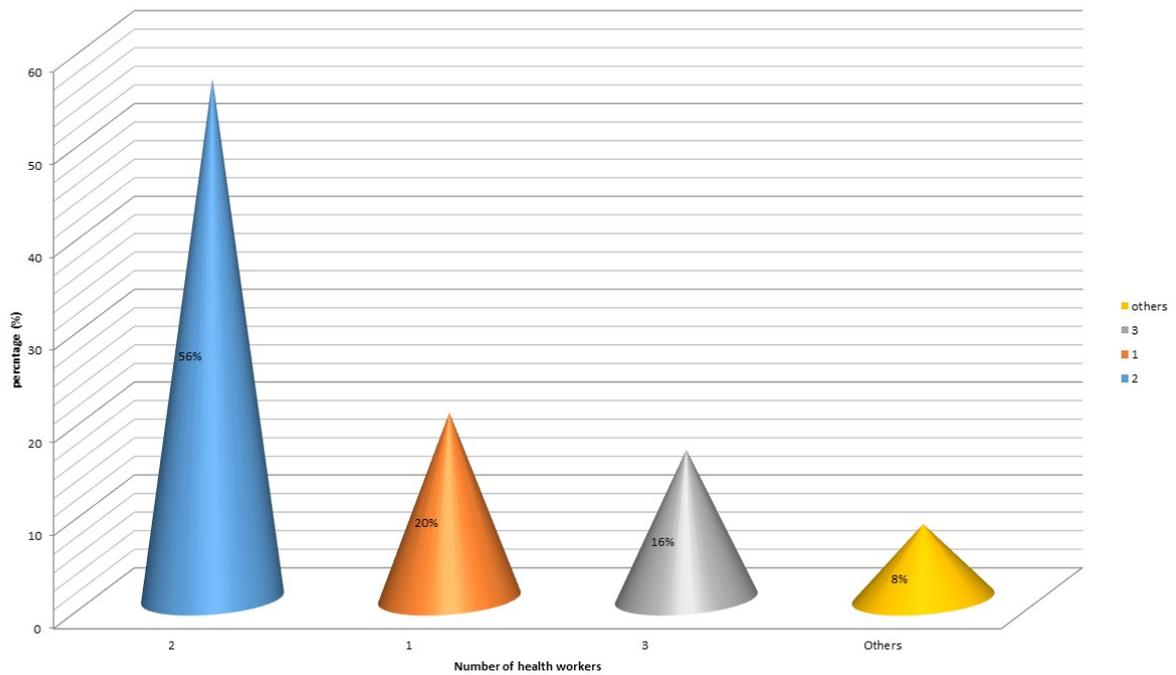


Chart 1. shows number of health workers offering ANC services at Kagote HC III.

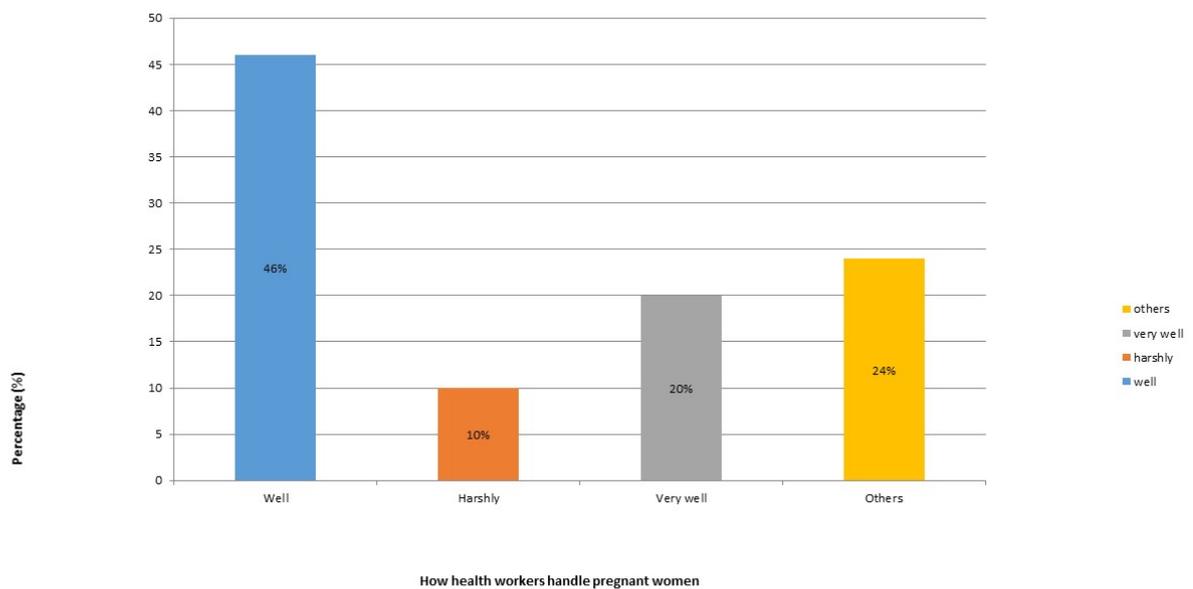


Chart 2. Showing how health workers handle pregnant women at the ANC clinic.

Table 2. Demographic characteristics of the respondents

Variable	Class (grouping)	Frequency	Percentage (%)
Age (years)	15-19	10	10
	20-24	16	16
	25-29	28	28
	30-34	20	20
	35-39	14	14
	40-44	8	8
	45-49	4	4
	TOTAL	100	100
Ethnicity	Batooro	40	40
	Bakonzo	24	24
	Banyankole	16	16
	Others	20	20
	TOTAL	100	100
Religion	Catholics	36	36
	Anglicans	28	28
	Moslems	12	12
	Others	24	24
	TOTAL	100	100
Occupation	Peasants	28	28
	Civil servants	16	16
	House wives	32	32
	Others	24	24
	TOTAL	100	100
Marital status	Married	76	76
	Single	6	6
	Widowed	2	2
	Divorced	16	16
	TOTAL	100	100
Level of education	Primary	21	21
	Secondary	40	40
	Tertiary	15	15
	Never attended formal education	12	12
	Others	12	12
	TOTAL	100	100
Address	Village	56	56
	Small town	32	32
	Large town	12	12
	TOTAL	100	100

N=100, (n=25)

Majority of the respondents 92 (92%) reported that the information they had on ANC could help in their subsequent pregnancies while the minority 8(8%) disagreed.

Respondents cited that they learnt a lot about pregnancy, got to know how to handle it, and got more experience about it. Those who disagreed cited the fact that pregnancies differ.

Figure 6: Whether multiparous pregnant women to attend ANC N=100, (n=25)

From the figure 6 above, nearly half of the respondents 48(48%) reported that they did not need to attend ANC if they are feeling healthy while only 12(12%) reported they were not sure.

Showing the order of pregnancy at which pregnant women attend ANC

N=100, (n=25)

Table 3. ANC services offered at Kagote HC III

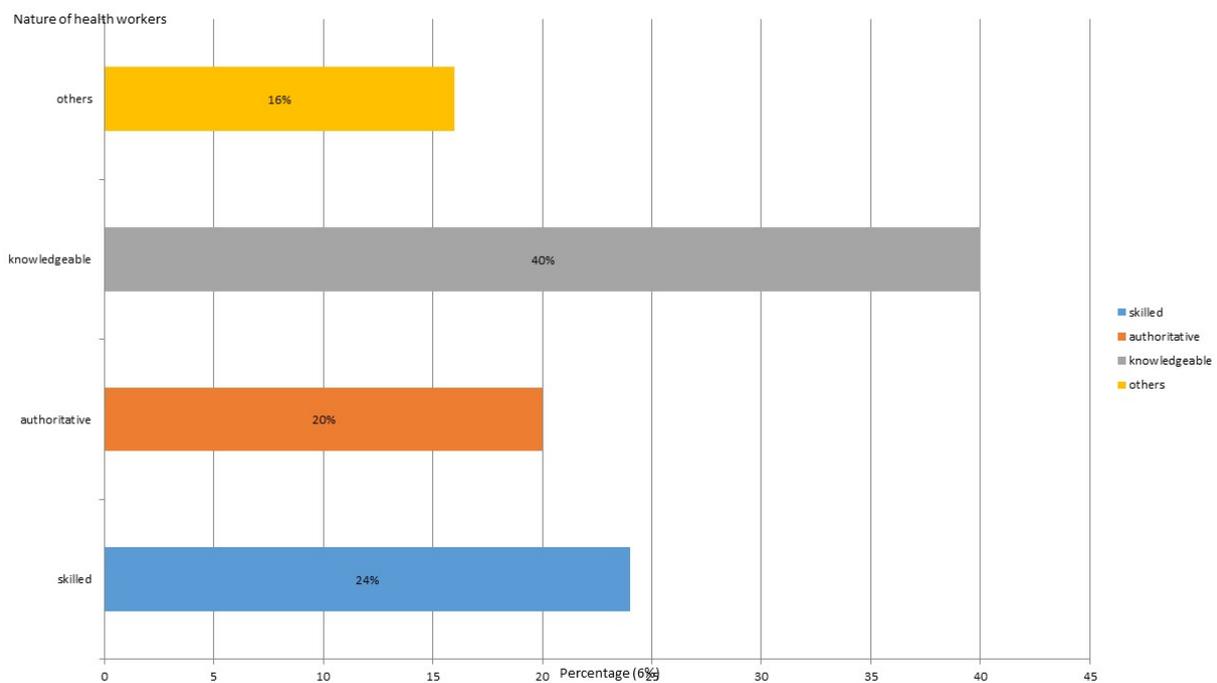
ANC Services offered	Frequency (f)	Percentage (%)
Routine physical examination of a pregnant woman	72	30
Health education	40	17
Tests like HIV testing, testing for syphilis	32	13
Tetanus vaccination	24	10
Medications like fansidar, folic acid, mebendazole, fefan	60	25.3
Others	12	5
TOTAL	240	100

Most respondents gave more than one answer

Table 4. Medications offered at the ANC clinic

	Folic acid	Fe-fan	Mebendazole	Fansidar	Tetanus toxoid	Other drugs	Total frequency	Percentage (%)
Always	15	21	11	14	14	13	88	63.7
Often	7	5	5	5	3	7	32	23
Never	0	0	0	2	0	0	2	1.4
I buy them	0	2	1	4	3	6	16	11.5
GRAND TOTAL							138	100

Many of the respondents gave more than one answer

**Chart 3. Characteristics of health workers offering ANC services at the health unit**

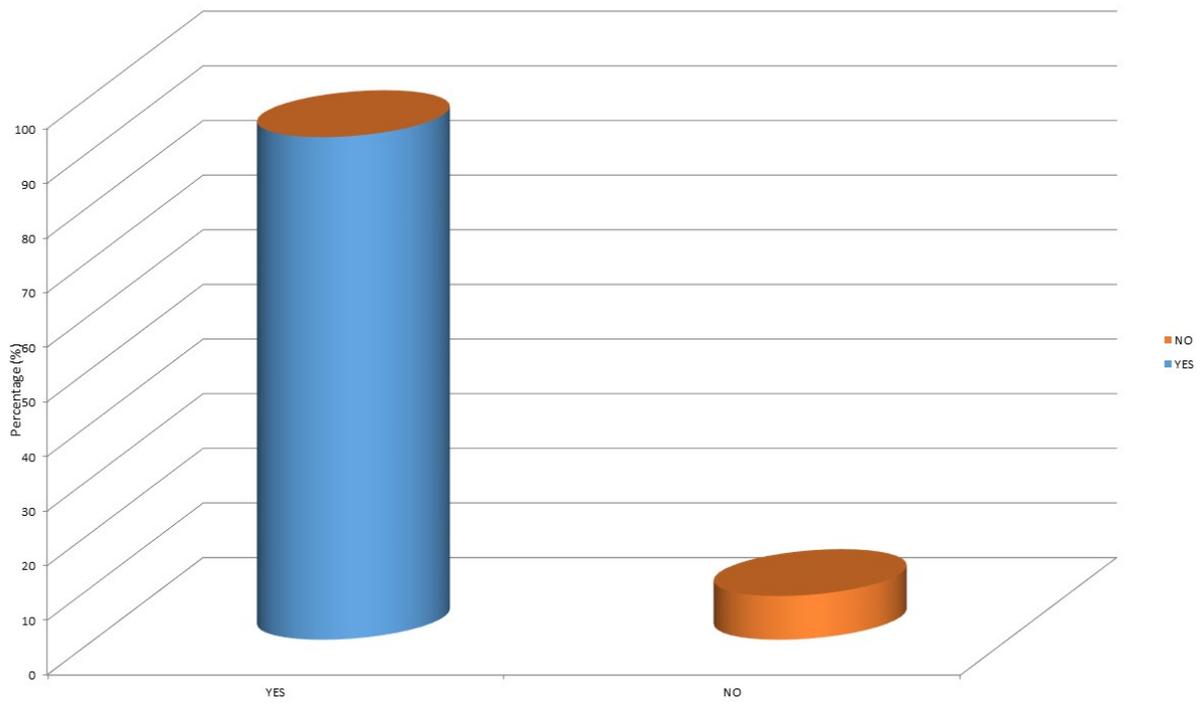


Chart 4. Whether information mothers have about ANC can help them in subsequent pregnancies

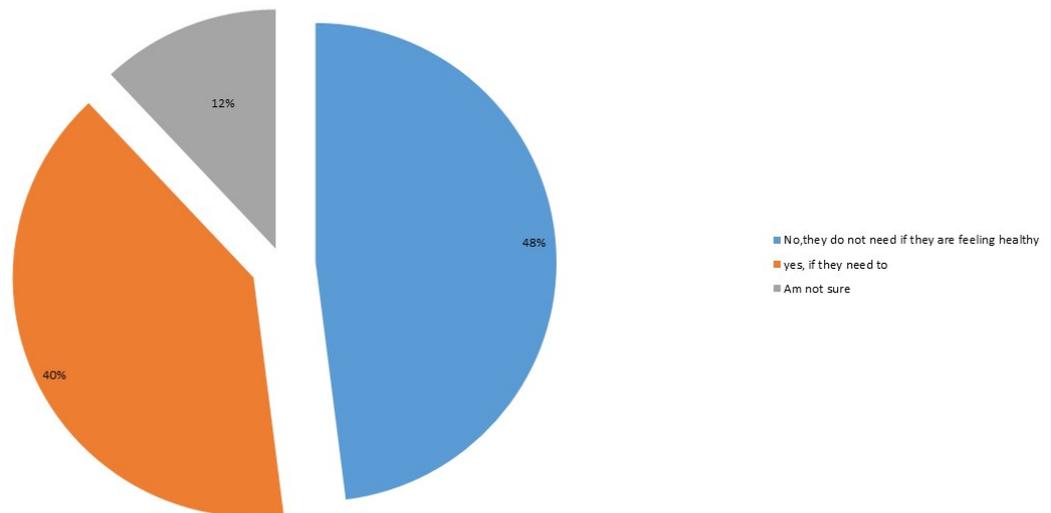


Chart 5. Whether multiparous pregnant women to attend ANC

Table 5. Cadre of health workers of health workers offering ANC services at Kagote unit

Cadre	Frequency	Percentage (%)
Midwives	84	47
Nursing officers	44	24
Student nurses and clinicians	24	13
Nursing assistants	12	7
Others	16	9
TOTAL	180	100

Some respondents gave more than 1 answer

Table 6. Showing the order of pregnancy at which pregnant women attend ANC

Order of pregnancy	Frequency	Percentage
1 st	50	40
2 nd	30	30
All pregnancies	8	8
Am not sure	12	12
TOTAL	100	100

A half of the respondents 50(50%) reported that ANC should be attended in the first pregnancy while only 8(8%) reported in all pregnancies. The rest were as in the table above.

The respondents reported the following challenges;

- Long distance from ANC clinic 32(13%)
- Harsh health service providers 8(3%)
- Lack of enough support from husbands 22(9%)
- Segregation and discrimination 12(5%)
- Negative attitude towards ANC by some family members 16(7%)
- High transport costs 37(15.4%)
- Lack of enough money 43(18%)
- Lack of enough time 10(4%)
- Unavailability of some drugs at times 24(10%)
- Too much work load at home 16(7%)
- Long waiting time at the ANC clinic 20(8.3%)

4 DISCUSSION, CONCLUSION, AND RECOMMENDATIONS

5 Discussion

Demographic factors affecting ANC attendance

Age

From the study, many of the respondents 28 (28%) were between the ages 25-29 years followed by 20(20%) in the age group of 30-34 years, only

10(10%) were in the age group 15-19 years and the least 4 (4%) were in the age group of 45-49 years. This is in line with Peter *et al.*, (2014) who stated that teenage respondents are poor seekers of ANC and also agrees with Dairo *et al.*, (2010) who found that women who are 25 years or more are more likely to attend ANC clinic than those below 25 years. It also agrees with King'oo *et al.*, (2015) who revealed that the least attendance of ANC was in those above 45 years. These findings can be explained by the fact that most of the married women and those in strong relationships are between the ages of 25-34 years and are more concerned about their health than the younger and the older respondents.

Ethnicity

The majority of the respondents 40 (40%) were Batooro, followed by Bakonzo at 24 (24%). This disagrees with King'oo *et al.*, (2015) who stated that women view attending ANC clinic as a taboo despite knowing these services. In my opinion, the high percentage of the Batooro could be because they are the indigenous culture in the region and not because they have better cultural views or fewer taboos on pregnancy and ANC. Therefore, culture is not a barrier to ANC attendance.

Religion

The highest percentage 36% of respondents were catholic, followed by Anglicans at 28% and Muslims were the least at 12%. This strongly dis-

agrees with Dairo *et al.*, (2010) who suggested that in his study, Christians were less likely to attend ANC than Muslims. This can be explained by the fact that the study area is comprised of more Christians than Muslims and it has also been observed that Christians always give health education to the church members including ANC attendance.

Marital status

Seventy-six (76%) of the respondents were married, 6 (6%) were single, 2(2%) were widowed and a significant figure of 16(16%) were divorced. In agreement with this study, Simkhada *et al.*, (2008) found out that most of the women who did not use ANC services were single. This could be because most single mothers had less support and encouragement from partners on ANC attendance. It may also be because most of the people who reported to be single were students therefore probably lacking knowledge on ANC. The widowed respondents reported that they had recently lost their husbands.

Occupation

Most of the respondents 32 (32%) reported to be housewives, 28 (28%) were peasants and 16 (16%) were civil servants. This agrees directly with Peter *et al.*, (2010) who stated that the majority of the women attending ANC tend to be housewives without independent and stable financial resources or positions. He also added that the difference in occupation influences time availability for access to ANC services. This particular point can explain the low 16 (16%) number of civil servants. Due to the low economic status of the area, the number of housewives attending ANC was found to be higher than the number of civil servants.

Level of education

Nearly half 40 (40%) of the respondents had attained secondary education followed by those who had attained primary level at 21 (21%), only 15 (15%) had attained tertiary level and a significant number of 12(12%) never attended any formal education. This agrees with Yang *et al.*, (2010) who suggested that educated women were 6.8 more times more likely to receive ANC than those who were not educated and also agrees with Zeine *et al.*, (2010) who reported that mothers who attained a primary level of education were more likely to attend ANC than women who were not able to read and write. However, it also disagrees with Yang *et al.*, (2010) who stated that highly knowledgeable women were 6.5 times more likely to attend ANC as

seen by the lower percentage of 15%of those who attained tertiary level. From my point of view, most of the residents in the study area have a low level of education and so low levels of income, making them seek care from the nearest health care center, also, people in the study area lack adequate knowledge about ANC since their level of education is generally low.

Address

More than half 56 (56%) of the respondents were living in rural (village) areas, 32 (32%) lived in the small town, and only 12 (12%) from large towns. This disagrees with Yang *et al.*, (2010) who stated that living in rural areas is associated with low attendance of ANC compared to living in urban areas. This can be explained by the fact that the health facility is in a local setting making it accessible to the local people in the area. The significant number 12 (12%) could be explained by the traditional practice in Africa of women moving back from urban areas to their parents in the rural areas when pregnant or when nearing the time of delivery.

Provider-related factors affecting ANC attendance

Number of health workers offering health services

More than half of the respondents 56 (56%) reported two health workers attending to them and 20 (20%) reported 1 health worker. 84 (47%) were midwives, 44 (24%) were nursing officers, 16 (9%) were other health workers' medical clinical officers, 24(13%) were student nurses and clinicians and 12(7%) were nursing assistants. This agrees with Nouf *et al.*, (2016) who indicated in his study that the number of medical doctors and physicians is limited; for there was no respondent reported a doctor or clinical officer as part of the health workers offering the service. From this study, the number of health workers was found to be adequate because the ANC clinic attended to at least 10-15 mothers on the ANC days that can easily be worked on by one midwife and health worker. However, the research study may also indicate that there is an inadequate quality of care because there were no specialists at the facility. This may force some mothers especially the highly educated not to seek ANC at the health facility.

ANC service delivery

From the study, most of the mothers reported that 40 (40%) of the health workers were knowledgeable, 20 (20%) were authoritative and 24 (24%)

were skilled. This is in line with Christopher *et al.*, (2013) who said that health staff who provide ANC exercise significant authority, and mothers generally place their trust in their instruction. On skills and knowledge, Ahebaw *et al.*, (2013) support that women who have confidence in skilled providers and their care tend to use services more, and also agrees with Peter *et al.*, (2013) who found out that older women sought ANC from older health workers usually for fear of being attended to by young female health workers. Therefore, knowledge, authority, and skill influence ANC positively.

Availability of materials to be used in the ANC clinic

The majority of the respondents 82(59%) reported that essential drugs were always available at the clinic, 2(1.4%) reported they never got some medications (fansidar), and a significant number of the 18(13.1%) reported that they sometimes bought these drugs. The latter statement corresponds to the findings by Tetui *et al.*, (2012) who stated that stock-outs are common occurrences especially in Ugandan public health facilities but disagrees with the same (Tetui *et al.*, 2012) who revealed that the availability of essential drugs is generally poor in Ugandan public health facilities. The availability of essential drugs and other materials was therefore found to have a significant influence on ANC attendance. Majority of the respondents 72(30%) that reported services offered in ANC included routine physical examination 72(30%), medications 60(25%), health education 40(17%) which are also included in Peter *et al.*, (2010) and these were specific services like provision of preventive treatment such as iron, folic acid, and SP, provision of information.

Other factors affecting ANC attendance

Nearly a half 48(48%) of the respondents reported that multiparous women do not need to attend ANC if they are feeling healthy while 40(40%) of them reported that multiparous women should attend ANC if they need to. This corresponds to Christopher *et al.*, (2013) who stated that multiparous women visited the clinic in later pregnancy, in some instances waiting up to the 9th month, their priority being to obtain the ANC card and they were less concerned about monitoring the progress of the pregnancy. In my own opinion, this is because they feel they know all about pregnancy and how to manage it. This is explained more by the respondents 23(92%) who reported that infor-

mation mothers have on ANC can help them in the subsequent pregnancies.

Nearly half of the respondents 46(46%) reported that they were handled well by the health providers while a significant figure of 10(10%) were handled harshly. The latter statement corresponds to a study by Christopher *et al.*, (2013) who stated that women feared being reprimanded by health care staff normally. Therefore, it is concluded that the good behaviour of the staff encourages ANC attendance and vice versa.

Nearly a half 50(50%) of the respondents reported that ANC should be attended in the 1st pregnancy, 32(32%) in the 2nd pregnancy, and a significant number of 16(16%) in all pregnancies. This agrees with the research study by King'oo *et al.*, (2015) who stated that ANC services are much more common for 1st pregnancies than subsequent pregnancies. The investigator's point of view is that this could be because they don't know much about pregnancy and its management in the first pregnancy and thus tend to attend ANC more at this time.

The challenge that affected ANC attendance as reported by the women (43, 18%) was a major lack of money, and this is well depicted by the number 37(15.4%) that reported transport costs as a challenge. This was in line with the study done by Pamela *et al.*, (2005) that revealed lack of transport, employment status as some of the situational factors influencing ANC initiation. This could be so because most of the women in the study area are housewives.

On-time, 10(4%) respondents reported that they didn't have enough time to attend ANC. This is in line with a research study by Zeine *et al.*, (2010) who stated that women in developing countries spent more time on their multiple responsibilities for the care of children. In addition to that, this study also found that respondents 16 (7%) reported too much workload at home as a challenge. This is because most of them were housewives and ran the daily activities in their homes.

The other challenges cited by the respondents were a long distance from ANC clinic 32(13%); harsh health service providers 8(3%); lack of enough support from husbands 22(9%); long waiting time at clinic 20(8.3%), 12(5%) reported segregation and discrimination and unavailability of some drugs at times 24(10%).

6 Conclusion

The majority of the respondents were between 25-29 years and the minority were ages 45- 49. Old women are poor attendees because they feel they already know about pregnancy and how to manage it. Nearly half of the respondents were Batooro because it's the dominant ethnicity in the area. Most of them were Catholics, married, housewives, attained a secondary level of education, and live in villages.

The ANC services offered in Kagote HCIII include; routine physical examination of a pregnant woman, testing for HIV and syphilis, health education, tetanus vaccination, administration of medications like folic acid, fefan, mebendazole, fansidar, and others like amoxicillin although at times there are stock-outs which discourage ANC attendance.

ANC attendance is affected by health service providers: harsh providers decrease it while well-behaved ones increase it; skilled, knowledgeable (cadre) and authoritative providers encourage attendance; an adequate number of them encourage attendance since the waiting time will be shorter and vice versa.

Pregnant women especially the multiparous already have information and experience about pregnancy and so they think it's not necessary to attend ANC unless they have a problem that they cannot handle. Order of pregnancy affects ANC attendance in such a way that women attend ANC for the first pregnancy well since they don't yet enough about it but for the subsequent pregnancies, their attendance decreases as explained in the former statement above.

The many challenges pregnant women face also discourage ANC attendance and these include lack of enough time, money, and support from their husbands, high transport costs, harsh health service providers, segregation and discrimination, too much workload at home, unavailability of drugs at times, long waiting time at clinic negative attitude by some family members, and long distance from the ANC clinic.

Recommendations

Basing on the study findings, to improve ANC attendance;

1. The MOH should continue sensitizing the people about the importance of ANC attendance.
2. Kagote HCIII should organize community outreaches to offer all the ANC services fully.

3. The health facility should collaborate with VHTs in encouraging pregnant women to attend ANC.

7 Limitations and Delimitations

Financial constraints for buying study materials and for other expenses during the research process. The investigator overcame this by requesting money from her parents to facilitate the research study.

Time allocated for the research project while other school activities go on, was limited. The investigator overcame this by budgeting her time appropriately between the research project and the school activities.

Some respondents most likely expected financial enticement. The investigator overcame this by explaining to the respondents that she was just a student in need of their help.

Dissemination of results

Original copy was submitted to Uganda Allied Health Examination Board.

One copy was submitted to Fort Portal School of Clinical Officers.

The investigator retained one copy.

8 ACKNOWLEDGEMENT

I acknowledge THE ALMIGHTY GOD for loving me and taking me through this research successfully, my supervisor Mr. Mpuhuuka Ezra for the guidance through this research study, the administration of Fort Portal School of Clinical Officers, and the in-charge Kagote HCIII for allowing me to research this health facility.

I also sincerely thank my parents- Mr. Luke Ouchokol and Mrs. Christine Ouchokol, my brothers – Omoding J, Inyalio M, Ouchokol M, Amunaun C, my uncle Odongo B and my sisters- Akol M, Asio F, Sana F, my best friend Nabukko P and all my friends, thank you for loving, supporting, guiding me in all and the prayers. May GOD richly bless you!

9 LIST OF ABBREVIATIONS

- AHSPR: Annual Health Sector Performance Report
 ANC : Antenatal Care
 DHS : Demographic and Health Survey
 EMHS : Essential Supplies and Health Supplies

FANC : Focused Antenatal Care
 GoU : Government of Uganda
 Gov't : Government
 HIV : Human Immunodeficiency Virus
 HSSIP : Health Sector Strategic Investment Plan
 IPTp : Intermittent Preventive Treatment
 ITNs : Insecticide Treated Nets
 MOH : Ministry Of Health
 NIH : National Institute of health
 PMTCT: Prevention of Mother -To -Child Trans-
 mission
 PPH : Post partum haemorrhage
 SP : Sulphadoxine- pyrimethamine
 SSA : Sub Sahara Africa
 US : United States
 WHO : World Health Organization

10 References:

- 1) Christopher P., Arantza M., Florence W., Nana A., Afrah, S. C., Lucinda M.T., Mary J. H., Abraham H., Harry T., Linda K., Peter O., & Robert P. (2013) Factors affecting ANC attendance: Results from Qualitative studies in Ghana, Kenya, and Malawi. PLOS ONE 8 (1): e53747. Doi 10.1371/journal.pone:0053747 <https://doi.org/10.1371/journal.pone.0053747> PMID:23335973 PMCID:PMC3546008
- 2) District planning unit- Kabarole 2010/ 2011 - 2012/ 2013.
- 3) Jennifer H., Jennifer JK., Laura O., Peter B., & Ron G. (2009). A systematic review of antenatal care programs to reduce infant mortality and its major causes in socially disadvantaged and care vulnerable. National Perinatal Epidemiology Unit, University of Oxford. Page 6- 8.
- 4) King'oo B. M. (2015) Factors affecting attendance to Antenatal care services in Kenya, the case study of Somali women in Eastleigh Nairobi County, Kenya.
- 5) MD Dairo & KE Owoyokun (2010) Factors affecting the utilization of antenatal services in Ibadan, Nigeria. <https://doi.org/10.4314/bjpm.v12i11.63387>
- 6) Moses T., Elizabeth K. E., Aloysius M., Raymond T., & Waiswa .P. (2012) Quality of antenatal care services in Eastern Uganda: implications of interventions. The Pan African Medical Journal 13.27 doi: 10.11604/ pamj. 2012. Page 1427
- 7) Nouf A. A., Ayman A.B., Sondos A. A., Zina A. z., Esraa A. A., & Osama S., B.(2016) Obstacles affecting antenatal care attendance. Results from a cross sectional study in Jeddah, Saudi Arabia page 213-219
- 8) Pamela L., Janis P., Trecia W., Sarnia C., Maynard W., & Teuila P. (2005). Factors affecting antenatal care attendance by mothers of Pacific infants living in New Zealand. The New Zealand Medical Journal. Volume 118 page 1- 10
- 9) Peter O. O., Anna M. V. E., Mary J. H., Evelyne S. S., Frank O.O., Kaendi M. M., John G . A., Sara B.C., Piet A.K., & Laurence S. (2010) Reproductive Health 7:1 page 5
- 10) Peter R. A., & Kenneth M. (2014) Influence of pregnancy perceptions on patterns of seeking antenatal care among women in reproductive age of Masaka district, Uganda . Tanzania Journal of health Research. Page 8-9 <https://doi.org/10.4314/thrb.v16i4.8> PMID:26891521
- 11) Simkhada B., Teijlingen E.R., Porter M., & Simkhada P (2008). Factors affecting the utilization of antenatal care in developing countries: systematic review of the literature <https://doi.org/10.1111/j.1365-2648.2007.04532.x> PMID:18197860
- 12) St. Mary's Midwifery Training School. (2013) Survey of factors affecting fourth ANC visits in Dr. Ambrosoli Memorial Hospital- Agago District.
- 13) Toan K T., Karin G., Hinh DN., Henry A., & Max P. (2012) Factors associated with adequacy in adequacy in rural and urban contexts. Results from two health and demographic surveillance sites in Vietnam.12:40 <https://doi.org/10.1186/1472-6963-12-40> PMID:22335834 PMCID:PMC3305637
- 14) Uganda Bureau of statistics (UBOS) & Macro International Inc. (2007) Uganda Demographic and Health Survey 2006. Calverton: UBOS and Macro International Inc.
- 15) World Health Organization. (2010) Packages of interventions for Family Planning, Safe Abortion care, Maternal, Newborn and Child Health Packages of Interventions https://www.who.int/pmnch/activities/jointactionplan/srhp_packages.pdf
- 16) Yang Y., Yushitoku Y., Harun R., & Junichi Sakamoto. (2010) factors affecting the utilization of antenatal care services among women in Kham district, Xiengkhouang Province Lao PDR. Journal of Medical Science; 72(1- 2):23- 33
- 17) Yifru B., & Asres B. (2014) Antenatal Care as a means of increasing birth in the health facility and reducing maternal mortality. A systematic review.24: 93- 104 <https://doi.org/10.4314/ejhs.v24i0.9S> PMID:25489186 PMCID:PMC4249212

18) Zeine A., Mikuzie W., & Shimeles O. (2015) Factors influencing Antenatal care utilization in Hadiya zone. 20(2): 75- 82 <https://doi.org/10.4314/ejhs.v20i2.69432> PMID:22434964 PMCID:PMC3275839