Knowledge, Attitude and Practices towards Prevention of Malaria among Pregnant Women aged 18-45 Years at Busibo Health Centre III, Lwengo District. A Cross-section Study.

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Abstract

Background:
The purpose of the study was to assess the knowledge, attitude, and practices toward the prevention of malaria among pregnant women aged 18-45 years at Busibo health center III, Lwengo district.

Methodology:
A cross-section study design was employed as a study design with a simple random technique as a sampling technique. Data were collected on a sample of 50 respondents using a semi-structured questionnaire written in the English language as a data collection tool; later analyzed manually by use of tally sheets and presented in frequency distribution tables and figures.

Results:
Overall results from practices towards malaria prevention among pregnant mothers showed that; 50% of the respondents had attended three ANC visits, 76% had treated mosquito bed nets, 61% reported that sometimes they use the mosquito bed nets, 54% they use of ITNs to prevent themselves from malaria infection, 70% maintain their mosquito bed nets by folding them every morning to prevent hoes and 88% always take IPTp.

Conclusion:
The study established that even though a significant number of pregnant mothers possessed fairly satisfactory knowledge, attitude, and practices towards malaria prevention but infrequent percentage number of pregnant mothers who were reluctant to uptake ANC and ITNs need extra interventions for equitable malaria prevention that will close the research gap.

Recommendation:
Busibo Health Centre III, Lwengo should intensively increase the awareness interventions about the dangers of untimely ANC visits and irregular use of ITNs through; health education of mothers during antenatal visits and community outreaches to implement better behavior changes that will close the research gap.

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1 Background of the study

In 2019, there were an estimated 229 million cases of malaria worldwide; 11 million pregnant women in sub-Saharan Africa exposed to malaria infections delivered about 872 000 children with low birth weight (16% of all children with low birth weight in these countries), with West Africa having the

highest prevalence of low birth weight children due to malaria in pregnancy (WHO 2020).

In Cameroon, Malaria prevalence was highest in rural areas (32%) and the Centre (47%). Children and pregnant women are most vulnerable to malaria. However, only 60% of pregnant women slept under an ITN the night before the survey. Only 32% of pregnant women received 3 doses of IPTp, but this represented an increased rate of uptake from 12% in 2011 (National Institute of Statistics Cameroon & ICF, 2020).

The estimated pooled prevalence of malaria among pregnant women in Ethiopia was 12.72%. In sub-group analysis, the prevalence of malaria showed a significant variation between symptomatic and symptomatic cases, which was 7.83% and 17.79% respectively (Yaleayker et.al, 2019).

A report from the U.S President's Malaria Initiative Democratic Republic of Congo (2020), revealed that DRC accounts for an estimated 11 percent of all malaria cases in sub-Saharan Africa; approximately 97 percent of the population lives in zones with stable malaria. Children and pregnant women take the higher percentages; whereby it is estimated that 20% of the pregnant women are at risk of having malaria infections due to low uptake of ITNs with only 52% of the pregnant mothers regularly using ITNs.

In Uganda, the FY 2017/18 report indicated that there was 228,371 out-patient department malaria in pregnancy cases down from 2,904,949 in the FY 2016/17. The Inpatient Department malaria in pregnancy cases reduced from 88,960 cases in FY2016/17 to 2017/ 18 (MoH, 2019). The specific objectives were to assess the; knowledge towards prevention of malaria among pregnant women aged 18-45 years, attitude towards prevention of malaria among pregnant women aged 18-45 years, and practices towards prevention of malaria among pregnant women aged 18-45 years.

2 Methodology

Study design

The study employed a descriptive cross-section design to generate possible ideas which were used to formulate a realistic and testable hypothesis on quantitative data.

Study area

Busibo health center III is located in Bukoto county, Lwengo district (central region) which was approximately 199.2 km from Kampala city of Uganda. The facility had got several departments such as; outpatient, inpatient, ART, Laboratory, and antenatal care clinic. The health center received an average of 100 patients per day. The justification for this place was that the facility was accessible and the possibility of getting the required sample was high.

Study population

This was comprised of pregnant women aged 18-45 years at Busibo Health center III. The reason as to why the study only targeted pregnant women was because they were more prone to malaria infection which increased their risk of being anemic.

Sample size determination

The sample size was calculated using QR/O (Burton, 1965)

Where;

Q= total number of days spent in data collection

R= Maximum time taken by the interviewer per day

O= Maximum time taken by the interviewer.

Therefore,

R= 5 Hours

Q=5 days

O=1/2 Hours

QR/O= 5X5/1/2

25x2= 50 Respondents

Therefore, the sample size for this study was 50 respondents.

Study variables

Dependent variable

The dependent variable was malaria prevention in pregnancy.

Independent variables

Knowledge, attitude, and practices were the independent variables.

Sampling technique

A simple random sampling technique was used to select respondents. This study design was preferred because the researcher was able to select a sample size that had an unbiased representation of the population.

Selection criteria

Inclusion criteria

Inclusion criteria composed of pregnant women aged 18-45 years eligible for the study after consenting.

Exclusion criteria

All non-consenting pregnant women were excluded from the study.

Data collection tool

Data collection refers to the precise, systematic gathering of information relevant to the research purpose or the specific objectives, questions, or hypotheses of a study. Therefore, semi-structured questionnaires consisting of both closed and open-ended questions written in English and later translated into the local language (Luganda) were used to collect primary data from pregnant women. The researcher considered a questionnaire as the most convenient way of collecting data from respondents because it was easy for the researcher to administer and obtain data within a short time from a large number of respondents.

Data collection procedure

Before collecting any information the researcher had to seek permission from the in-charge of Busibo health center III to conduct the study from the facility and when permission was granted; two research assistants were trained on the subject in question and the data collection procedures they used. Before conducting the process, the researcher and the research assistant introduced themselves and explained the purpose of the study to the respondents. The researcher proceeded to the collection of data from respondents whereby numerical numbers from 1-10 were written on papers and given to the respondents to pick; those who picked number 3 were interviewed first after consenting and the process continued until the required sample size was attained. The respondents were asked questions following the designed questionnaire to avoid being biased and each respondent was interviewed for 40-50 minutes.

Pretesting the questionnaire

The questionnaire was pre-tested in Mbirizi St Francis Health Centre III and administered to a group of 10 respondents with similar characteristics before the main study for purposes of checking if the results given by the respondents were consistent and also checked for ambiguous research questions. Results from the pilot study were not included in the final study.

Data management

Data were managed by the researcher only to ensure that confidentiality and security were maintained. Data management also included data editing before leaving the area of study to ensure that there were no mistakes or areas left blank and if any were found they were corrected before leaving the study area. Data were managed and stored in the computer.

Quality control

Questions from the questionnaire were structured understandably to enable all respondents to interpret the questions without any bias to attain responses that answered the research questions.

Two research assistants were trained and closely supervised on how to correctly administer the data collection instruments to enhance the validity of the data collected. The questionnaires were screened for completeness and legibility.

Standard Operating Procedures for COVID 19 were strictly maintained during the data collection period to curb the spread of the coronavirus.

3 Data analysis and presentation

Data were analyzed manually by use of tally sheets and entered in excel computer program Microsoft excel to generate tables, graphs, and pie charts for easy presentation and interpretation of study findings.

Ethical considerations

An introductory letter was obtained from the Kampala School of Health Sciences department of research. Then the letter was taken to the charge of Busibo Health center III where the study was conducted from. When permission was granted; the researcher and her assistants introduced themselves before conducting the study. Respondents received an explanation of the study before enrolment and only those who consent to participate were involved. Respondents were free to withdraw from the study at any time and strict confidentiality was observed. Codes were used to identify the respondents instead of full names. The respondent's participation was voluntary.

4 Study Findings

5 Demographic data

From the table above, more than half of the respondents (54%) were within the age bracket of 25-31 years whereas the least (6%) were within the age bracket of 39-45 years.

Based on study findings, the majority of the respondents (86%) were married whereas the minority (2%) were widowed.

Table 1. Shows the distribution of respondents according to demographic data (N=50)

Response	Frequency(f)	Percentage (%)
Age (years)		
18-24	7	14
25-31	27	54
32-38	13	26
39-45	3	6
Total	**50**	**100**
Marital status		
Single	4	8
Married	43	86
Divorced	2	4
Widowed	1	2
Total	**50**	**100**
Religion		
Protestant	8	16
Catholic	22	44
Muslim	3	6
Others	17	34
Total	**50**	**100**
Tribe		
Muganda	26	52
Mukiga	6	12
Munyankole	9	18
Munyarwanda	2	4
Others	7	7
Occupation		
House wife	45	90
Public servant	1	2
Self employed	4	8
Total	**50**	**100**
Education levels		
Never went to school	4	8
Primary	17	32
Secondary	27	54
University/ college	3	6
Total	**50**	**100**
Gestation age		
1-3 months	2	4
4-6 months	34	68
7-9 months	14	28
Total	**50**	**100**

(Primary data, 2022)

The study also revealed that most of the respondents (44%) were catholic by religion whereas the least (6%) were Muslim by religion.

Furthermore, most of the respondents (52%) were Baganda by tribe whereas the least (2%) were Banyarwanda by the tribe.

Findings related to occupation showed that almost all respondents (90%) were housewives whereas the least (2%) were public servants.

The study showed that more than half of the respondents (54%) had attained a secondary level of education whereas the least (6%) had attained a university/ college level of education.

Results from the study showed that the majority of the respondents (68%) were within the gestation period of 4-6 months whereas the least (4%) were within the gestation age period of 1-3 months.

6 Knowledge towards malaria prevention among pregnant mothers aged 18-45 years

From the figure above, majority of the respondents (94%) had ever heard about malaria in pregnancy whereas the minority (6%) had never heard about malaria in pregnancy.

From the table above, majority of respondents (64%) obtained information about malaria in pregnancy from health workers whereas the least (8%) reported other sources like friends, neighbors and husbands.

From the table above, majority of respondents (74%) knew infected mosquito bites as the cause of malaria whereas the minority (2%) reported that malaria is caused by insects.

From the figure above, more than half of respondents (58%) reported maternal death as the consequence of malaria to pregnant women whereas the least (4%) they didn't know the consequences of malaria to pregnant women.

From the figure above, half of the respondents (50%) knew fansidar as the medicine given to pregnant women during antenatal care in order to prevent malaria whereas the least (6%) they didn't know the medicine.

From the table above, most of the respondents (52%) reported use of insect treated bed nets as the malaria preventive measure whereas the least (10%) reported taking herbal medicine as the malaria preventive measure.

A ttitude towards malaria prevention pregnant women aged 18-45 years

From the figure above, majority of the respondents (80%) agreed that malaria among pregnant women can be a great public concern whereas the minority (20%) disagreed.

From the table above, majority of respondents (92%) agreed that going for antenatal care visits it is important whereas the minority (8%) disagreed.

From the figure above, more than half of the respondents (70%) preferred to sleep under insecticide-treated mosquito nets whereas the least (30%) didn't prefer to sleep under treated mosquito nets.

From the figure above, more than half of the respondents (70%) preferred to sleep under insecticide-treated mosquito nets whereas the least (30%) didn't prefer to sleep under treated mosquito nets.

From the table above, most of the respondents (33%) reported that they get challenges of excessive heat as the reason why they never preferred to sleep under treated mosquito nets whereas the least (10%) noted that they get challenges of itching.

From the table above, more than half of respondents (54%) reported that they feel normal when they sleep under treated mosquito nets whereas the least (46%) reported that they feel bad when they sleep under treated mosquito nets.

7 Practices towards malaria prevention pregnant women aged 18-45 years.

From the figure above, half of the respondents (50%) had attended three antenatal care visits whereas the least (8%) had attended one antenatal care visit.

From the figure above, majority of respondents (76%) they had treated mosquito bed nets whereas the least (24%) they didn't have treated mosquito bed nets.

From the table above, the majority of respondents (61%) reported that sometimes they use the mosquito bed nets whereas the least (5%) reported that they don't use the mosquito bed nets.

From the table above, more than half of respondents (54%) reported that they use insecticide-treated mosquito nets to prevent themselves from

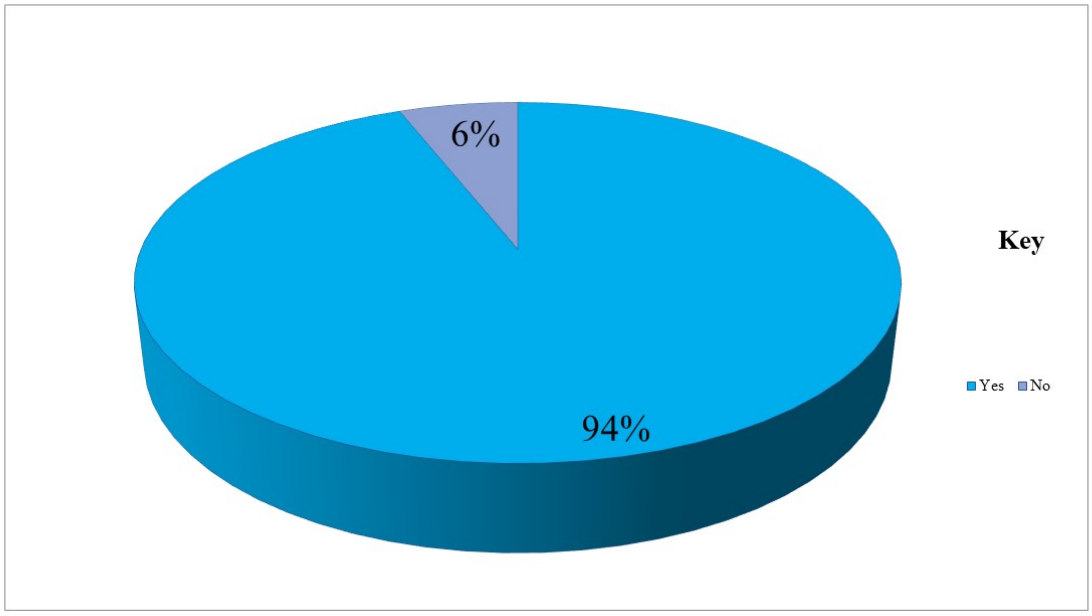

Figure 1. Shows the distribution of respondents according whether they had ever heard about malaria in pregnancy (N=50)

Table 2. Shows the distribution of respondents according to where they obtained information about malaria in pregnancy (N=47)

Response	Frequency (f)	Percentage (%)
Relatives	6	13
Health workers	30	64
Media	7	15
Others	4	8
Total	**47**	**100**

(Primary data, 2022)

Table 3. Shows the distribution of respondents according to their knowledge about what causes malaria (N=50)

Response	Frequency (f)	Percentage (%)
Infected mosquito bites	38	74
Insects	1	2
Dirty water	2	4
I don't know	2	4
Others	7	16
Total	**50**	**100**

(Primary data, 2022)

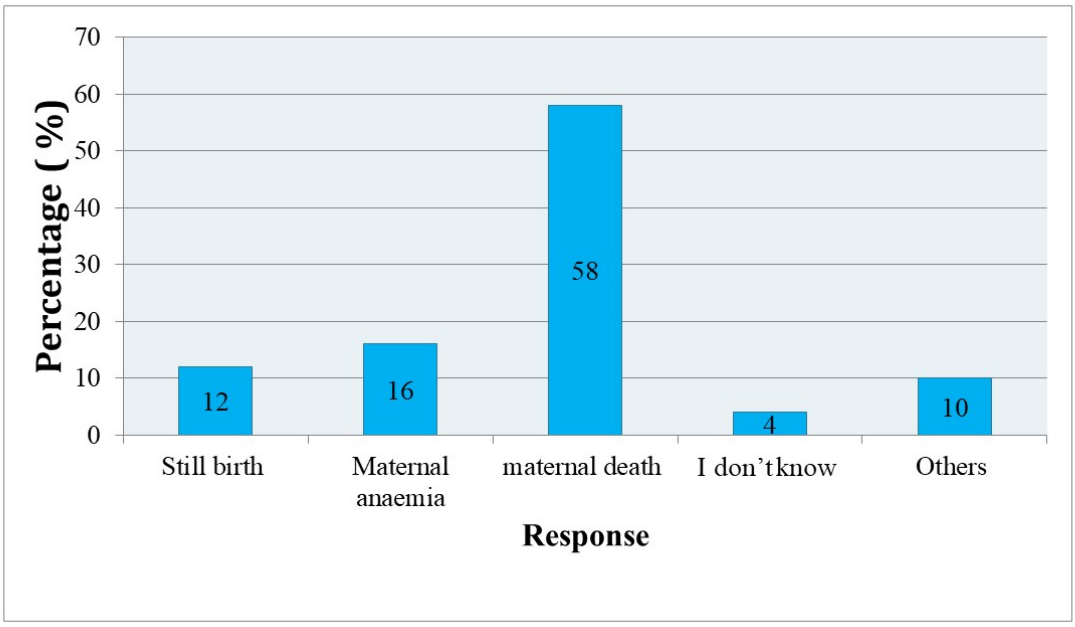

Figure 2. Shows the distribution of respondents according to their knowledge about consequences of malaria/ untreated malaria to pregnant women

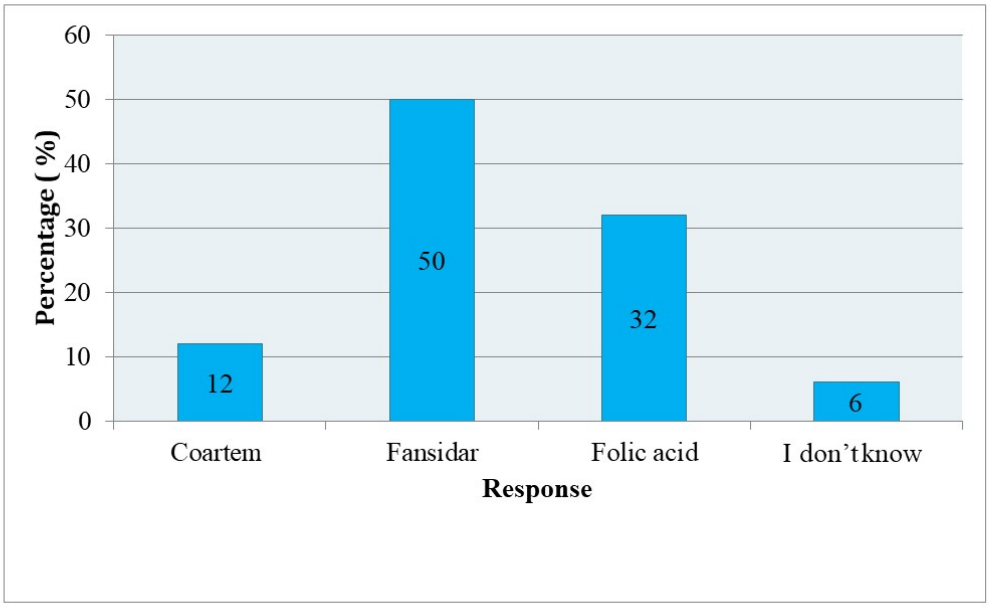

Figure 3. Shows the distribution of respondents according to their knowledge about the medicine given to pregnant women during antenatal care in order to prevent malaria

Table 4. Shows the distribution of respondents according to their knowledge about malaria preventive measures (N=50)

Response	Frequency (f)	Percentage (%)
Use of insect treated bed nets	26	52
Clearing bushes	11	22
Taking herbal medicine	5	10
Others	8	16
Total	**50**	**100**

(Primary data, 2022)

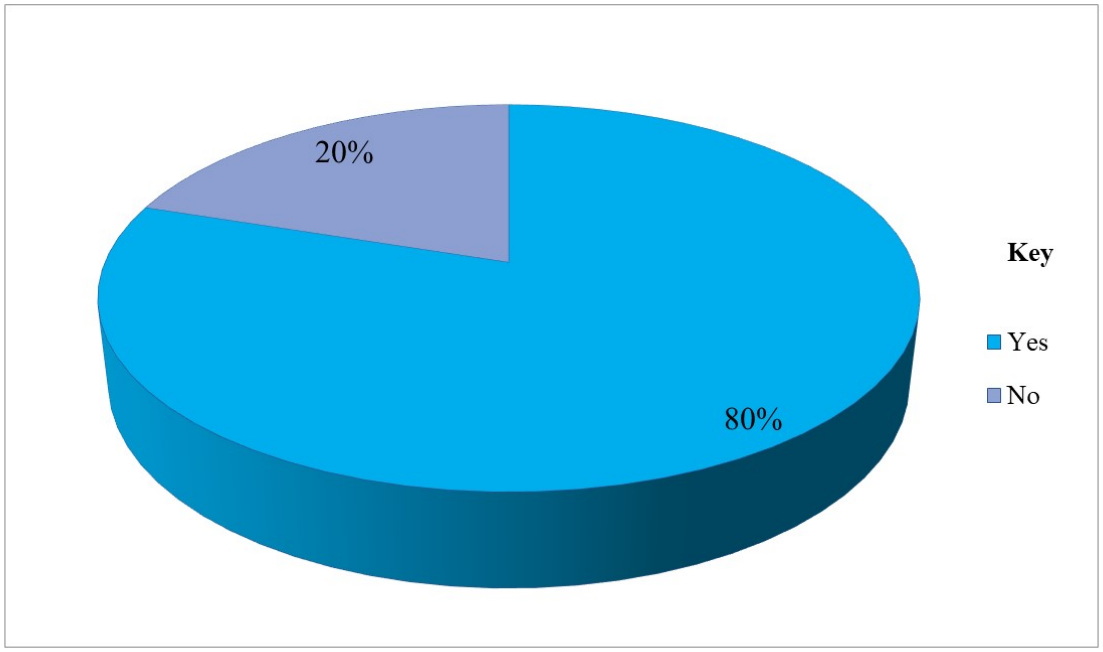

Figure 4. Shows the distribution of respondents according whether they think malaria among pregnant women can be a great public concern (N=50)

Table 5. Shows the distribution of respondents according to whether they think going for antenatal care visits is important (N=50)

Response	Frequency (f)	Percentage (%)
Yes	46	92
No	4	8
Total	**50**	**100**

(Primary data, 2022)

Table 6. Shows the distribution of respondents who agreed that going for antenatal care visits is important according to whether think a pregnant woman can benefit from taking Intermittent Preventive Treatment (N=46)

Response	Frequency (f)	Percentage (%)
Yes	44	96
No	2	4
Total	**46**	**100**

(Primary data, 2022)

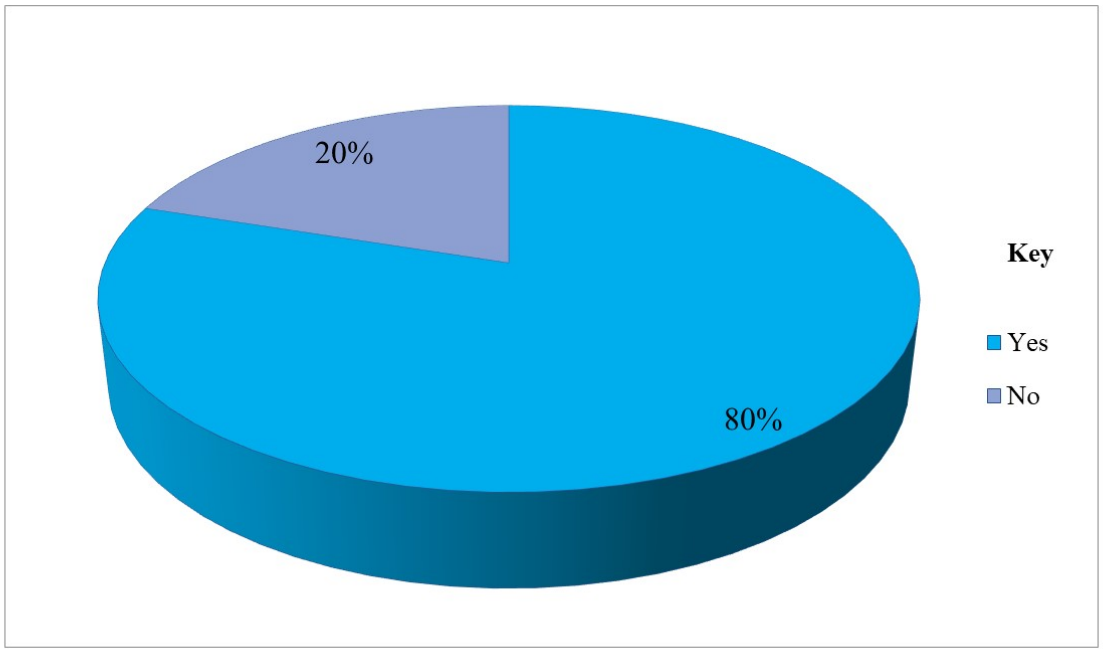

Figure 5. Shows the distribution of respondents according whether they prefer to sleep under Insecticide Treated Mosquito Nets (N=50)

Table 7. Shows the distribution of respondents according to the reason as to why they never preferred under treated mosquito nets (N=30)

Response	Frequency (f)	Percentage (%)
Unsuitable accommodation to hang the nets	8	26
I get challenges of excessive heat	10	33
Nothing much I don't like it	9	30
I get challenges of itching	3	10
Total	**30**	**100**

(Primary data, 2022)

Table 8. Shows the distribution of respondents according to how they feel when they sleep under treated mosquito nets (N=50)

Response	Frequency (f)	Percentage (%)
Normal	27	54
Bad	23	46
Total	**50**	**100**

(Primary data, 2022)

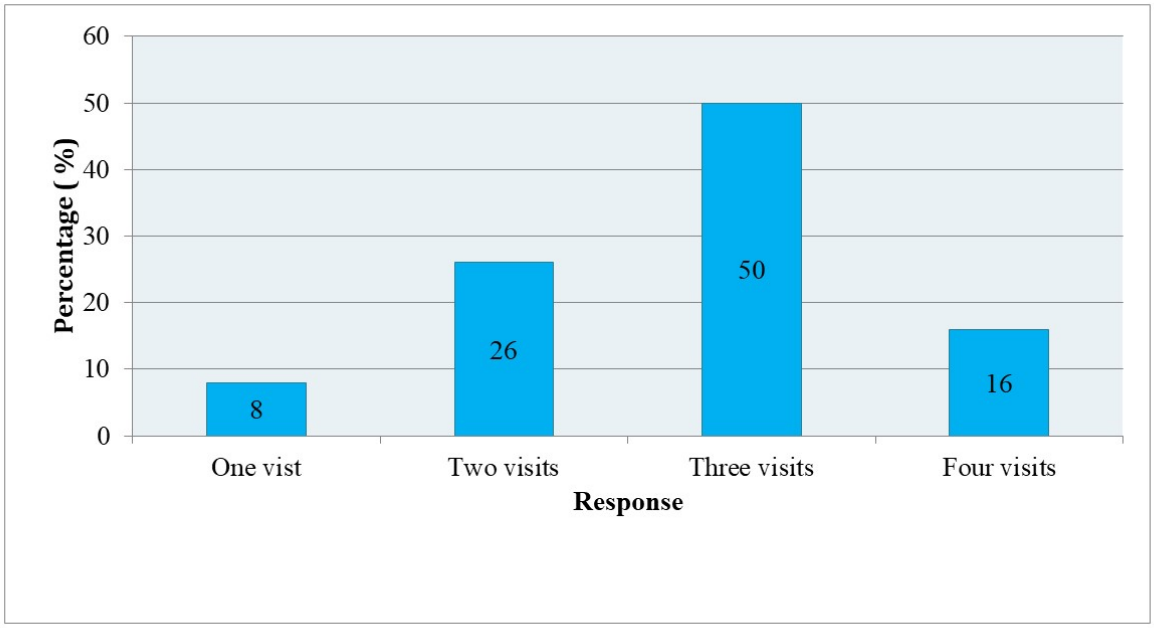

Figure 6. Shows the distribution of respondents according to the number of ANC visits they had ever attended.

Table 9. Shows the distribution of respondents who had mosquito bed nets according to how often they use the mosquito bed nets (N=38)

Response	Frequency (f)	Percentage (%)
Always	13	34
Sometimes	23	61
Never	2	5
Total	**38**	**100**

(Primary data, 2022)

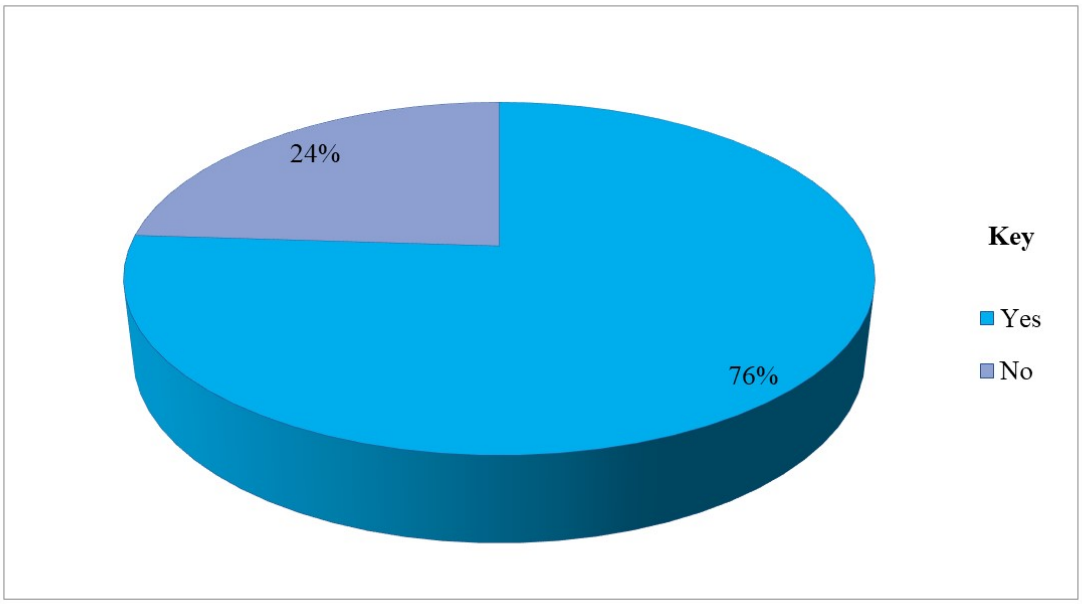

Figure 7. Shows the distribution of respondents according to whether they had a treated mosquito bed net (N=50)

Table 10. Shows the distribution of respondents according to how do they prevent selves from malaria infection (N=50)

Response	Frequency (f)	Percentage (%)
Use of Insecticide Treated Mosquito Nets	27	54
Removing stagnate water	11	22
Clearing bushes	9	18
Others	3	6
Total	**50**	**100**

(Primary data, 2022)

malaria infection whereas the least (6%) reported other ways such spraying and switching off lights early.

From the table above, majority of respondents (70%) maintain their mosquito bed nets by folding them every morning to prevent hoes whereas the minority (2%) maintain their mosquito bed nets reported frequent washing.

From the figure above, the majority of the respondents (88%) reported that they always take intermittent preventive treatment whereas the minority (12%) reported that they don't always intermittent preventive treatment.

Limitations of the study and their solutions

The researcher faced the challenge of uncooperative respondents who were not willing to either respond or provide rightful information; the researcher solved this by explaining the importance of the study to the respondents.

The researcher also faced the challenge of heavy rains which interrupted the turn-up of mothers to the health facility and was dealt with by extending the number of days of data collection to capture a significant number of respondents needed.

Tight school programs interfered with the exercise and the researcher solved this by effectively budgeting the little time available.

The coronavirus pandemic interrupted the data collection process, this was solved by adding more five days for data collection to obtain data from a few respondents on each day of data collection without exposing them to risks of Coronavirus and standard operating procedures were significantly implemented.

Table 11. Shows the distribution of respondents according to how they maintain their mosquito bed nets (N=50)

Response	Frequency (f)	Percentage (%)
Frequent washing	1	2
Reducing tension at sides of net	7	14
Folding them every morning to prevent hoes	35	70
Others	7	14
Total	**50**	**100**

(Primary data, 2022)

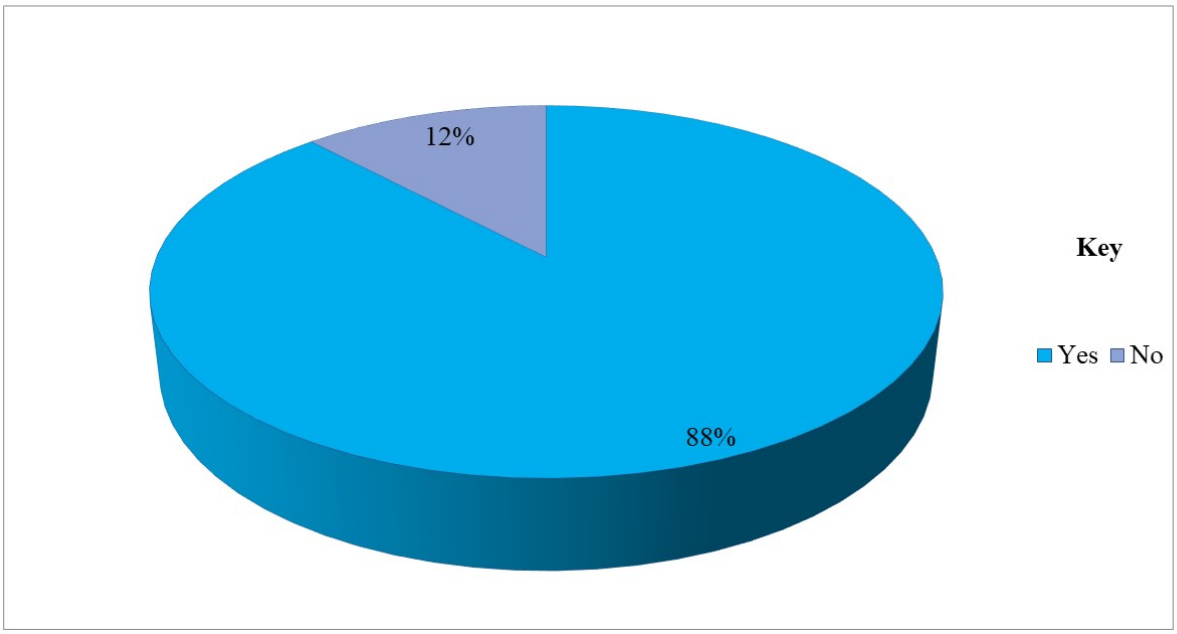

Figure 8. Shows the distribution of respondents according to whether they always take intermittent preventive treatment (N=50)

8 Discussion, Conclusion and Recommendations:

9 Discussion of findings

Knowledge of malaria prevention among pregnant mothers aged 18-45 years

From findings that were obtained from 50 respondents, the majority of the respondents (94%) had never heard about malaria in pregnancy. This signifies that a considerable number of mothers were aware of the study. The study findings were in agreement with Terefe *et al.,* (2015), where results showed that (97.6%) of the pregnant women had ever heard about malaria.

The study also showed that more than half of respondents (64%) obtained information about malaria in pregnancy from health workers. This could be a result of the fact health workers provide easy access to detailed information about malaria than other sources. This was inconsistent with a study that was done by Habimana *et al.* (2019), where results showed that radio was the commonest source of information among the respondents (97.7%).

Concerning the causes of malaria, the majority of respondents (74%) knew infected mosquito bites as the cause of malaria. This could probably be attributed to the fact that most of the study participants had ever attained any level of education and therefore, the probability of being responsive about the causes of malaria was expected to be away from average. The current findings were in

agreement with Vincent & Ajero (2019), where results in regards to women's knowledge about what causes malaria revealed that 77.5% of respondents knew mosquito bite as the cause.

The study further revealed that more than half of respondents (58%) reported maternal death as a consequence of malaria in pregnant women. This reveals that an average number of participants were aware of the consequences of malaria. This is inconsistent with Yitayal & Azeb, (2018), where 86.8% of participants listed abortion as a complication of malaria in pregnancy.

From study findings, half of the respondents (50%) knew fansidar as the medicine given to pregnant women during antenatal care to prevent malaria. This could be attributed to the fact that an outstanding number of the mothers had ever taken fansidar and therefore, were most likely to be aware of the medicine. The results were in line Djam et al. (2018), where the majority of the women (88.9%) knew that Fansidar (SP) was the medicine given to pregnant women.

Most of the respondents (52%) reported the use of insect-treated bed nets as malaria prevention. This was a result of the fact that most of the mothers had ever obtained information from different sources and therefore, such sources equipped them with basic knowledge about preventive methods for malaria. Findings differ from the results of the study that was done by Chukwurah et al., (2016), where (30%) of the women noted taking herbs as a measure of prevention.

Attitude towards malaria prevention among pregnant mothers aged 18-45 years

The study showed that the majority of the respondents (80%) agreed that malaria among pregnant. Women can be a great public concern. This implies that study participants were afraid of the consequences that result of malaria infection. The study results were in line with Ifeoma *et al.* (2019), where results revealed that a large proportion (68.2%) of the respondents agreed that MIP is a public serious health risk.

In addition, the majority of respondents (92%) agreed that going for antenatal care visits is important. This reveals that mothers had perceived positive health-seeking behaviors. This was consistent with findings that were obtained from a study that was done by Ivan *et al.,* (2017), where the majority of the study participants (90.1%) agreed that antenatal care visits are important.

Nearly all respondents (94%) agreed that pregnant women can benefit from taking intermittent preventive treatment. This could be attributed to the fact that study participants had perceived malaria to be a great public threat and therefore, they had to take IPTp for better preventive measures. The study results were in line Lora *et al.,* (2018), study results indicated that (78%) agreed that pregnant women can benefit from taking IPTp.

The study revealed that more than half of the respondents (70%) preferred to sleep under insecticide-treated mosquito nets. This denotes that a significant number of participants possessed a positive attitude towards malaria. This is in agreement with Ayodeji *et al.,* (2015), where results showed that 66% of pregnant women always preferred to sleep under ITNs.

The study revealed that more than half of respondents (54%) reported that they feel normal when they sleep under treated mosquito nets. This is evidenced by the fact that a substantial number of participants were not feeling comfortable when they sleep under ITNs. The study results were in agreement with Adibe *et al.,* (2017), where results revealed that (66.2%) of the respondents reported that they feel normal when they sleep under ITNS.

Practices towards malaria prevention among pregnant mothers aged 18-45 years

The study showed that half of the respondents (50%) had attended three antenatal care visits. This shows that an average number of mothers had tried to utilize ANC services. The study results were inconsistent with Anto *et al.,* (2019), where (42.9%) of the mothers made five to seven visits.

Based on study findings, the majority of respondents (76%) had treated mosquito bed nets. This could be a result of the easy accessibility of ITNs. The study results were in line with Lora *et al.*, (2018), where 72% of pregnant women had a bed net in their houses.

However, the majority of respondents (61%) reported that sometimes they use mosquito bed nets. This could be attributed to some reasons the study is yet to reveal. The study results were in disagreement with Runsewe *et al.,* (2018), where (73.1%) of the respondents had never slept under a bed net for the reason, they either never thought of it or did not consider it important.

The study showed that more than half of respondents (54%) reported that they use insecticide-treated mosquito nets to prevent themselves from

malaria infection. This visibly shows that participants tried to follow malaria preventive measures. The study results were consistent with Habimana *et al.,* (2019), where 70.2% of the women used ITNs to prevent themselves from malaria infection

Results from the study revealed that the majority of respondents (70%) maintain their mosquito bed nets by folding them every morning to prevent hoes. This specifies that mothers were properly sensitized even though they regularly slept under ITNs. Findings from the study were in line with Ifeoma *et al.,* (2019) where 60% of the mothers reported that they fold the nets every morning to prevent hoes.

The majority of the respondents (88%) reported that they always take intermittent preventive treatment. This is evidenced by the fact that most of the mothers were utilizing ANC visits and therefore were expected to have had intermittent preventive treatment. This is inconsistent with a study that was done by Chukwurah *et al.,* (2016), where results showed that SP was taken once for malaria prevention during pregnancy by (75%) of the women.

10 Conclusion

Given the findings that were obtained from the study, the following conclusions were drawn by the researcher:

Regarding participants' knowledge of the prevention of malaria in pregnancy, 94% of the respondents had ever heard about malaria in pregnancy, 64% obtained information about malaria in pregnancy from health workers, 74% knew infected mosquito bites as the cause of malaria, 58% knew maternal death as the consequence of malaria to pregnant women, 50% knew fansidar as the medicine given to pregnant women during antenatal care to prevent malaria and 52% knew the use of insect treated bed nets as a malaria preventive.

It was also discovered that participants had a positive attitude towards the prevention of malaria because 80% of the respondents agreed that malaria among pregnant women can be a great public concern, 92% agreed that going for antenatal care visits is important, 94% agreed that pregnant women can benefit from taking intermittent preventive treatment, 70% preferred to sleep under insecticide-treated mosquito nets and 54% reported that they feel normal when they sleep under treated mosquito nets.

The study also revealed that a significant number of pregnant mothers were reluctant to uptake ANC and ITNs, generally, mothers had fairly practices towards the prevention of malaria as 50% of the respondents had attended three antenatal care visits,76% had treated mosquito bed nets,61% reported that sometimes they use the mosquito bed nets, 54% reported that they use insecticide-treated mosquito nets to prevent themselves from malaria infection, 70% maintain their mosquito bed nets by folding them every morning to prevent hoes and 88% they always take intermittent preventive treatment.

Conclusively, the study established that even though a significant number of pregnant mothers possessed fairly satisfactory knowledge, attitude, and practices towards the prevention of malaria in pregnancy, a significant percentage of pregnant mothers were reluctant to uptake ANC and ITNs need extra intervention.

Recommendations:

The researcher strongly recommended that MoH should implement continuous strategic interventions including health awareness and educational programs, monitoring and evaluation in regards to equitable access to ITNs, regular uptake of ITNs, and ANC to attain 2030 malaria preventive goals.

The management of Busibo Health Centre III, Lwengo district should increase the awareness interventions about the benefits of completing ANC visits and regular use of ITNs through; health education of mothers during antenatal visits and community outreaches.

The study further recommends additional studies to identify more factors affecting the utilization of insecticide-treated mosquito nets and ANC among pregnant mothers to identify more solutions.

11 Acknowledgment:

I would like to thank the almighty God for the sufficient grace which has sustained me all this far.

Hearty thanks go to my supervisor, Mr. Mubangizi Prosper for the commendable work done supporting and guiding me tirelessly during the academic struggle, for the supervision of research I couldn't ask for a better team, you have been superlative. May God richly bless you.

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Let me extend my heartfelt thanks to the Director Mr. Kiyimba Frank, the principal, Mr. Mubangizi Prosper, the administration and staff of Kampala school of health sciences for the ultimate effort exhibited in nurturing me to be the kind I am today, you have been a masterpiece of rectitude.

List of Abbreviation.

ANC: Antenatal Care

FY: Financial Year

HCWs: Health Care Workers

ICF: International Classification of Functioning

IPTp: Intermittent Preventive Treatment

ITNs: Insecticide Treated Mosquito Nets

LLIN: Long Lasting Insecticidal Nets

MIP: Malaria in Pregnancy

MoH: Ministry of Health

SP: Sulfadoxine Pyrimethamine

UAHEB: Uganda Allied Health Examination Board

UDHS: Uganda Demographic and Health Survey

WHO: World Health Organization

Definition of Key Terms

Anaemia: Is defined by WHO, as hemoglobin (Hb) level less than 11g/dl.

Attitude: Predisposition of an individual to evaluate some symbol or object or aspect of her world favorably or unfavorably.

Intermittent Preventive Treatment: A public health intervention aimed at treating and

preventing malaria episodes in infants (IPTi), children (IPTc), and pregnant women (IPTp).

Knowledge:

Refers to the extent of exposure to malaria prevention.

Malaria:

An infectious disease characterized by cycles of chills, fever, and sweating, caused by a protozoan of the genus Plasmodium in blood cells, which is transmitted to humans by the bite of an infected female anopheles mosquito.

Maternal mortality:

Refers to the death of a woman during pregnancy or within 42 days of termination of pregnancy (delivery or abortion) Irrespective of the site or aggravated by pregnancy or duration of pregnancy, from any cause related to management but excluding accidental incidental causes.

Practice:

This is the usual action, habit, manner or the routine of malaria prevention.

12 References:

1) Adibe Ogochukwu Maxwell, Ebere Emilia Ayogu, Nneka Uchenna Igboeli, AbdulMuminu Isah (2017). Attitudes and self-practices of pregnant women towards malaria prevention and control in Nigeria; Journal of Applied Pharmaceutical Science; Vol. 7 (05), pp. 136-141.

2) Anto Francis, Ibrahim Harunab Agongo, Victor Asoala, Awini Elizabeth, Abraham Rexford Oduro (2019). Intermittent Preventive Treatment of Malaria in Pregnancy: Assessment of the Sulfadoxine-Pyrimethamine three-dose policy on birth outcomes in Rural Northern Ghanahttps://doi.org/10.1155/2019/6712685PMid:31275401 PMCid:PMC6582795 Journal of Tropical Medicine, Vol. 2019, 10 page.

3) Ayodeji M. Adebayo, Oluwaseun O. Akinyemi, Eniola O. Cadmus (2015). Knowledge of malaria prevention among pregnant women and female caregivers of under-five children in rural of Southwest Nigeria; peer J,Vol. .3

4) Chukwurah N., Josephine, Idowu T. Emmanuel, Adeniyi K. Adeneye, Oluwagbemiga O. Aina, Philip U. Agomo, Adetoro O. Otubanjo (2016). Knowledge, attitude and practice on malaria prevention and sulfadoxine pyrimethamine utilization among pregnant women in Badagry, Lagos State, Nigeria. Malaria World Journal, Vol. 7, No. 3

5) Djam Chefor Alain, Sylvester Ndeso Atanga, Marcelus U. Ajonina, Ndale N. Wozerou (2018). Assessing knowledge of pregnant women on malaria and its prevention with in the South West Region, Cameroon; IOSR Journal of Nursing and Health Science (IOSR-JNHS), Vol.7, Issue 6. VIII. (Nov.-Dec.), 78-85 PP

6) Habimana Amos, Gikunju Joseph, Mag Dennis (2019). Knowledge and preventive practices of

malaria among pregnant women in Huye district Southern province, Rwanda; Int J Community Med Public Health. Vol.7. no.6, 2042-2050pphttps://doi.org/10.18203/2394-6040.ijcmph20202450

7) Ifeoma P. Okafor, ChinonsoEzekude, Esther O. Oluwole,Olanrewaju O. Onigbogi (2019).Malaria in pregnancy: A community based study on the knowledge, perception, and prevention among Nigerian women; Journal of Family Medicine and Primary Care, vol. 8:1359-64pp.https://doi.org/10.4103/jfmpc.jfmpc_295_18PMid:31143721 PMCid:PMC6510088

8) National Institute of Statistics Cameroon and ICF (2020). 2018 Cameroon DHS Summary Report. Rockville, Maryland, USA: NIS and ICF.

9) Taremwa M., Ivan, Scholastic Ashaba, Harriet O. Adrama, Carlrona Ayebazibwe, Daniel Terefe G. Fuge, Samuel Y. Ayanto, and Fiseha L. Gurmamo (2015). Assessment of knowledge, attitude and practice about malaria and ITNs utilization among pregnant women in Shashogo District, Southern Ethiopia; Malaria Journal; vol. 14, no. 235, (2015) 14:235https://doi.org/10.1186/s12936-015-0755-7PMid:26040464 PMCid:PMC4475320

10) U.S president's malaria initiative Democratic Republic of Congo (2020). Malaria operational plan FY 2020

11) UBOS &ICF (2017). Uganda Demographic and Health Survey 2016: Key indicators report. Kampala; UBOS and Calverton: Maryland

12) Vincent, C. C. N & Ajero C. M. U (2019). Knowledge and practice of malaria prevention/control among pregnant women in imo state university teaching hospital (imsuth) orlu, Imo state, Nigeria; open access journal of nursing; vol. 2, issue 1

13) Yalewayker Tegegne, Daniel Asmelash, Sintayehu Ambachew, Setegan Esthetic, Ayenew Addisu and Ayalew (2019). The prevalence of malaria among pregnant women in Ethiopia: A systematic review and meta data analysis; Journal of parasitology research, patient Departmentvol.2019https://doi.org/10.1155/2019/8396091PMid:31186950 PMCid:PMC6521389

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