FACTORS INFLUENCING QUALITY OF LIFE AMONG PREGNANT MOTHERS AT ANAKA GENERAL HOSPITAL, NWOYA DISTRICT – A CROSS-SECTIONAL STUDY.

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ABSTRACT.

Background:
Globally, pregnancy affects the quality of life of women, and this affects maternal and infant health. In Uganda, 85% of maternal deaths are due to poor quality of life during pregnancy. The purpose of the study was to assess the factors influencing the quality of life among pregnant mothers at Anaka General Hospital, Nwoya District.

Methodology:
It was a descriptive cross-sectional study that utilized quantitative methods. 44 pregnant mothers were selected using a simple random sampling method. A structured questionnaire was used to collect data involving both open and closed-ended questions. The data collected was arranged in tables, pie charts, and graphs.

Results:
In the study,28(63.6%), of the respondents were aged 18 to 25 years, and 34(77.3%) were unemployed. 33(75%) had had 1 to 3 pregnancies, and 34(77.3%) reported that pregnancy drained their energy or influenced the quality of their lives. However, the majority, 36(81.8%) reported that the health workers were friendly, 23(52%) reported that the facilities from where they received care had equipment, and 33(75%) reported that the facilities were clean. Furthermore, the majority, 20(45%) reported to be staying more than 1km away from the health facility.

Conclusion:
The study established that the low socioeconomic status of the respondents, the high number of pregnancies, the long distances to the health facility, and the lack of social support; negatively influenced the quality of life among pregnant mothers.

Recommendation:
The government of Uganda through the responsible ministries should work on improving the socio-economic status of the mothers and carrying out more sensitization about family planning among pregnant mothers.

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BACKGROUND OF THE STUDY

The World Health Organization defined Quality of Life (QoL) as an "individual's perception of their physical health, psychological state, level of independence, social relationships, personal beliefs, and their relationships to silent features of their environment (WHO, 2018). In the context of pregnancy measuring the quality of life can help in identifying unmet needs and predicting future health problems (WHO, 2018).

Globally in the U.S.A, quality of life in pregnancy has emerged as an essential health component. Pregnancy is a period with important physical and emotional changes that can affect the quality of life of pregnant women and this affects both maternal and infant health (Magos, et al., 2019). In French Health professionals in the field of prenatal and child health try to satisfy their patients concerning their experience during preconception and pregnancy periods and traditionally pregnancy outcome measures such as morbidity and mortality rates remain essential to promote quality life. However, these are not sufficient to improve the quality of life in pregnancy (Lagadec, 2018).

In Africa, in Ethiopia, pregnant women have been subjected to emotional and physical changes during their transition period of pregnancy that can affect their quality of life

(Dule, 2021). In Gambia, women's perceived quality of life is essential to the concept of perinatal health, which encompasses physical, psychological, and social domains and is influenced by clinical and nonclinical events that are significant for women during pregnancy. Quality of life assessment during pregnancy contributes to determining women's unmet needs and preventing negative health outcomes (Sawyer 2014).

In East Africa, in quality of life among pregnant women was poor where 14.3% of the births were preterm (Beck, 2015). In Tanzania, most pregnant women were with pregnant related anxiety which was 18.3% and this was associated with antenatal depression (Rwakarema, et al, 2015). In Kenya, maternal mortality is high despite the advances in prenatal and maternal deaths to improve quality of life in pregnant women in recent decades, there has not been a significant decline in deaths related to pregnancy for over twenty years (Yuen, 2022).

In Uganda, pregnancy has an impact on quality of life (Lulu & Nanyingi, 2022). Uganda has a high maternal mortality estimated at 505 maternal deaths per 100000 live births where 85% of the cases are due to poor quality of life during pregnancy (Ssengooba, 2016). In Uganda, 62% of pregnant women are delivering outside health facilities without skilled labor due to poor quality of life. However, most maternal deaths can be prevented if all pregnant women have access to timely health-related quality of life (Gier, 2016).

Despite the strategies by the Ministry of Health to improve the quality of life among pregnant women such as; putting up constant programs like antenatal care services, health education programs through media, outreach, community health talks, and home visits. In addition, medications like folic acid and other supplements for pregnancy have been made available to ensure healthy living for the pregnant mother and the unborn child (MOH, 2018), the targets for quality of life among pregnant women remain unpromising in Anaka General Hospital, Nwoya District, whereby; 45% of mothers face a problem of pre-eclampsia, 83.5% of pregnant mothers face a challenge of anemia, 35% of pregnant mothers face a challenge of diseases and infections and mainly malaria. Thus, the purpose of this study was to assess the factors influencing the quality of life among pregnant mothers at Anaka General Hospital, Nwoya District.

METHODOLOGY

Study design and rationale

In this study, a descriptive cross-sectional study design was used and it used the quantitative methods of data collection and analysis. This research study design was preferred because it was less time-consuming and in addition, the researcher collected data at once without following up with respondents.

Study setting and rationale

The study was carried out in Anaka General Hospital, Nwoya District. Anaka General Hospital also known as Anaka Hospital, is a hospital in the Northern region of Uganda. The hospital is in the town of Anaka in Nwoya District, approximately 55 kilometers (34 mi), by road, south-west of the Gulu Regional Referral Hospital. This is about 321 kilometers (199 mi), by road, north-west of Mulago National Referral Hospital, The geographical coordinates of Anaka General Hospital are 02°35'59.0"N, 31°56'51.0"E (Latitude:2.599707; Longitude:31.947496). The hospital offers services such as general medicine, surgery, gynecology and obstetrics, antenatal and postnatal services, etc. The hospital receives approximately 30 mothers for antenatal care services daily thus the area is suitable to carry out the study to assess the factors influencing the quality of life among pregnant mothers.

Study population

The study targeted all pregnant mothers attending Antenatal care at Anaka General Hospital, Nwoya District.
Sample size determination
The sample size was determined by the use of Roscoe's (1975) method which stated that a Sample size of not less than 30 and not more than 500 is appropriate for the generalization of most scientific studies. Therefore 44 respondents were sampled from Anaka General Hospital, Nwoya District as required by the UNMEB guidelines. The sample size was influenced by resource constraints that included limited time and inadequate financial resources.

Sampling procedure

A simple random sampling procedure was used. This can be defined as a sampling procedure that gives each person in the study population a chance to be selected. On each day of data collection, papers labeled "YES" or "NO" were put in a box and shaken. The eligible respondent was a pregnant mother who picked the paper with a Label "YES" and was enrolled in the study. This procedure was considered because of its ease and accuracy of representation; selecting subjects completely at random from the larger population produces a sample that is representative of the group being studied. This was repeated until the desired sample size of 44 pregnant mothers was reached during the three days of data collection.

Inclusion criteria

This study included all pregnant mothers attending Antenatal Care at Anaka General Hospital, Nwoya District, and who met the following criteria; Willing to voluntarily take part in the study by consenting.

Exclusion criteria

The eligible pregnant mothers but with reasons for not participating in the study were excluded.

Definition of variables

Variables are challenges or characteristics of interest that the researcher handled in the research. The study has two variables and these are:

Independent variables

The independent variables of this study were;
- Individual factors influencing quality of life among pregnant mothers.
- Health facility factors influencing quality of life among pregnant mothers.
- Socio-economic factors influencing quality of life among pregnant mothers.

Dependent variable

The dependent variable is the quality of life among pregnant mothers.

Research instruments

Data was collected by a structured questionnaire consisting of both open and closed-ended Questions in English designed to assess the factors influencing the quality of life among pregnant mothers at Anaka General Hospital, Nwoya District.

Data collection procedure

After approval of the proposal, an introductory letter was obtained from the school administration which was then presented to the administration of Anaka General Hospital to get consent for carrying out the study. The researcher made a self-introduction, explained the purpose of the study to each respondent on consent, and distributed the questionnaire to the respondents. A questionnaire was given to each participant and each respondent who fulfilled the criteria for participation in the study was greeted and made comfortable in a separate room to ensure privacy. For confidentiality and anonymity, serial numbers were used instead of names, and the questionnaires were kept in a locked cupboard and the key kept by the researcher. Then the researcher thanked the respondents after the interview.

Data management

In the process of data collection, each questionnaire after filling was checked for completeness and accuracy before leaving the area of study. Filled questionnaires were kept properly in a locker for confidentiality and safety.

Data analysis

The data collected was analyzed by entering it into the computer using Microsoft Office Word and Microsoft Excel 2013 where data was represented in tables, graphs, pie charts, and figures.

Ethical consideration

An introductory letter was obtained from the principal of Lubaga Hospital Training School. This letter was presented to the administrator of Anaka General Hospital seeking permission to carry out the study. Participants received an explanation of what the study was about in simple and easy language that could be understood by everyone before enrollment only those willing to participate consented and anyone who wanted to pull out of the study was free to pull out. People were not forced to participate in the study which is a fundamental principle of voluntary participation in research ethics. Confidentiality was ensured to respondents and willingly observed during the study by respondents using serial numbers instead of names and questionnaires were kept in a locked cupboard and the key kept by the researcher.

RESULTS

A total of 44 pregnant mothers were used as the sample. The response rate obtained was 100%. The findings of the research study were then presented in percentages, frequency distribution tables, figures, and narratives regarding the specific objectives as indicated in the following information.

### Socio-demographic characteristics of the respondents

Table 1; Shows the Demographic table. n=44

Variable	Category	Frequency(f)	Percentage (%)
Age	18-25 years	28	63.6
	26-35 years	13	29.5
	Above 36 years	3	6.8
Marital status	Married	14	31.8
	Single	26	59.1
	Divorced	2	4.5
	Widowed	0	0
Employment status	Unemployed	34	77.3
	Employed	4	9.1
	Self employed	6	13.6
Education status	Primary level	22	50
	Secondary level	16	36.4
	Tertiary level	4	9.1
	None	2	4.5

According to table 1; Majority of the respondents were aged between 18 to 25 years of age 28(63.6%), above 36 years of age 6.8%, un employed 34(77.3) and half of the respondents had primary level as the highest level of education 22(50%). Meanwhile respondents who were above 35 years of age, 3(6.8%) those who were divorced 2 (4.5%), those who were employed 4(9.1%) and those with no formal education had the least number 2(4.5%).

Figure 1: Shows response to at the age at which participants started conceiving n=44
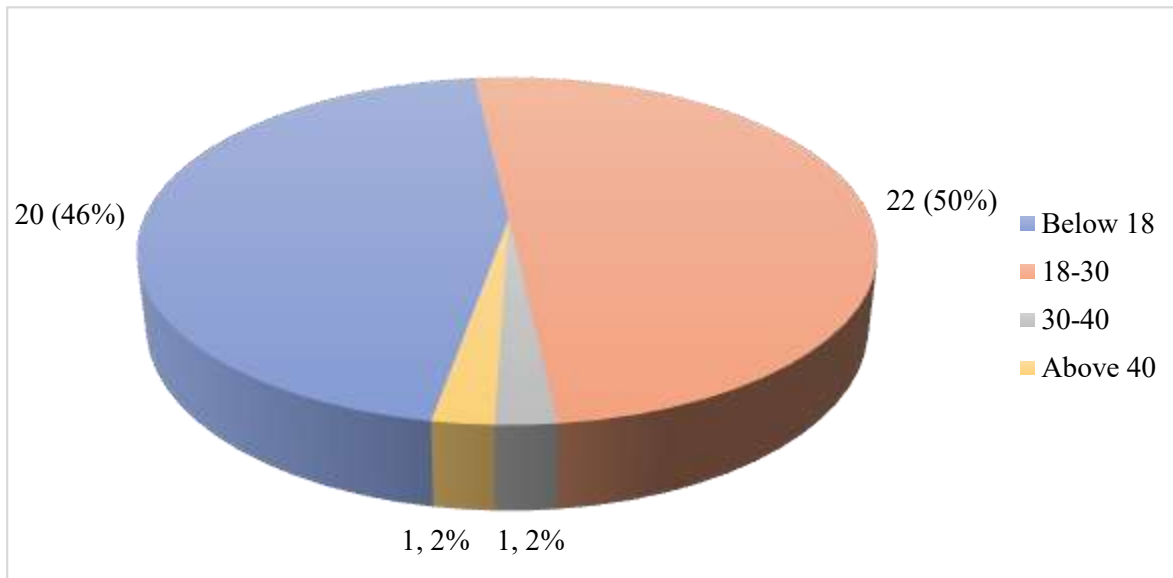
According to figure 1; Half of the respondents 22(50%) gave birth between the age between 18-30, the least number of respondents gave birth between the age 30-40 years of age and above 40 years respectively.

How age affects quality of life

Figure 2: Shows response to how age affected the quality of life of the respondents. (n=44)
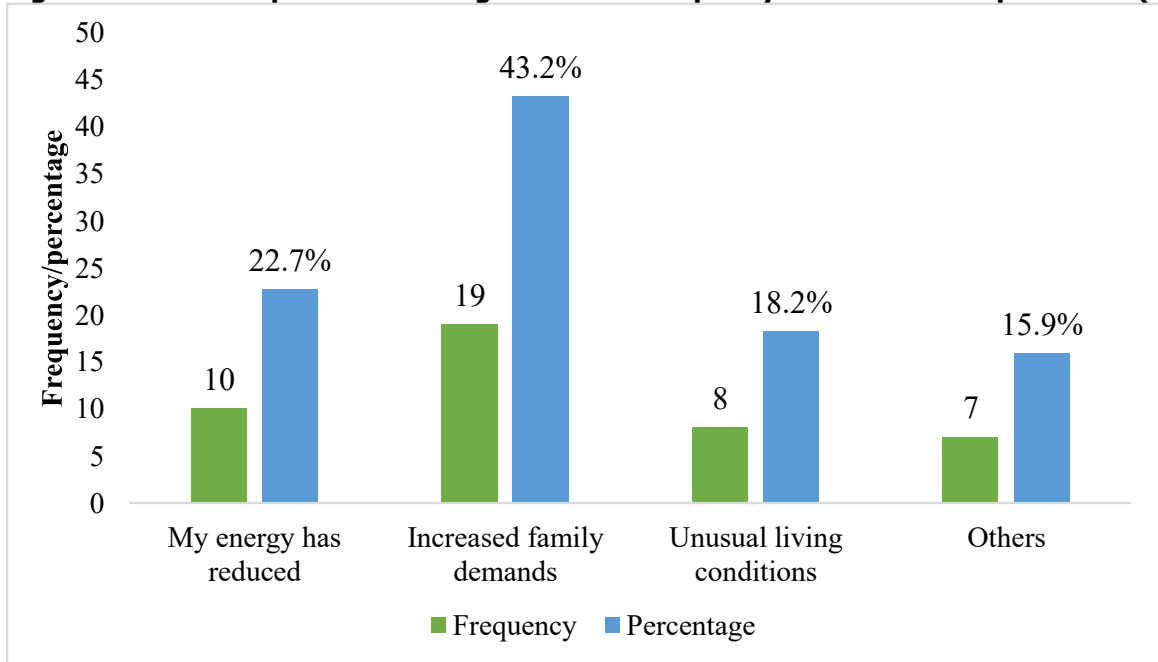
In figure 2; Majority 19(43.2%) of the respondent reported that age increased family demands while as the least number of participants reported other effects 7(15.9%).

Total number of pregnancies

Figure 3: Shows the response the total number of pregnancies of the respondents n =44
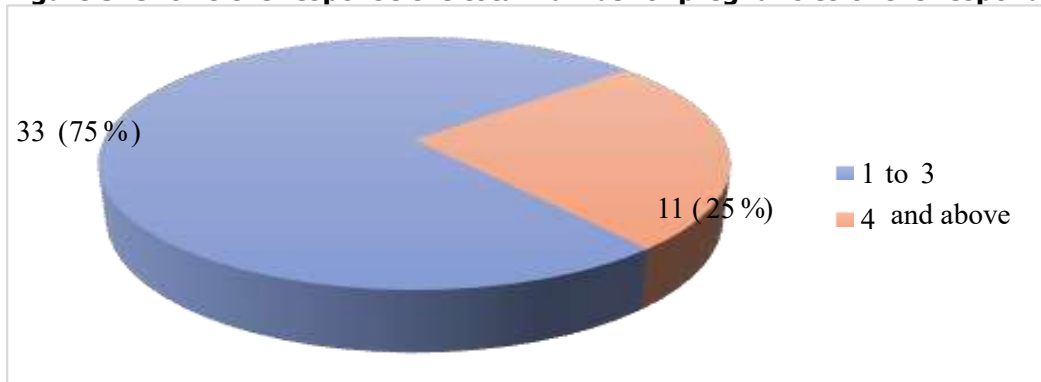
In figure 3; Majority of the respondents reported that they had had 1 to 3 pregnancies 33(75%) and the least number 11(25%) of respondents had 4 and above pregnancies.

Whether the number of pregnancies carried affected the participants' quality of life

Figure 4: Shows the response to whether the number of pregnancies carried affected the participants' quality of life. n=44
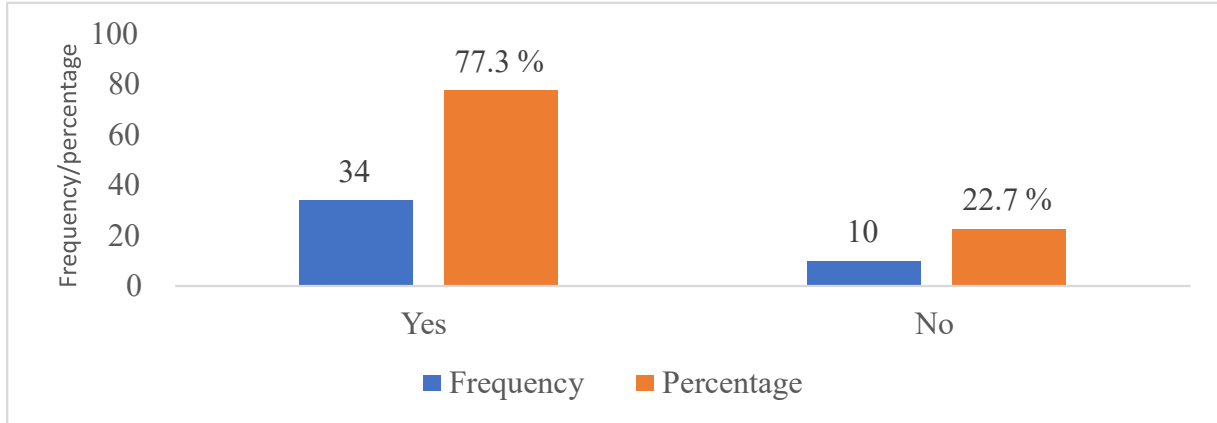
In figure 4; Majority of the respondents reported that pregnancy, drained their energy or influenced the quality of their lives 34(77.3%) while as 10(22.7%) reported that it did not.

**The trimester of the current pregnancy**

Table 2; Shows the response to the trimester of the current pregnancy. n=44

Response	Frequency(f)	Percentage (%)
First trimester	14	31.8
Second trimester	14	31.8
Third trimester	16	36.4

In table 2; Majority of the respondents were pregnant in the third trimester 16(36.4%) others were equally in the first and second trimester 14(31.8%).

**Whether participants faced complications during their previous pregnancies**

Figure 5: Shows the response to whether participants faced complications during their previous pregnancies. n=44
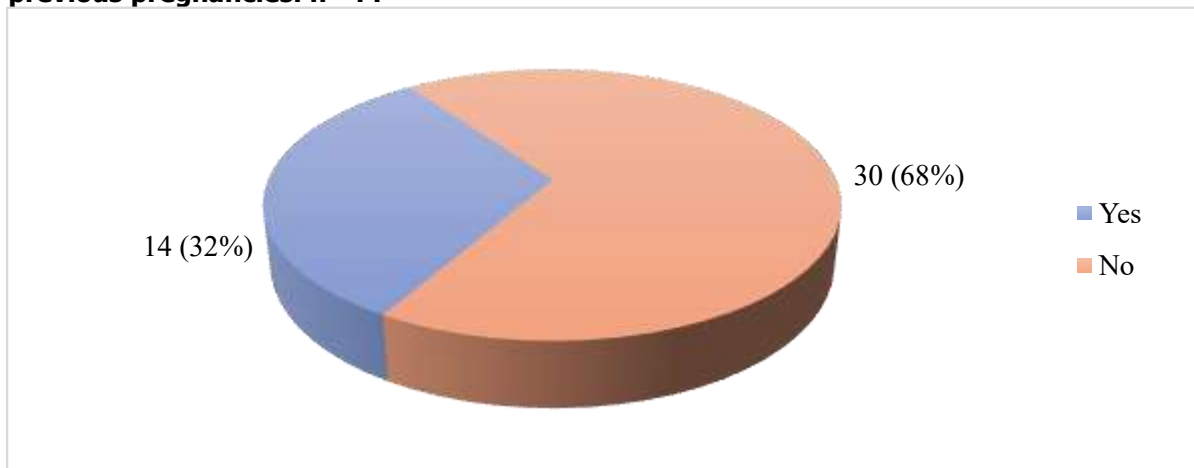
In figure 5; Majority of the respondents did not face complications in their previous pregnancy 30(68%). The rest had faced complications 14 (32%).

The kind of complication faced by the respondents

Figure 6; Shows the response to the kind of complication faced by the respondents. n=14
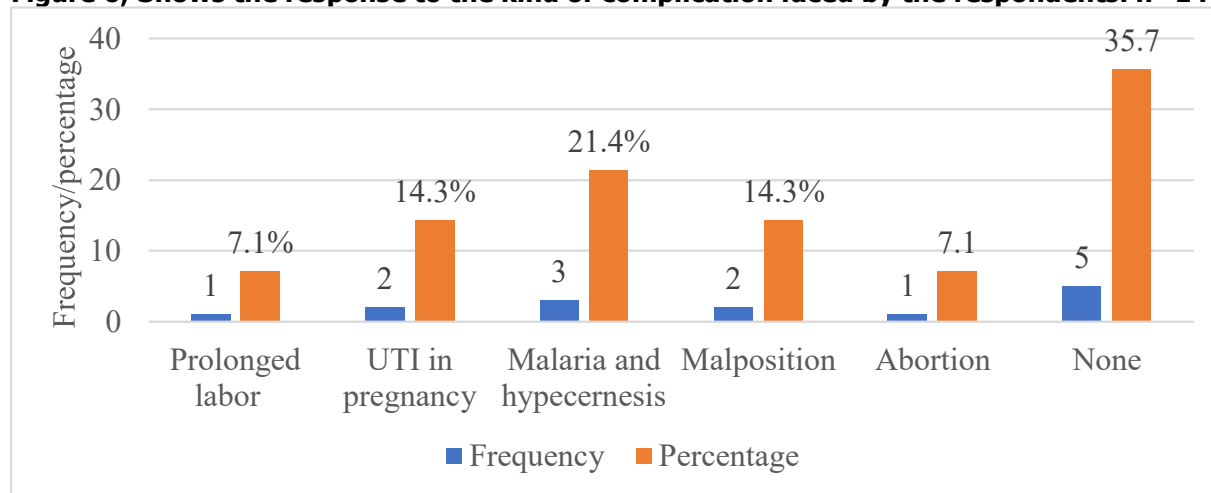
In figure 6; For those who had faced complications, majority 3(21.4%) had contracted malaria and hyperemesis whereas the minority 1(7.1%) had faced Abortion and prolonged labor equally.

**What the respondents were doing to ensure that they would not encounter the same complications again.**

Table 3; shows the response to what the respondents were doing to ensure that they would not encounter the same complications again. n=14

Category	Frequency(f)	Percentage (%)
Seeking medical attention	3	21.4
Avoiding strenuous work	5	35.7
Treatment and maintaining my hygiene	2	14.3
Nothing	4	28.6

In table 3; Majority 5(35.7%) of the respondents reported that they avoided strenuous work and the minority 2(14.3%) reported that they Treated and maintained their hygiene.

The attitude of health workers when the participants went to the health facility

Figure 7; Shows the response to the attitude of health workers when the participants went to the health facility. n=44
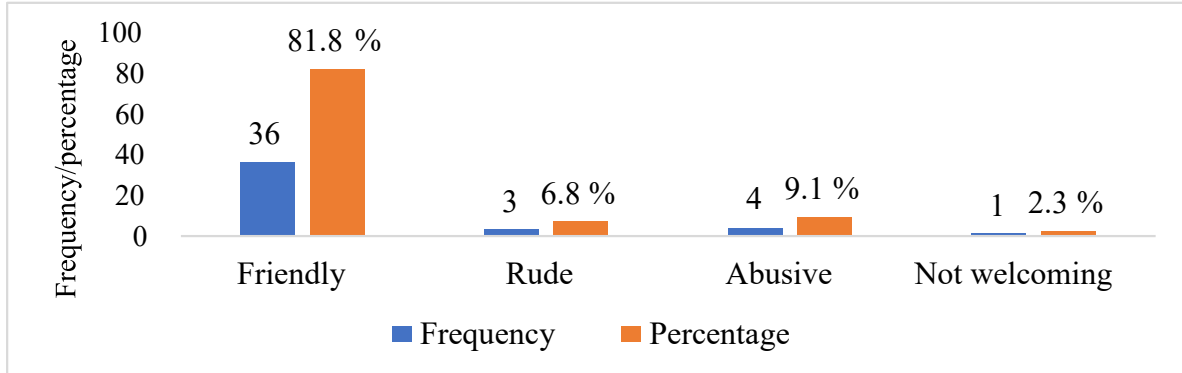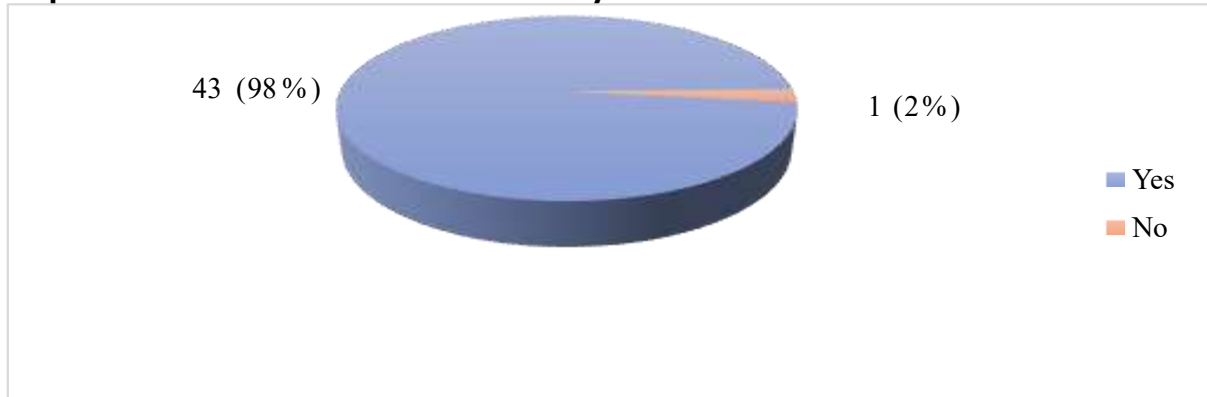
In figure7; Majority of the respondents reported that the health workers were friendly 36(81.8%). The least respondents reported that the health workers were not welcoming 1(2.3%)

Health facility related factors influencing quality of life among pregnant mothers

Whether the attitude of health workers encouraged respondents to access services at the facility

Figure 8; Shows the response to whether the attitude of health workers encouraged respondents to access services at the facility. n=44
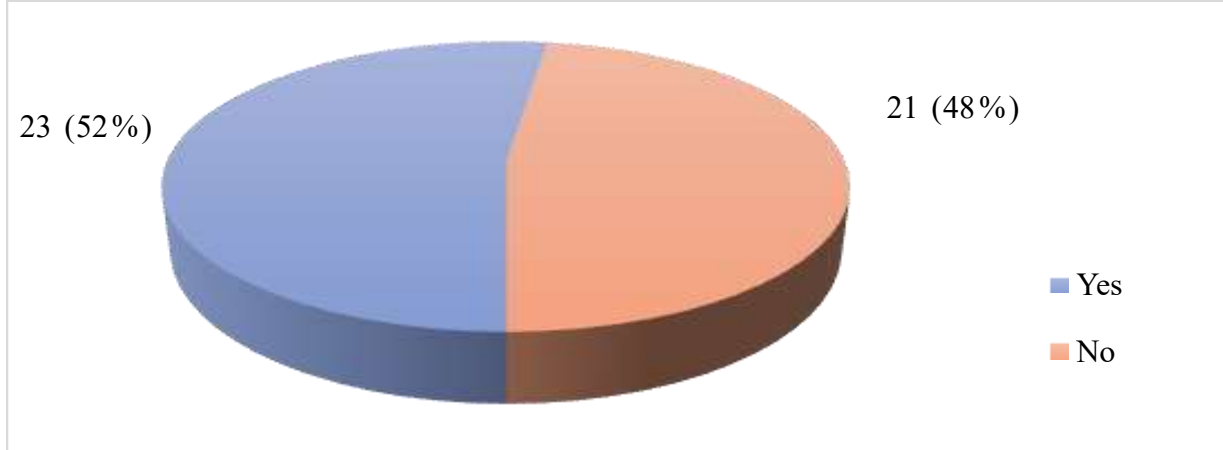

In figure 8; Majority of the respondents reported that the attitude of the health workers encouraged them to access services 43(98%). Only 1(2%) were not encouraged.

Whether the health facility attended had all the equipment, drugs and services you needed by the respondents

Figure 9; Shows the response to whether the health facility attended had all the equipment, drugs and services you needed by the respondents. n=44

23 (52%)   21 (48%)

- Yes
- No

From the figure 9, majority 23(52%) of the respondents reported that the facilities where they received care had equipment whereas the minority 21(48%) reported that the facilities didn't have the facilities.

The cleanliness of the health facility attended by the respondents.

Figure 10; Shows the response to how the cleanliness of the health facility attended by the respondents. n=44
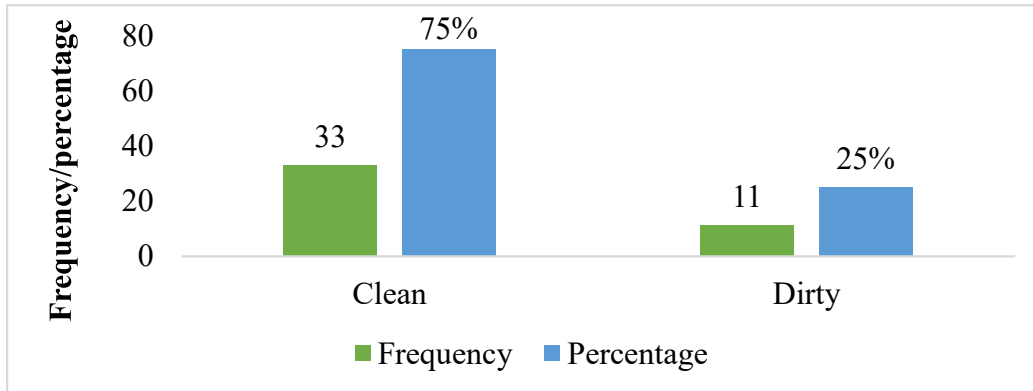
In figure 10; Majority of the respondents reported that the facilities where they got care were clean 33(75%). The rest reported they were unclean 11(25%).

**Socio-economic factors influencing quality of life among pregnant mothers**

The economic status of the respondents.

Table 4; Shows the response to the economic status of the respondents. n=44

Response	Frequency(f)	Percentage (%)
Low-income status	29	65.9
Middle income status	14	31.8
High income status	1	2.3

In table 4; Most of the respondents reported that they were from a low-income status 29(65.9%). The least were I the high-income status 1(2.3%) Whether the respondents were supported by family members and friends since they got pregnant

Figure 11; Shows the response to whether the respondents were supported by family members and friends since they got pregnant. n=44
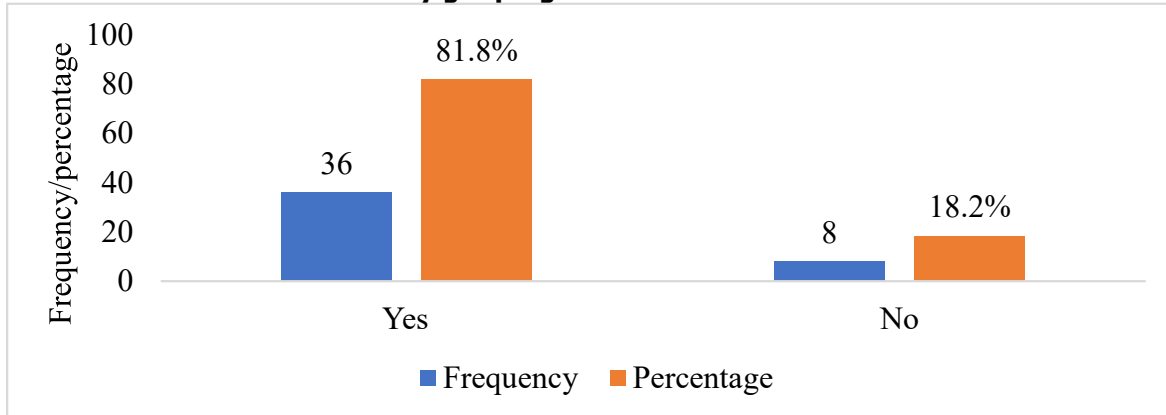
In figure 11; Majority 36(81%) of the respondents were supported by their families and only 8(18.2%) were not supported.

**How family members and friends supported the respondents**

Table 5: Shows the response to how family members and friends supported the respondents. n=36

Response	Frequency(f)	Percentage (%)
They help me reduce my stress	7	19.4
They help me with house chores	6	16.7
Am provided with money to help me with my need	11	30.6
Others	12	33.3

In table 5; Majority of the respondents supported them in other ways which are not listed in the options. However, only 6(16.7%) reported that they were helped with house chores.

The distance from the respondents' home to the health facility

Figure 12; Shows the response to the distance from the respondents' home to the health facility. n=44
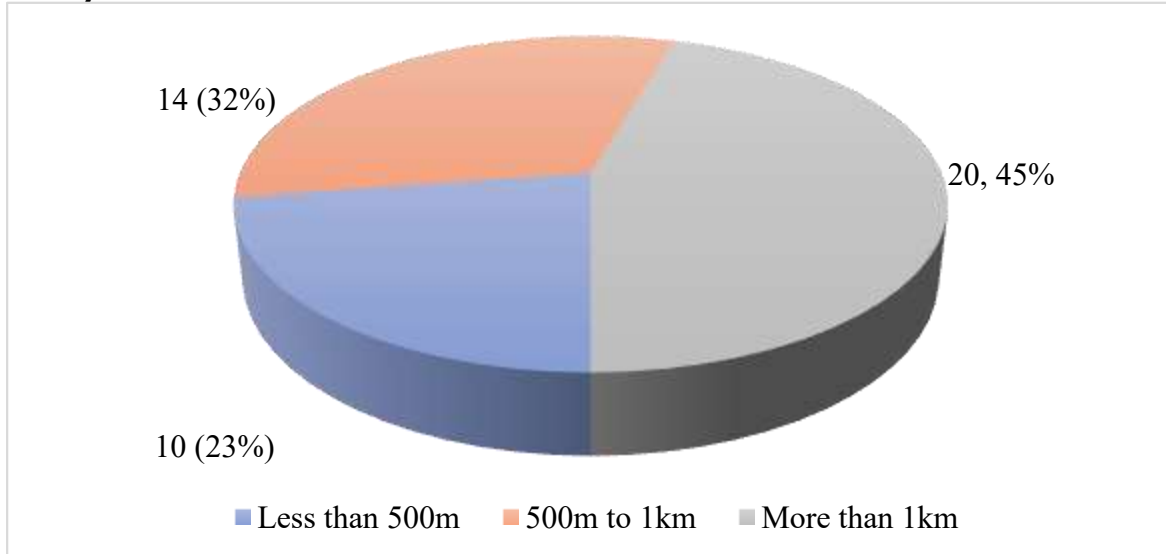
In figure 12; the Majority of the respondents reported being more than 1km away from the health facility 20(45%) and the least reported being less than 500m from the health facility 10 (23%)

DISCUSSION

Demographic data of the respondents

The majority of the respondents were aged between 18 to 25 years of age 28(63.6%), this is similar to several studies conducted around fertility (Abdollahpour & Khadivzadeh, 2020) this age group is considered the most sexually active but the same time very fertile. These results are explained by half of the respondents that gave birth between the age of 18-30 22(50%) showing that the age group is more fertile with higher chances of getting pregnant compared to older individuals. This is similar to a study by (Ahinkorah, 2020) This study also reveals that 34(77.3%) respondents were unemployed. This is typical for most developing countries because of low levels of education levels and poverty levels. This study reveals that half of the respondents had primary level as the highest level of education 22(50%) and this confirms the hypothesis. However, another study by (Sweeting et al., 2022) Also confirms this hypothesis. Similarly, most of the respondents reported that they were from a low-income status 29(65.9%). This is a typical characteristic of individuals in a developing country like Uganda as shown by another study by (Yadav et al., 2022).

The Individual factors influencing the quality of life among pregnant mothers

The majority of the respondents reported that age-increased family demands 19(43.2%) while the least number of participants reported other effects 7(15.9%). This is similar to a study by (Al-Huda et al., 2022) which reveals that Uganda has an expanding population pyramid, therefore as the population grows older into the next age group, they tend to have more responsibilities due to a higher population of younger individuals (Abdollahpour & Khadivzadeh, 2020)

The majority of the respondents reported that they had had 1 to 3 pregnancies 33(75%) and the least number of respondents had 4 and above pregnancies 11(25%). This is similar to a study by (Yadav et al., 2022) that reveals that there are several factors influencing fertility including socioeconomic factors among other. It is also important that factors like increasing cesarean section limit the number of children women can give birth to.

The majority of the respondents reported that pregnancy drained their energy or influenced the quality of their lives 34(77.3%) while 10(22.7%). This is similar to several studies conducted about women during pregnancy. This is because pregnancy causes physiological and physical changes, these intern lead to loss of energy and laziness as symptoms.

The majority of the respondents were pregnant in the third trimester 16(36.4%) others were equally in the first and second trimester 14(31.8%). This is a similar study in several studies in this area of research. According to (Sweeting et al., 2022) women in the third trimester may

frequent the health facility in an attempt to prepare for childbirth and better pregnancy outcomes.

The majority of the respondents did not face complications in their previous pregnancy 30(68%). The rest had faced complications 14 (32%). This is similar to a study by (Russell et al., 2022) that reveals that there has been great advancement in the health system hence addressing most of the complications before they occur in pregnancy. Actually, for those who had faced complications, the majority had contracted malaria and hyperemesis 3(21.4%). This is not surprising because Uganda is an endemic region for malaria and pregnant mothers are more affected by malaria due to their compromised immune system.

The majority of the respondents reported that they would avoid strenuous work to avoid complications 5(35.7%). The least reported that they would go for treatment and maintain their hygiene 2(14.3%). This could be because strenuous work increases the risk of complications during pregnancy. These findings are similar to a study by (Mooney et al., 2021) that indicated that women who do strenuous work could develop complications during pregnancy. The similarity between the studies could be due to physical weakness and stress caused to the body.

The Health facility-related factors influencing quality of life among pregnant mothers

The majority of the respondents reported that the health workers were friendly 36(81.8%). The least respondents reported that the health workers were not welcoming 1(2.3%). This could be because health workers are trained to be friendly in health facilities. Studies have shown that user-friendly services discourage utilization of ANC and hence can result in poor quality of pregnancy (Lee et al., 2021).

The majority of the respondents reported that the attitude of the health workers encouraged them to access services 43(98%). Only 1(2%) were not encouraged. The high percentage of respondents who were encouraged by health workers' attitudes suggests that the behavior and approach of healthcare professionals play a crucial role in influencing individuals' willingness to access services. The findings are similar to a study conducted in Africa by (Hayman et al., 2022). It implies that the positive attitude of health workers can create a supportive and welcoming environment, which in turn can have a positive impact on healthcare utilization.

Slightly more than half of the respondents reported that the facilities where they received care had equipment 23(52%). Almost half 21(48%) reported that the facilities did not have the equipment. The presence or absence of equipment in healthcare facilities is an important factor in delivering quality care. Facilities equipped with the necessary tools and technologies can enhance the accuracy of diagnoses, support effective treatment procedures, and contribute to better patient outcomes. This is similar to a study conducted by (van Dijk et al., 2020) conducted in Ethiopia. The similarity is because the group of respondents who reported having access to equipment is likely to have experienced more efficient and comprehensive care compared to those who did not have access.

The majority of the respondents reported that the facilities where they got care were clean 33(75%). The rest reported they were unclean 11(25%). The positive perception of cleanliness among the majority of respondents suggests that the healthcare facilities in your study are making efforts to maintain a hygienic environment. This can contribute to ensuring the well-being and safety of both the pregnant individuals and their babies. The results of the study are similar to a systematic review by (Dodd et al., 2019) conducted in Africa. The similarity could be due to unclean environments in healthcare settings can pose health risks, compromise patient safety, and potentially lead to avoidable complications.

The Socio-economic factors influencing quality of life among pregnant mothers

The majority of the respondents supported them in other ways which are not listed in the options. However, only 6(16.7%) reported that they were helped with house chores. This suggests that there are additional forms of support beyond the options provided in your study that are valued by pregnant individuals. It is noteworthy that while there were various forms of support mentioned by respondents, only a small proportion, specifically 6 individuals (16.7%), reported receiving help with house chores. This finding highlights a potential gap in the provision of practical assistance to pregnant individuals in terms of household responsibilities. The (Hayman et al., 2022) findings are similar to the systematic study by (Dodd, et al., 2019). The similarity could be because Assistance with tasks such as cleaning, cooking, and other household responsibilities can provide much-needed relief and contribute to a healthier and more positive pregnancy experience.

The majority of the respondents reported being more than 1km away from the health facility 20(45%) and the least reported being less than 500m from the health facility 10 (23%). The finding that a significant proportion of respondents live more than 1km away from the health facility suggests that there may be challenges in terms of geographical accessibility to healthcare services. Distance is a crucial factor that can impact timely access to prenatal care, delivery services, and postnatal care. The greater the distance, the more likely it is for individuals to face difficulties in reaching the health facility when needed. This is similar to a study by (Hayman et al., 2022) that shows distance is a significant factor influencing access to ANC and quality of pregnancy. The similarity between the studies

could be due to living far from a healthcare facility can have several implications for pregnant individuals. It may result in delayed or infrequent prenatal visits, limited access to emergency obstetric care, and reduced opportunities for early detection and management of potential complications.

CONCLUSIONS

This study established that the cleanliness of health facilities, the good attitude of health workers, and the presence of hospital equipment at the facility, positively influenced the quality of life among pregnant mothers. The study further established, however, that the low socioeconomic status of the respondents, the high number of pregnancies, the long distances to the health facility, and the lack of social support; negatively influenced the quality of life among pregnant mothers.

RECOMMENDATIONS

To the Government of Uganda: The government of Uganda should work on improving the socioeconomic status of the mothers and carry out more sensitization about family planning among pregnant mothers. More so, it should encourage health facilities to maintain the standards or improve the services to pregnant mothers, recruit more health workers, and train them with adequate skills in patient management.

To the Health workers: They need to maintain or improve the attitude and excellent skills of patient management, especially pregnant mothers.

To the Pregnant mothers: They should adhere to the instructions given to them by the health workers and endeavor to attend all their hospital appointments.

IMPLICATIONS TO NURSING AND MIDWIFERY

Nurses and midwives should endeavor to seek knowledge on various ways of maternal and child health to provide better services. They ought also to go for continuous education in health practice. Qualified midwives/ nurses in practice should also mentor the student nurses or midwives on the importance of educating the communities on maternal and child health care and its importance in preventing complications.

ACKNOWLEDGEMENT

LIST OF ABBREVIATIONS

MoH: Ministry of Health
QoL: Quality of Life
U.S.A: United States of America.
UNMEB: Uganda Nurses' and Midwives' Examination Board
WHO: World Health Organisation

SOURCE OF FUNDING

CONFLICT OF INTEREST

No conflict of interest was declared by the author

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