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FACTORS INFLUENCING THE QUALITY OF LIFE OF PREGNANT WOMEN IN IBADAN METROPOLIS, NIGERIA

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Abstract: **During pregnancy, various physical and emotional changes occur, and these changes can affect the quality of life of pregnant women. Even in relatively uncomplicated pregnancies, these changes can significantly impact maternal health. The quality of life assessment during pregnancy can help determine the unmet needs of pregnant women and prevent negative health effects. The goal of this study was to identify factors that influence pregnant women's quality of life, ranging from demographic-obstetric, socio-economic and perceived social support. This study also aimed to determine the significant differences in maternal quality of life based on these factors.**

The study was guided by the functionalist theory and socio-ecological model, which showed how individuals are part of a larger social system and states that the various factors that affect a person's health are interrelated. It states that the interactions between people, groups, and the environment can affect their well-being. A total of 519 pregnant women were selected from primary health care centers in 5 urban local government areas in Ibadan namely- Ibadan North, North West, South East, South West, North East and they responded to the questionnaires given. Quality of Life in pregnancy (Gravidarum) questionnaire and Household Food Insecurity Access Scale (HFIAS) and social support scale were used. With a p-value of less than 0.05 and a confidence interval of 95%, the data was analyzed using version 21 of SPSS.

The study's showed that the quality of life mean score was 20.56 with a standard deviation of 8.347, showing that the quality of life of the women in this study was very good. The major predictors of quality of life were economic status (β= .492), food security (β= .514), partner support (β= -.151) and gestation age (β= .141). A woman, who lacks ample partner support, experiences household food insecurity and lacks financial security, will have a lower quality of life during pregnancy.

Improving the quality of life of pregnant women needs better identification of their difficulties and assistance whenever possible.

Keywords: Quality of Life, Pregnancy, Social support, Socio-economic status, Food security.

1. INTRODUCTION

1.1 Background

In recent years, there have been various attempts at measuring the quality of life beyond mortality and morbidity as it is an important component of individual well-being. According to the World Health Organization (WHO, 2014), quality of life is defined 'as an individual's perception of their position in life in the context of the culture and value systems in

which they live and in relation to their goals, expectations, standards and concerns'. This definition shows that quality of life is embedded in social, cultural, and environmental context, meaning it is subjective. Quality of life includes physical health, family, education, employment, wealth, safety, and security to freedom, religious beliefs, and the environment.

David Morris (1982), a sociologist, identified three indicators- life expectancy, infant mortality, and illiteracy to represent the 'physical quality of life. He argued that life expectancy at the age of one and infant mortality was chosen because they were affected by nutritional status, family environment, public health, etc. All these showed that infant mortality was influenced by environment and family characteristics shown in the role and position of women. On the other hand, literacy is the ability to get needed information concerning development. These indicators sum up David Morris' physical quality of life though this was developed to measure the condition of the world's poor. However, the metric for measuring has changed over the years as the measures of quality of life now include; income and wealth, job, housing, health status, education, social connection, social support, etc.

Pregnancy is a period that comes with not only physical but also emotional changes. These changes threaten the quality of life of the woman and her unborn child. It is regarded as one of the most important and natural stages of a woman's life (Amoozegar et al, 2009). Although pregnancy is often regarded as a positive time, many women experience distress during this period. Some of the common disturbances women experience during this time include experiencing a loss of self-esteem, inability to bond with their child and concerns about their appearance. Gestation is a period that can positively or negatively influence the life of a woman and it comes with many transformations that can either be emotional, social, physical, or physiological and these changes that occur in pregnancy reduce the woman's quality of life (Kazemi et al, 2017). A woman's quality of life can either increase or decrease during pregnancy. Health services like antenatal care have been established to encourage pregnant mothers to develop positive health-seeking behavior to improve their quality of life.

The quality of life during pregnancy affects a woman's birth process, the health of the fetus; and the baby, and the outcome of labor (Wang et al, 2013) as research has shown that low quality of life is associated with low birth weight infant rate (Lau, 2013).

It is the work of both healthcare professionals and individuals to determine the factors that have an adverse effect on a woman's quality of life and work together to avoid them.

Empirical research has shown that maternal age, primiparity, early gestational age, absence of social and economic problems, having family and friends, doing physical exercise, feeling happy at being pregnant, and being optimistic are associated with better quality of life for a pregnant woman however low quality of life is affected by factors like medically assisted reproduction, lack of social support, obesity, nausea and vomiting, back pain, smoking during the months before conception, a history of alcohol dependence, sleep difficulties, stress, anxiety, depression during pregnancy and sexual or domestic violence (Lagadec et al, 2018).

Maxson and colleagues defined psychosocial health as a multidimensional concept that covers mental and social areas such as depression, stress, self-sufficiency, and social support. As is known, especially the prevalence of certain psychosocial health problems such as depression, anxiety, and stress is high during pregnancy, and these psychosocial health problems affect the health of pregnant women and infants negatively (Maxson et al, 2016). In many studies, it is stated that psychosocial health, which gains importance during pregnancy for both women and children, is affected by many factors like age, income, educational level, substance use, or history of miscarriage (Maharlouei, 2016).

Perceived social support is another factor that has an important role during pregnancy, affecting psychosocial health considerably (Maharlouei, 2016). According to empirical literature, depressive symptoms of pregnant women who do not have social support on an adequate level are high, and their quality of life is low (Bedaso et al, 2021). Social support is seen as an emotional coping mechanism that has the potential power to affect the quality of life. Social support can be in the form of emotional and mental support and information and it can also be tangible and sociable.

Getting the proper nutrition and food security is also important for a healthy and happy pregnancy. It can help prevent premature birth and improve the health and quality of life of the mother and her baby.

Although being pregnant at any reproductive age is not risk-free, older pregnancy can lead to adverse outcomes for the mother and fetus or neonate. Maternal mortality has also been connected to women's healthcare decision-making power at the household level in many low and middle-income countries (Sumankuuro et al, 2019).

The importance of education in improving the quality of life for pregnant women is evidenced by the fact that it can help them obtain employment and improve their self-esteem. In addition, it can help them understand the needs of their unborn child. Studies also suggest that having a good job and financial stability can help improve the quality of life for women (Calou et al, 2018).

During pregnancy, quality of life is associated with different gestational trimesters. A study carried out by Ishaq and his colleagues in 2022 revealed that the best quality of life was reported during the first trimester, as it was attributed to the feeling of happiness and parity. However, this level of happiness and parity eventually decreased during the second trimester, and this was also caused by nausea and fatigue. The third trimester was also characterized by an increase in weight, sleep disorders, and sexual issues which leads to a decrease in the quality of life.

Parity can affect women's health, as well as their quality of life. The terms "primiparous" and "multiparous" are often used to describe the impact of this factor on women's health, while the terms "low parity" and "high parity" refer to the individuals who have given birth multiple times. High-parity women are more likely to experience worse quality of life during pregnancy, while those who have given birth once are less likely to do so.

Unplanned or misplanned pregnancy can have adverse effects on a woman's health. There are two types of these: unwanted pregnancy and mistimed pregnancy. Mistimed pregnancy is when a woman gets pregnant earlier than she intended, while unwanted pregnancy is when the parents did not plan on having a baby. It can also cause various risks to the mother and her child and poor quality of life for both the mother and child. This is common among housewives, less educated, and poorer women. Family planning can however help couples become more ready to accept pregnancy. It can also help minimize the effects of pregnancy on a woman's quality of life. However, it is additionally important to note that even unplanned pregnancy can have negative effects on a woman's quality of life (Barrett & Wellings, 2002).

It is in recognition of the aforementioned as well as acknowledging the vulnerability of pregnant women that the present study is premised. The study is therefore aimed at determining the factors influencing the quality of life of pregnant women.

1.2 Statement of the problem

A woman's body goes through many changes during pregnancy, which is normal. However, these changes attract attention when complications or problems arise.

Previous studies have shown that low social support increases the risk for depression during pregnancy and post-birth (Morikawa et al, 2015), and also leads to the possibility of giving birth to an underweight infant. There is also a significant association between lack of social support and drinking alcohol, smoking tobacco, and illicit drug use during pregnancy and pregnant women who report anxiety disorder, smoke tobacco, live without a partner, have an unplanned pregnancy, and have a low socioeconomic status also report low social support (Peter et al, 2017). In addition, a women's level of education and length of relationship with their partner are also important determinants of social support during pregnancy.

An unplanned pregnancy can have various consequences on a woman's health. These include delayed childbirth, low attendance at prenatal care visits, sexual and physical violence, depression, and suicide. It can also lead to miscarriages and stillbirths. Less attention is also given to pregnancy-related complications, anxiety during pregnancy, and low social support (Karacam et al, 2011). High-risk behaviors are also common among women with unplanned pregnancies. This condition can also affect a woman's health. According to a new report by the UN Population Fund (2022), about half of all births are unintended. This figure is estimated to reach 121 million annually. Therefore, women and their partners must be empowered to make informed decisions regarding childbearing.

Women's nutritional status during pregnancy can also be a cause of complications. Poor diets are often linked to anaemia and premature birth. These conditions can also occur if the mother's nutrients are not enough. Lack of nutrients can also lead to other health problems for the mother and her baby.

The increase in gestational age has a negative impact on the quality of life for pregnant women. At the later stages of pregnancy, the discomfort and mobility issues that occur due to the distension of the belly can be worsened by the presence of additional pelvic pain. Women who are pregnant during the third trimester are more prone to experiencing a lower quality of life scores than those who are not pregnant. On the other hand, during the rest of their pregnancy, pregnant women's physical and mental health is also affected (Lagadec & Steinecker, 2018).Some women with advanced maternal age and high parity experience discomforts that reduces their quality of life.

Studies have shown that low socioeconomic status can increase the risk of experiencing pregnancy complications. These include gestational diabetes, preterm delivery, preeclampsia, and abortion which are linked to low quality of life (Silva & Coolman, 2008). Although it is known that low socioeconomic status can increase the risk of experiencing pregnancy complications, it is not clear if this is due to the lack of access to medical services or if economic barriers are also contributing factors. Until now, this issue has not been studied as an independent risk factor.

The above information, coupled with an anecdotal report and observation in Ibadan, indicated cases of pregnant women being hospitalized due to pregnancy, labor, and postpartum complications. Also, a casual interaction of the researcher with some health workers revealed that pregnant women seem not to have enough understanding about the quality of life, and what it entails; most of these pregnant women had poor health-seeking behavior due to social, economic, cultural, sociodemographic factors, psychological and institutional factors which end up affecting their quality of life.

This study, therefore, focused on factors (social, mental, economic, etc.) influencing the quality of life of pregnant women in the study setting of Ibadan Metropolis, Oyo State, Nigeria.

1.3. Research questions

1. Is there a difference in the quality of life scores among pregnant women based on their demographic-obstetric characteristics?

2. What is the effect of demographic-obstetric factors and perceived social support on the quality of life scores of pregnant women?

3. What are the differences in the quality of life scores of pregnant women based on their socio-economic status?

4. What are the predictors of maternal quality of life in pregnancy?

1.4. Research objectives

The general objective of this study is to determine the differences in Quality of Life (QoL) based on women's characteristics (sociodemographic and obstetric) and to identify the factors that affect the quality of life of pregnant women in Ibadan metropolis.

Specific Objectives of this study are to:

1. Determine the difference in the quality of life scores among pregnant women based on their demographic- obstetric characteristics.

2. Investigate the effect of demographic-obstetric factors and perceived social support on the quality of life scores of pregnant women.

3. Examine differences in the quality of life scores among pregnant women based on their socioeconomic status.

4. Determine the predictors of maternal quality of life in pregnancy.

1.5 Significance of the study

Despite the important role of quality of life for pregnant women and considering the many cultural, social, and economic challenges in Nigeria, focusing on the issues hindering the quality of life of a pregnant woman will help plan interventions to improve the quality of life for future generations. Therefore, the results of this study can be used as a basis for designing appropriate interventions to improve the quality of life of pregnant mothers and their children.

Furthermore, study findings will help ensure that healthcare providers are provided with information they can use to develop strategies that will assist families and individuals in achieving the expected quality of life and increasing awareness about preconception care. Also, nurses should encourage women of reproductive age to utilize maternal health by providing a welcoming and supportive attitude at all contacts. It will also ensure that the government aims at more in-depth and distal determinants of health to improve pregnancy outcomes in pregnant women with low socioeconomic status.

The socioeconomic conditions of Nigeria have been erratic in recent times, playing a key role in the availability of maternal resources and by extension, their sources of social support and QoL. It is pertinent to mention also that previous studies carried out on the subject matter hardly take into consideration, food insecurity and social media impact on QoL and this is one study gap covered by this research work.

The knowledge of this study will help the family, especially pregnant women, achieve an optimal level of health during the stage of pregnancy and it will expose them to the services available in their communities including preconception care.

2. RESEARCH METHODS

2.1 Research Design

According to Kerlinger (1986) research design is a plan, structure and strategy of investigation conceived so as to obtain answers to research questions and to control variance. This study involves the use of quantitative correlational research design. Correlational research is research designed to discover relationships among variables and to allow the prediction of future events from present knowledge. The quantitative aspect employed the descriptive cross-sectional survey design to evaluate the perceived factors influencing the quality of life of pregnant women in Ibadan Metropolis, Oyo State. This design was considered appropriate because it is a design which is concerned with the present phenomena in terms of practices, beliefs, processes, conditions, relationships and it allows the collection of information from a representative sample of a target population at a point in time.

2.2. Research Setting

The study was conducted in selected primary health care centers in Ibadan Metropolis, Oyo State, Nigeria. The city of Ibadan is the capital of Oyo State, and it is the third-largest city in Nigeria by population. It has a total population of over 6 million and is located in south-western Nigeria. It is also the country's largest geographical area. It is the fastest growing city in Africa according to UN (2022). Ibadan is connected to various towns in Nigeria through its various connectivity facilities such as railways, roads, and air routes. There are 11 Local Government Areas in the metropolitan area of the city. Five of these are urban local governments (Ibadan North, Ibadan North West, Ibadan South East, Ibadan North East and Ibadan South West) while the remaining six are semi-urban (Akinyele, Egbeda, Ido, Lagelu, Ona Ara, Oluyole) (Wikipedia)

For the purpose of this study, Primary Health Care Centers in the urban areas of Ibadan local government were used. In Ibadan North, 3 Primary Health Care Centers were selected- Idi-Ogungun, Basorun and Agbowo Primary Health Care Centers. In Ibadan North West- Oniyarin Primary Health Care Center, Ibadan South East- Oranyan Primary Health Care Center, Ibadan North East- Ayekale Primary Health Care Center and in Ibadan South West- Molete Primary Health Care Center.

2.3. Target population

The target population for this study was all women attending primary health care centers for antenatal care in Ibadan Metropolis. The estimated number was 2,500,000

2.4. Sample size determination

The sample size will be determined by using Krejcie and Morgan formulae as cited in their 1970 article. This formula is stated below:

$$n = \frac{x^2 * N * P * (1 - P)}{d^2 * (N - 1) + (x^2 * P * (1 - P)}$$

n = required sample size.

X^2 = the table value of chi-square for 1 degree of freedom at the desired confidence level (99%)

P = the population proportion (assumed to be 0.5)

d = the degree of accuracy expressed as a proportion (0.05)

N = 2,500,000 which is the estimated population size of Ibadan Zones (Ibadan North, Ibadan North East, Ibadan North West, Ibadan South East, Ibadan South West)

The minimum required sample size is 519 pregnant women.

2.5. Sampling method

The study adopted multi-stage sampling technique.

Stage 1: Stratification of 11 Local Governments in Ibadan, Oyo State, into urban and semi-urban Local Governments. The urban Local Government comprises of five (5) Local Governments which include Ibadan North, Ibadan North West, Ibadan North East, Ibadan South West and Ibadan South East; while semi-urban Local Government comprises of six (6) Local Governments which include Akinyele, Egbeda, Ido, Lagelu, Oluyole and Ona-Ara. For this study, all the 5 selected local governments that fall under the urban areas were purposively selected.

Stage 2: From each of the local government, one major health care center providing antenatal care services to women was purposively selected.

Stage 3: The number of respondents (pregnant women) selected per health care center was proportionate to sample size

2.6. Data analysis

The data was analyzed using version 21 of SPSS. The relationships between the outcome variable (quality of life) and explanatory variables was evaluated using univariate, bivariate, and multivariate analyses (maternal bio-demographic, socioeconomic, and social support characteristics). At the univariate level, proportions were calculated for categorical variables, and means and standard deviations were calculated for continuous variables. Statistically significant differences in mean quality of life scores across explanatory factors with three or more categories were examined using one-way analysis of variance and the Games-Howell Post-Hoc test in bivariate analysis. Welch's F is reported because Levene's test indicates a breach of the assumption of homogeneity of variance. Also, the Student's t-test was used to compare the mean quality of life scores across the personal characteristics of women for variables with two categories. The association between the participants' social support and quality of life scores was then determined using Pearson correlations. The relationship between women's attributes and quality of life was then determined using multiple linear regression. Each predictor variable's beta coefficient and 95% confidence interval were calculated. At a p-value of less than 0.05, the results were deemed significant.

2.7 Instruments

i. Quality of life in pregnancy (Gravidarum) (QOL-GRAV) questionnaire

This questionnaire was created by Vachkova et al. (2013) employing the WHO Quality of Life-BREF (WHOQOL-BREF). It consists of nine items, and the authors found that QOL-GRAV can capture the experiences of pregnant women that significantly impact their QOL with sensitivity and precision. The items are provided in a 5-point Likert scale, with "1" representing the best quality of life and "5" the worst. The QOL-GRAV score ranges from 9 to 45, with lower mean scores indicating higher quality of life and vice versa. The developers classify QoL as excellent [mean score of 9–18], very good [mean score of 19–27], decent [mean score of 28–36], and not very good [mean score of 37–45]. Mirghafoorvand et al. (2016), Golshani et al. (2021), and Ishaq et al. (2021) all concluded that the questionnaire's validity and reliability were satisfactory.

ii. Social Support

Using a series of questions about trust and support from intimate partners, family members, and friends, the emotional and instrumental support of participants was assessed. The Significant Others Scale was used to generate and modify this set of questions (Power et al., 1988). These items assess the frequency of instrumental help and the amount to which the respondent has a trusted intimate partner, family member, or acquaintance from whom she receives emotional or instrumental support. Six of the items pertain to instrumental support and four to emotional support from family and friends. Six questions pertain to confidence and assistance from an intimate partner. The things are assessed on a four-point likert scale (1-4) ranging from "Never," "Occasionally," "Often," and "Always." In addition, the frequency of digital media use for information seeking and social and emotional support was determined using a five-point Likert scale ranging from 1 ("never") to 5 ("always"), with a higher score indicating more frequent use of digital media for pregnancy-related information and support. The scale was derived from Smith et al. Digital Media Questionnaire (2020).

iii. Household Food Security

To measure the household food security status, the Household Food Insecurity Access Scale (HFIAS) was used. This scale reflected the feelings of the head of household about food insecurity of his/her own and the family. In the HFIAS,

questions did not refer directly to the nutrition quality, but it covered the household's perception of changes in food quality, regardless of actual food compositions. The HFIAS was consisted of 9 questions with a 4-item Likert scale as often (3); sometimes (2); rarely (1) and never (0). The maximum score for a household was 27. Higher scores in the HFIAS meant the worse status of food insecurity for household. In this scale, food insecurity was divided into four groups including: food secure (0–1 point), mildly food insecure (2–7 points), moderately food insecure (8–14 points) and severely food insecure (15–27 points) (Coates et al. 2007).

2.8 Data collection method

Antenatal clinics in the selected primary health care centers were visited on antenatal days to obtain information, the recruitment of the pregnant women was randomized and data was collected using questionnaires.

3. DATA PRESENTATION, ANALYSIS AND INTERPRETATION

3.1 Analysis of research questions

Table 3.1 Comparison of health related quality of life across maternal demographic-obstetric factors (N = 519)

Maternal Characteristics	N	Mean (SD)	95% CI for Mean Difference	*t/F value*	*p-value*	Df
Maternal age[a]						
<25	145	20.43 (8.41)	19.05, 21.82			
25-34	303	20.21 (8.32)	19.27, 21.15	1.88	.154	516
≥ 35	71	22.32 (8.23)	20.38, 24.27			
Gestation age[b]						
Second trimester	151	18.38 (8.13)	-4.63, -1.52	-3.89	.000	284
Third trimester	368	21.45 (8.28)				
Parity[a]						
0	100	21.54 (8.83)	19.79, 23.29			
1	160	19.68 (7.98)	18.43, 20.93	1.36	.255	515
2	181	20.48 (8.45)	19.18, 21.66			
> 3	78	21.44 (8.15)	19.60, 23.27			
Pregnancy readiness[b]						
Ready	413	19.44 (7.60)	-7.49, -3.52	-5.47	.000	140
Not ready	106	24.94 (9.62)				

Note: a = One-way Anova; b = Independent t-test.

The differences in health-related quality of life ratings among maternal demographic and obstetric characteristics are examined in Table 3. There was a significant effect for gestational age, $t(284) = -3.89$, p .001, and pregnancy preparedness, $t(140) = -5.47$, p .001, according to the findings of the Independent t-tests. Women in the third trimester scored higher (M = 21.45, SD = 8.28) compared to women in the second trimester (M = 18.388, SD = 8.13); this implies that women in the later stages of pregnancy face more difficulties, resulting in a lower quality of life. Women who were prepared for the index pregnancy received lower scores (M = 19.44, SD = 7.60) than those who were not (M = 24.94, SD = 9.62). This finding revealed that women who were prepared for pregnancy faced fewer difficulties and, thus, had a higher quality of life than those who were not. $F(2, 516) = 1.88$, p =.15; and $F(3, 515) = 1.36$, p =.25, respectively. The one-way ANOVA test revealed no between-group differences in the total quality of life scores for maternal age $F(2, 516) = 1.88$; and parity $F(3, 515) = 1.36$, p =.25.

Table 3.2 Comparison of health related quality of life across maternal socio-economic factors (N = 519)

Maternal Characteristics	N	Mean (SD)	95% CI for Mean Difference	*t/F value*	*p-value*	Df
Marital status[a]						
Married	486	20.16 (8.04)	-10.09, -2.56	-3.41	.002	35
Not married	33	26. 48 (10.44)				
Family type[a]						
Monogamy	420	20.39 (8.29)	-2.71, 0.95	-0.94	.346	517
Polygamy	99	21.27 (8.56)				

Maternal education[b]						
Primary	64	22.19 (8.55)	20.05, 24.32			
Secondary	347	21.20 (8.82)	20.26, 22.13	15.69	.000	156.97
Tertiary	108	17.56 (5.52)	16.50, 18.61			
Maternal work status[a]						
Employed	451	20.36 (8.18)	-3.69, 0.58	-1.43	.152	517
Not employed	68	21.91 (9.34)				
Partner work status[a]						
Employed	468	20.34 (8.22)	-4.66, 0.16	-1.83	.068	517
Not employed	51	22. 59 (9.25)				
Economic status[b]						
Good	177	17.41 (5.40)	16.61, 18.21			
Moderate	291	19.89 (7.80)	19.08, 20.88	257.62	.000	159.87
Weak	51	34.80 (4.72)	33.48, 36.13			
Household food insecurity[b]						
Food secure	56	14.27 (2.28)	13.66, 14.88			
Mildly food insecure	224	16.63 (4.61)	16.02, 17.23	562.47	.000	203.10
Moderately food insecure	175	22.26 (7.73)	21.11, 23.42			
Severely food insecure	64	35.19 (3.48)	34.32, 36.06			

Note: a =Independent t-test; b = One-way Anova analysis.

The bivariate analysis of the relationship between socioeconomic factors of respondents and quality of life is presented in Table 3.2. The one-way ANOVA test revealed statistically significant differences in the mean quality of life based on the food security level of the household. $F(3, 203.10) = 562.47$, $p < 0.001$. Post hoc analyses using the Games-post hoc criterion for significance revealed that the average quality of life score was significantly lower in food secure households (M = 14.27, SD = 2.28) than in the mildly food insecure, moderately food insecure, and severely food insecure households (M = 16.63, SD = 4.61, 22.26, 7.73, and 35.19, respectively). This result implies that women in food-secure households had fewer difficulties, resulting in a higher quality of life.

There was a statistically significant difference in the quality of life scores for the three maternal education groups $F(2, 156.97)= 15.69$, $p<0.001$. Post- hoc comparisons using the Games-Howell test indicated that the mean score for women who had tertiary education (M= 17.56, SD= 5.52) was significantly lower than those with primary (M= 22.19, SD= 8.55) and secondary education (M= 21.20, SD= 8.82). This suggests that women who had tertiary education had lesser challenges which results in their higher quality of life.

The results of the one-way ANOVA test also revealed that the quality of life of pregnant women was significantly associated with their economic status. $F(2, 159.871) = 257.62$. Games Howell post-hoc analyses showed the quality of life of women who were good economically was significantly lower (M= 20.16, SD= 8.04) than those who were moderate and weak (M= 19.89, SD= 7.80, M= 34.80, SD= 4.72 respectively) showing that those who were economically good had higher quality of life because they had fewer obstacles.

The association of marital status and quality of life of pregnant women was also significant, t (35) = -3.41 p. 0.001, based on the results gotten from the Independent t- tests. Women who were married had lower scores (M = 20.16, SD = 8.04) than those who were not married (M = 26.48, SD = 10.44). The result revealed that women who were married had fewer struggles thereby having a higher quality of life than those who were not. The independent t-test did not find a difference in the quality of life scores for women based on their family type, $t(517) = -0.94$, work status, $t(517)= -1.43$ and partner work status $t(517)= -1.83$.

Table 3.3 Effect of demographic-obstetric factors and perceived social support on the quality of life scores of pregnant women

S/N	Variables	1	2	3	4	5
1	**Quality of life**	1				
2	**Partner support**	-.381** .000	1			
3	**Emotional support**	-.199** .000	.527**	1		

4	**Instrumental support**	-.215** .000	.531**	.531**	1	
5	**Media support**	-.242** .000	.484**	.401**	.324**	1
	Mean	20.56	3.82	5.47	4.95	4.68
	Standard Deviation	8.347	2.247	3.608	4.985	5.876

** Correlation is significant at the 0.01 level (2-tailed)

* Correlation is significant at the 0.05 level (2-tailed)

A Pearson_ Moment correlation analysis was carried out to test the relationship between the quality of life scores of pregnant women in relation to partner support, emotional support, instrumental support and media support.

The matrix show a statistically significant negative correlation between partner support and the quality of life scores of pregnant women [r, (519) = -.381, P<0.05]. It also shows statistically significant negative correlation between the quality of life scores and the domains of social support: emotional support [r, (519) = -.199, P<0.05]; instrumental support [r, (519) = -215, P<0.05] as well as media support [r (519) = -.242, P<0.05]

It can therefore be concluded that social support has a significant influence on the quality of life of pregnant women. This result indicates that there is an inverse relationship between the support a pregnant woman gets and her quality of life which means that lower the social support, the higher the score on the quality of life scale which means a lower the quality of life. This is because of the way the quality of life scale is constructed- higher scores indicate more problems in pregnancy which leads to lower quality of life.

Table 3.4 Multiple linear regression analysis of predictors of maternal quality of life in pregnancy

Model	Sum of squares	Df	Mean square	F	Sig
Regression	21034.785	12	1752.899	58.846	.000
1 Residual	14923.845	501	29.788		
Total	35958.630	513			

				95% Confidence Interval for B	
Model	**Standardized Co-efficient (Beta)**	**T**	**Sig**	**Lower bound**	**Upper bound**
Constant	14.375	8.852	.000	17.787	25.172
Gestation Age Second trimester (vs. Third trimester)	-2.090	-3.897	.000	-3.144	-1.036
Pregnancy Readiness Ready (vs. Not ready)	1.270	1.922	.055	-.028	2.568
Marital status Married (vs. Not married)	-.349	-.336	.737	-2.391	1.693
Maternal Education Primary (vs. Tertiary) Secondary (vs. Tertiary)	.601 .186	.634 .281	.526 .779	-1.261 -1.113	2.464 1.484
Economic status Moderate (vs. Good) 1 Weak (vs. Good)	.055 8.126	.081 6.783	.936 .000	-1.299 5.772	1.410 10.480
Partner Support	-.393	-2.507	.012	-.701	-.085
Emotional support	-.024	-271	.786	-.148	.195
Instrumental Support	.100	1.577	.115	-.024	.224
Media Support	-.001	-.022	.982	-.024	.224
Food Security	.514	15.229	.000	.766	.993

F (12, 501) = 58.846, P< 0.05, R^2= 0.59

A multiple regression analysis was computed to determine the predictors of maternal quality of life. The set of independent variables included were those with a significant *P* value in the bivariate analysis. Based on the summary of analysis, a significant regression equation was found F (12, 501)= 58.846, P< 0.05 with a R^2 of 0.59. The results of the regression indicated that the model was significant and the variables in the model explained 59% of the variance of maternal quality of life.

Further analysis revealed that food security (β= .514, t= 15.229, p< 0.05), weak economic status (β= 8.126, t= 6.783, p< 0.05), partner support (β= -.393, t= -2.507, p< 0.05) and gestation age (β= -.393, t= -3.897, p< 0.05) were significant predictors of maternal quality of life. While pregnancy readiness (β= 1.270, t = 1.922) was marginally significant, marriage, education, moderate economic status (β= .026, t= .517, p< 0.05), emotional, instrumental and media support were not statistically significant predictors of maternal quality of life.

3.2 Discussion of findings

The first research question identified the difference in the quality of life scores among pregnant women based on their demographic-obstetric characteristics. The findings revealed that several previous pregnancies (parity) and maternal age have no significant difference in the pregnant women's quality of life score. In contrast, pregnancy readiness and gestation age significantly affect pregnant women's quality of life scores. This is similar to a study by Haas et al who showed an increase in women with poor physical quality of life during their second and third trimesters of pregnancy. In affirmation, Lagadec et al (2018) also support the view that pregnant women during the third trimester were more prone to experiencing a lower quality of life score than those who were not pregnant.

The second research question focuses on the effect of demographic-obstetric factors and perceived social support on pregnant women's quality of life scores. The result showed that perceived social support has a significant effect on the quality of life of a pregnant woman as lower social support leads to more problems during pregnancy, leading to lower quality of life. This is similar to the work of Shishehgar and her colleagues in 2013 who found out that in addition to reducing stress, social support can also help improve the quality of life for pregnant women and also helps them avoid experiencing pregnancy-related stress and influence health related behaviors indirectly. Having sufficient social support during pregnancy is also known to improve the health and well-being of pregnant women. Despite experiencing high levels of stress, women with adequate social support have fewer complications during their pregnancy, leading to a higher quality of life. According to Gabbe et al., in 2012, social support can change the quality of life for pregnant women. Lack of one can lead to various symptoms such as nausea, vomiting, and heartburn and lower quality of life. It has been known that providing social support to pregnant women can help prevent them from experiencing negative mental health effects. Studies also suggest that having more social support from the women's partners and families can help decrease the risk of depression (Figueiredo et al., 2014).

The third research question assessed the difference in the quality of life scores of women based on their socioeconomic status. The findings revealed that there was no significant difference in the quality of life score based on pregnant women family type, work and partner employment status. However, there was a significant difference in pregnant women's quality of life based on food security, education, economic status and marital status. This is similar to Kim, Lee, Bae et al, (2018) who reported considerable evidence that low socioeconomic status is directly linked to obstetrical complications such as preterm deliveries, high rate of cesarean sections, and third-trimester hemorrhages. In affirmation, Nguyen, Hoang & Nguyen, (2018) who reported that pregnant women with low socioeconomic status tend to receive inadequate nutrients. Those with good economic status however, display a higher quality of life because they can afford what they need. It is argued that a child born to a mother who can read is 50 percent more likely to survive past the age of 5 than a child born to an illiterate woman (UNESCO). A study conducted by Boybak and Ylmaz (2020), also revealed that the psychosocial health of pregnant women was higher when their spouses worked. In terms of food security, Owoo (2020) argued that being economically viable can help improve food security, leading to a higher quality of life for pregnant women.

The fourth research question examines the predictors of maternal quality of life. The results showed that partner support, financial instability, gestational age and food security were significant predictors of maternal quality of life. According to Sut & Asci (2016), the second trimester is often associated with fewer problems for women. It also benefits them as it allows them to maintain their quality of life. However, according to Lagadec (2018), pregnant women's quality of life is decreased as their gestational age increases. Women in their third trimester of pregnancy have more complications and lower quality of life than those in their first and second trimesters. A woman with strong partner support will feel less stressed and happier during and after pregnancy. It helps decrease her emotional distress and gives her interpersonal

security and relationship satisfaction, leading to a better quality of life (Stapleton et al, 2012). Education, marriage, pregnancy readiness emotional, instrumental and media support were not significant predictors of maternal quality of life.

4. SUMMARY AND RECOMMENDATIONS

4.1 Summary

The study sought to determine the factors that influence the quality of life of pregnant women in Ibadan Metropolis. Quality of live goes beyond mortality and morbidity as it is a broad category that includes various factors such as family, education, wealth, safety, and freedom. From the background of the study, it was observed that quality of life applies to everyone especially pregnant women who are in a vulnerable state because they are in a period that can affect their lives and that of the fetus. Various works of literature reviewed showed that many factors ranging from socio-demographic, obstetric, social support, socioeconomic, household food security, etc affect the quality of life of women during pregnancy.

Women with unplanned pregnancy, no partner, low social support and low socioeconomic status face challenges that could affect their quality of life during pregnancy. Food insecurity and poor nutritional status leads to complications as lack of nutrients leads to health problems for both the mother and the baby. As gestational age increases, the quality of life is negatively affected. Overall, social, economic, socio-demographic and institutional factors could lead to poor health-seeking behavior which ends up affecting a woman's quality of life.

This study was carried out to see if pregnant women understood quality of life and what it entails and to gain a deeper understanding of the factors influencing their quality of life during pregnancy. The study was conducted with four research objectives and questions. Data was collected from 519 pregnant women in the selected primary health care centers. The data collected showed that the quality of life mean score was 20.56 with a standard deviation of 8.347, showing that the quality of life of women in this study was very good. The significant predictors of maternal quality of life were economic status, food security, gestation age, and partner support.

4.2 Recommendations

Based on these findings, the following recommendations were made

1. There should be screening for maternal quality of life during antenatal care and treatment for women with poor quality of life.

2. Health authorities should also make recommendations to improve the quality of life for pregnant women and consider the various factors and barriers that can affect their quality of life. They should also consider the solutions or policies that can be implemented to prevent these issues

3. In addition to providing comprehensive care to pregnant women, medical institutions and obstetric doctors should provide them with additional support and resources (family therapy) to help them manage their pregnancies. Women should be given the best possible care during their pregnancy to avoid experiencing life-threatening situations.

4. Families should also ensure that they build better support structures for the pregnant woman to improve her physical and emotional well-being and quality of life.

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