

FACTORS ASSOCIATED WITH ROUTINE PRENATAL CARE MEDICATION COMPLIANCE AMONG PREGNANT WOMEN ATTENDING SELECTED GENERAL HOSPITALS IN LAGOS METROPOLIS, NIGERIA

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Abstract

Pregnancy impacts women's health, and compliance with prescribed prenatal care medications can reduce negative outcomes. However, many pregnant women in developing countries, including Nigeria, do not comply with their medication regimens. This study assesses the factors associated with routine prenatal care medication compliance among pregnant women attending selected general hospitals in Lagos metropolis, Nigeria. A cross-sectional descriptive survey research design was adopted for this study and a multistage sampling method was employed for selecting the 365 respondents at selected general hospitals in Lagos metropolis. A validated self-developed questionnaire with a reliability coefficient value score of 0.73-0.80 was used to collect data. Descriptive and inferential statistics were utilized to analyze the data. This study indicate that majority of the respondents are within the ages of 21-30years (59%), married (78%), with secondary school certificates (65%) and husband also has secondary school certificates (51%). Majority of the respondents are self employed (59%), Christian religion (80%), able to buy medication (96%) and perceived distance between home and hospital is more than 20 minutes' walk (66%). This study observe that respondents' attitude (50.5%) is a factor associated with routine prenatal care medication compliance among pregnant women attending selected general hospitals in Lagos metropolis, Nigeria, while This study reveal that respondents' knowledge of prescribed prenatal care medications is not a factor (39.3%) and respondents' self-efficacy (49.4%) are not factors.

Keywords: Factors: Routine; Prenatal Care; Medication Compliance; Pregnant Women; General Hospitals

Introduction

Pregnancy significantly affects women's health, leading to increased demand for vitamin supplements and medications. Vaccines, vitamins, and minerals are often prescribed to improve the nutritional status of both mother and fetus (Geresu et al., 2020). Despite debates on the sufficiency of diet alone, studies show inadequate food intake in low- and middle-income countries, leading to maternal mortality from deficiencies in iron and essential minerals (Obickwu et al., 2020; Konje et al., 2022). The World Health Organization (WHO) recommends daily oral iron, folic acid, intermittent sulfadoxine-pyrimethamine treatment, tetanus toxoid vaccination, and preventive anthelmintic treatment for pregnant women. These measures help reduce neonatal mortality from tetanus, malaria, maternal anemia, puerperal sepsis, low birth weight, preterm birth, and worm infestations (WHO, 2018).

Anemia affects 41.8% of pregnant women globally, particularly in developing countries, where it persists despite preventive measures such as insecticide-treated nets and hematinics (Konje et al., 2022; Abioye et al., 2024). In Ghana, the mean hemoglobin level is 10.81 g/dl, with a 50.8% prevalence of anemia (Mohammed & Helegbe 2020). A study in Nigeria reported pregnancy-related anemia rates between 25% and 45.6% (Geresu et al., 2020; Ugwu & Uneke 2020). Approximately 70% of malaria-related deaths occur among pregnant women and children under five, making malaria a significant public health challenge in sub-Saharan Africa (WHO, 2019; Darteh et al., 2021). In 2018, over 5.5 million low-birth-weight children were born in this region,

with 872,000 cases linked to malaria (WHO, 2019). Additionally, tetanus during pregnancy remains a concern, contributing to maternal and neonatal mortality, with an estimated 180,000 neonatal deaths due to inadequate tetanus toxoid immunization (Gbenga-Epebinu et al., 2023; Amin et al., 2022).

In a study conducted in Ethiopia, it was found that the overall usage of routine antenatal drugs was inappropriate (Geresu et al., 2020; Amin et al., 2022). An Indian study also revealed that around 34.4% of respondents reported non-adherence to iron and folic acid supplements (Amin et al., 2022). It has been discovered in a Ghanaian study, that 34.0% of the pregnant women complied with oral iron supplementation (Ferka & Kumi-Kyereme 2023). Additionally, research has indicated relatively low adherence to the use of iron and folic acid supplements. Many studies have shown that the majority of pregnant women are unaware of the names and uses of the medications they receive (Abioye et al., 2024; Lyoba et al., 2020; Molla et al., 2019). Research in sub-Saharan Africa revealed a link between knowledge and compliance with iron folic acid (IFA) supplementation; women who understood IFA were 2.71 times more likely to comply with the supplementation compared to those who did not (Fite et al., 2021). Additionally, pregnant women's attitudes toward Intermittent Preventive Therapy (IPT) were generally unfavorable, resulting in inadequate medication uptake. The low uptake of Tetanus Toxoid (TT) vaccinations among pregnant women has also been attributed to misconceptions and irregular immunization practices, contributing to low vaccination rates (Najlaa et al., 2022).

Researchers found out that low compliance with iron-folic acid (IFA) supplementation among pregnant women is primarily due to forgetfulness, socio-economic factors, difficulty accessing tablets, husband's education, gestational age at first ANC, antenatal visits four or more times, household radio ownership, higher knowledge about supplements, knowledge of anemia, time from home to health facility, and having children aged 7 and above (Khanam et al., 2022 ; Arficho 2023). Moreover,

it was also corroborated this in a study where it was found out that the predictors of compliance with iron supplements during pregnancy include; women's literacy, wealth, knowledge of anemia, iron supplements, information about their importance, and being visited by urban health extension workers are significant predictors of compliance with iron supplements during pregnancy (Adewole et al., 2019)

Low intake of iron and folic acid during pregnancy can lead to anemia, which, if untreated, may result in premature birth, low birth weight, reduced mental ability, increased infection risk, and serious conditions such as hydrocephalus, spina bifida, and encephalocele (Mohammed & Helegbe 2020). A study in Nigeria highlighted that iron deficiency in pregnancy is associated with low birth weight and contributes to maternal mortality and adverse health outcomes by affecting the metabolism and health of both mother and fetus (Obiekwu et al., 2020). Additionally, non-compliance with Intermittent Preventive Therapy (IPT) can lead to malaria during pregnancy, which results in approximately 10,000 maternal deaths annually and significantly high maternal morbidity rates, especially among first-time mothers. Malaria also contributes to 75,000 to 200,000 infant deaths each year, increasing the risks of miscarriage, stillbirth, and low birth weight¹⁸.

Tetanus toxoid vaccine is an effective and affordable intervention that boosts immunity against the disease for both pregnant women and their newborns (Ahmed & El-Barrawy 2019). Additionally, supplements like folic acid, iron, and multivitamins support red blood cell production, helping to prevent anemia and reduce risks of postpartum hemorrhage, preterm births, and low birth weight. Folic acid also protects against congenital malformations, such as neural tube defects. Intermittent Preventive Treatment with Sulphadoxine/pyrimethamine (IPTp) is important for preventing malaria, which poses risks to both mothers and their babies. Providing deworming treatment helps address maternal infections, particularly in areas where helminths are common, benefiting both mothers and their

unborn children (Mohammed & Helegbe 2020)

Lastly, Lagos state government frequently provides free prescribed prenatal care medications and vaccines to its general hospitals, which are consistently available to pregnant women during their antenatal clinic appointments. Midwives also regularly conduct health education sessions on this topic during antenatal clinics at health facilities in the Lagos metropolis. Despite all these, the researcher has discovered that the pregnant women who visit antenatal clinics within the Lagos metropolis do not comply with the medications. The study therefore aimed to identify the factors associated with prenatal care medication compliance among pregnant women attending antenatal clinics in selected general hospitals in Lagos state.

METHODOLOGY

Design: This study employed a cross-sectional descriptive design.

Setting: General Hospital Ifako Ijaye is located in Ifako Coker, Ifako-Ijaiye LGA. It has around 1,350 pregnant women attend its antenatal clinic monthly. Lagos Island Maternity Hospital, is located at 1 Campbell Street, Lagos Island. The hospital serves about 1,400 pregnant women monthly. Alimosho General Hospital, Igando is situated along LASU-Isheri Road in Alimosho Local Government Area. It serves approximately 1,000 antenatal patients monthly. General Hospital, Isolo is located at 121 Mushin Road, Isolo (Oshodi-Isolo Local Government Area). About 800 pregnant women attend antenatal clinic in the hospital each month. Orile Agege General Hospital is at 3 Old Otta Road in Agege Local Government Area. The facility caters for approximately 880 pregnant women monthly. General Hospital, Gbagada is located at 1 Hospital Road in Shomolu Local Government Area. It is serving approximately 680 antenatal patients monthly.

Target Population: Pregnant women. The total monthly attendance at these hospitals was 6,750. Exclusions included women attending the clinic for antenatal booking and those making multiple visits within the same week.

Sample Size Determination: A sample size of 365 was determined by using Cochran formula for estimating sample size for a population which is large and finite. Snedecor and Cochran (1989) developed a formula to calculate a representative sample for proportions as:

$$\text{Sample size: } n = \frac{Z^2 pq}{d^2}$$

where;

n_0 = is the sample size

z = assuming 95% confidence interval = 95% (1.96)

p = proportion of Routine haematinics and multivitamins compliance from a previous study (Mohammed and Helegbe, 2019) = 35% = 0.35

$q = (1-p) = 1 - 0.35 = 0.65$

d = acceptable margin of error (constant) = 0.05.

Sampling technique: A multi-stage sampling technique was used to recruit participants.

First Stage: 15 general hospitals with maternal and child health services were purposively selected from the Ikeja (10) and Lagos (5) divisions of Lagos State.

Second Stage: Following Babatunde et al. (2021), 50% of hospitals from each division were randomly selected, yielding eight hospitals (five from Ikeja, three from Lagos).

Third Stage: Proportional stratified random sampling was then employed to select 365 pregnant women from these hospitals to ensure subgroup representation.

Fourth Stage: systematic random sampling was used to recruit eligible participants during antenatal clinic visits, enhancing representativeness and minimizing bias.

Instrument: a self-structured questionnaire aligned with the study objectives and organized into five sections: socio-demographic data, knowledge of prenatal care medications (24 items), obstetric care-seeking behavior (5 items), attitudes toward medications (10 items on a 5-point Likert scale), and compliance with prenatal medications, measured using the 8-

item Morisky Medication Adherence Scale. Knowledge scores were categorized as low (0-11), average (12-18), and high (19-24). Attitudes were analyzed by scoring the five likert items in which the highest score is 5 for strongly agreed, then the total items possible score for attitude of the respondents was 55. Therefore, points between 28-55 means positive attitude towards utilization of prescribed prenatal medication, while 0-27 points is negative attitude. Inferential chi-square tests examined the hypothesis, with significance set at $p < 0.05$, providing insights into factors influencing prenatal care compliance and attitudes.

Validity of instrument: The questionnaire was validated by the research supervisor.

Reliability of instrument: A pilot test with 37 pregnant women ensured reliability, yielding a coefficient of 0.73-0.80.

Data collection: involved A systematic sampling interval of 18 was applied across eight facilities, with simple random sampling for the first respondent. Data collection, conducted over four weeks by 24 trained assistants, involved informed consent and confidentiality assurances.

Data Analysis: Data were processed using SPSS Version 26.0, with descriptive analysis (mean, standard deviation, frequency) for responses.

Ethical approval: was obtained from Babcock University Research and Ethical Committee (BUHREC) with reference number: BHREC 095/24 and Health Research Ethics Committee

(HREC) at Lagos University Teaching Hospital, Idi-Araba, Lagos, with the assigned number: ADM/DSCST/HREC/APP/6544. Throughout the study, ethical standards were rigorously maintained. Informed consent was obtained from respondents before the distribution of questionnaires, ensuring anonymity and confidentiality of the information provided. Non-maleficence was also prioritized to protect the respondents.

RESULT

A total of 365 respondents were approached to participate, all of whom agreed to partake, resulting in a return rate of 96.0%. Out of the 365, 350 responses were deemed valid, with 15 being invalidated due to incomplete questionnaire completion. This study shows that the respondents are predominantly young population with an average age of 31.1 years. 59% fall between 21 and 30 years, and 31% between 31 and 40 years. 78% are married, and 59% are self-employed. 80% identify as Christian, 65% have a secondary education, and 96% can afford medications during pregnancy. Additionally, 66% believe the distance from their homes to the hospital is quite far, requiring more than 20 minutes to walk. This study indicate that majority of the respondents are within the ages of 21 -30years (59%), married (78%), with secondary school certificates (65%) and husband also has secondary school certificates (51%). Majority of the respondents are self employed (59%), Christian religion (80%), able to buy medication (96%) and perceived distance between home and hospital is more than 20 minutes' walk (66%)

Table 1:
Socio-demographic data of respondents (N=350)

Variable	Frequency	Percentage
Age (in years)		
Less than 20	25	7.0
21-30	206	59.0
31-40	108	31.0
41 and above	11	3.0
Marital Status		
Married	273	78.0
Single	28	8.0
Divorced	17	5.0
Separated	32	9.0
Maternal Educational Status		
Primary	0	0
Secondary	228	65.0
Tertiary	122	35.0
Husband Educational Status		
Secondary	179	51.0
Tertiary	171	49.0
Occupation		
Civil servant	98	28.0
Self-employed	207	59.0
House wife	45	13.0
Religion		
Christianity	280	80.0
Islam	70	20.0
Able to buy medications		
Yes	336	96.0
No	14	4.0
Perceived distance between home and hospital		
5 minutes' walk	14	4.0
10 minutes' walk	74	21.0
15 minutes' walk	31	9.0
More than 20 minutes' walk	231	66.0

The table below shows that 78% of respondents knew about vitamin C, 54% knew about folic acid tablets, and 42% knew about the vitamin B complex. Only a small percentage of them (27%) were aware that prenatal care medications guard against birth defects, and 30% were aware that women should have the tetanus toxoid vaccine five times to be protected for the rest of their lives. More than three-quarters (76%) of the study participants were unaware that folic acid helps prevent birth

deformities, and more than half (54%) were unaware of the role tetanus toxoid vaccination plays in shielding the mother and child from infection during or after delivery. A significant portion of the study population (69%) was unaware that iron supplements prevent anemia during pregnancy and 52% did not know that pregnancy supplements help baby to grow well. This study reveal that respondents' knowledge of prescribed prenatal care medications is not a factor (39.3%).

Table 2: Respondents' knowledge of prescribed prenatal care medications as a factor

Items	True	False
Knowledge of Medications	Freq(%)	Freq(%)
Ferrous Sulphate	133(38.0)	217(62.0)
Folic Acid	189(54.0)	161(46.0)
Vitamin B-complex	147(42.0)	203(58.0)
Vitamin C	273(78.0)	77(22.0)
Tetanus Toxoid Vaccine	112(32.0)	238(68.0)
Pregnacare	21(6.0)	329(94.0)
Safe Preg	28(8.0)	322(92.0)
Pregnature	21(6.0)	329(94.0)
Ferotone	35(10.0)	315(90.0)
Fansidar	53(15.0)	297(85.0)
Amalar	25(7.0)	75(93.0)
Albendazole	14(4.0)	336(96.0)
Intermittent preventive therapy (Amalar/Fansidar) is received in only one dose	238(68.0)	112(32.0)
The prenatal care medications prevent against malformation of baby during pregnancy	95(27.0)	255(73.0)
Tetanus Toxoid Vaccine is to be taken five times to protect women throughout life	105(30.0)	245(70.0)
Starting-time of consuming pregnancy supplement is as soon as a woman conceive	98(28.0)	252(72.0)
	28.3%	71.7%
Knowledge of benefits of the drug		
Iron supplement prevent anaemia in pregnant women	108(31.0)	242(69.0)
Folic acid prevents malformations in babies	119(34.0)	266(76.0)
Tetanus toxoid immunization protects the mother and child from acquiring infection during or after birth	161(46.0)	189(54.0)
The benefits of taking pregnancy supplements include to help baby to grow well	168(48.0)	182(52.0)
	39.8%	62.8%
Knowledge of side effects		
The side effects of prenatal care medications include:		
Nausea	91(26.0)	259(74.0)
Vomiting	214(61.0)	136(39.0)
Coloured stool	263(75.0)	87(25.0)
Itching	130(37.0)	220(63.0)
	49.8%	50.2%
Source: Field work, 2024	39.3%	61.6%

Table 4 revealed that the participants' negative attitude towards prenatal care medications. The results indicate that more than half (74%) of the participants think that prescribing too many drugs during pregnancy is unnecessary. Additionally, 62% of the participants believe that conventional medicines do more harm than good when used during pregnancy. Moreover, 89% felt that there are too many

pills to swallow and 46% of the participants find taking such medications, especially during pregnancy, to be uncomfortable. This study indicate that respondents' attitude (50.5%) is a factor associated with routine prenatal care medication compliance among pregnant women attending selected general hospitals in Lagos metropolis, Nigeria

Table 4: Respondents' attitude towards prescribed prenatal medications as a factor (N = 350)

Attitudinal Items	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
Prescribing too many medicines is unnecessary during pregnancy	186(53.0)	73(21.0)	35(10.0)	14(4.0)	42(12.0)
Conventional medicines do more harm than good when used in pregnancy	158(45.0)	59(17.0)	31(9.0)	63(18.0)	39(11.0)
I do not comply to taking the medications because there are too much tablets to swallow	228(65.0)	84(24.0)	7(2.0)	21(6.0)	10(3.0)
Taking medicine during pregnancy is a discomfort	94(27.0)	67(19.0)	45(13.0)	42(12.0)	102(29.0)
Routine antenatal medicine is mandatory in pregnancy	115(33.0)	28(8.0)	4(1.0)	21(6.0)	182(52.0)
All medications should be considered harmful to fetus	49(14.0)	129(37.0)	70(20.0)	88(25.0)	14(4.0)
I have interest in taking medicine when I am pregnant than when I am not	91(26.0)	98(28.0)	137(39.0)	7(2.0)	17(5.0)
Tetanus infection is life-threatening for the mother and the baby	67(19.0)	10(3.0)	7(2.0)	14(4.0)	252(72.0)
Adherence to routine antenatal medicine is difficult during pregnancy	182(52.0)	46(13.0)	17(5.0)	28(8.0)	77(22.0)
Medicines should be restricted to individual care during pregnancy	17(5.0)	21(6.0)	39(11.0)	35(10.0)	238(68.0)
I have to be positive to a disease condition before I adhere to the routine medications	123(35.0)	10(3.0)	28(8.0)	49(14.0)	140(40.0)
	34%	16.5%	10.9%	10%	30%

Source: Field work, 2024

Table 5 below revealed that 64% of participants occasionally forgot to take their medications, with 71% missing doses in the past two weeks. Additionally, 60% forgot their medications while traveling, and 67% took all their medications the previous day. While 52% claimed to follow prescriptions, 56% frequently missed prenatal medications due to unavailability. Moreover, 61% took their antenatal drugs only when they remembered,

and only 30% completed their prescribed courses. These findings indicate significant non-compliance with routine antenatal medications among respondents. This study indicate that respondents' self efficacy (35.5%) is not an associated factor with routine prenatal care medication compliance among pregnant women attending selected general hospitals in Lagos metropolis, Nigeria

Table 5: Respondents' Self efficacy as a factor associated with compliance of prescribed prenatal care medications (N=350)

Items	Yes Freq (%)	No Freq (%)
Do you sometimes forget to your medicine	224(64.0)	126(36.0)
Thinking over the past 2 weeks, were there any days when you did not take your medicine	248(71.0)	102(29.0)
Have you ever felt the need to stop taking your medicine without telling your doctor due to usual symptoms	185(53.0)	165(47.0)
When you travel or leave home, do you sometimes forget to bring along your medicine	210(60.0)	140(40.0)
Did you take all your medicines the day before	234(67.0)	116(33.0)
Was there any day you ever felt bothered about sticking to your routine antenatal care medications	270(77.0)	80(23.0)
Stopped taking routine antenatal medications due to not having any serious symptoms during pregnancy	168(48.0)	182(52.0)
Takes routine antenatal medications according to prescription of the doctor/midwife	182(52.0)	168(48.0)
	61.5%	35.3%
Frequency of missing taking prenatal care medications because it is non-available in the hospital/pharmacy		
Never/rarely	28(8.0)	322(92.0)
Once in a while	52(15.0)	298(85.1)
Sometimes	60(17.0)	290(83.0)
Usually	14(4.0)	336(96.0)
All the times	196(56.0)	154(44)
	20%	80%
Length/Duration of intake of antenatal drugs		
I take it until I exhaust the antenatal drugs prescribed	105(30.0)	245 (70.0)
I take about half of the antenatal drugs prescribed for me	21(6.0)	329 (94.0)
I take the antenatal drugs only on the days I remember	213(61.0)	137(39.1)
I take the antenatal drugs only when I feel sick	11(3.0)	339(97.0)
	25%	75%
	35.5%	63.4%

In Table 6, the association between knowledge of prescribed prenatal care medications and compliance with them is presented. The statistical analysis yielded a chi-square (χ^2)

value of 3.226 with a p-value greater than 0.05 ($p = 0.19$). This study indicate that there is no significant association between knowledge and compliance of respondents ($P=0.19$).

Table 6: Chi-square table showing association between knowledge and compliance (N = 350)

Overall Knowledge	Overall Compliance		Df	(p-value)	Remark
	Compliant (%)	Not-Compliant (%)			
High	78(69.6)	34(30.4)	3.226	2	Not significant
Average	37(68.5)	17(31.5)			
Low	110(59.8)	74(40.2)			

Table 7 shows the relationship between socioeconomic characteristics and compliance with prescribed prenatal care medications among pregnant women in selected Lagos hospitals. The findings indicate significant associations between respondents' occupation ($\chi^2 = 13.2$, $p = 0.001$) and their ability to

purchase medications ($\chi^2 = 7.2$, $p = 0.03$) with compliance. This study reveal that there is a significant association between two socio-demographic characteristics (Occupational Status ($P=0.001$) & Ability to buy medications ($P=0.03$)) and their compliance to prescribed prenatal care medications.

Table 7: Chi-square table showing association between the respondents' socio-economic characteristics and their compliance to prescribed prenatal care medications (N = 350)

Characteristics	Compliance Level		χ^2	Df	p-value
	Compliant (%)	Non-compliant (%)			
Age (in years):					
Less than 20-30	128(55.4)	103(44.6)	1.84	1	0.17
31-41 and above	57(48.0)	62(52.0)			
Maternal Educational Status:					
Secondary	115(50.4)	113(49.6)	1.26	1	0.26
Tertiary	70(57.4)	52(42.6)			
Marital Status:					
Married	150(55.0)	123(45.0)	2.41	1	0.12
Unmarried	35(46.0)	42(54.0)			
Occupational Status:					
Employed	159(52.0)	146(48.0)	13.2	1	0.001
Unemployed	26(58.0)	19(42.0)			
Ability to buy medications:					
Able	172(51.0)	164(49.0)	7.2	1	0.03
Not able	13(93.0)	1(7.0)			
Perceived distance between home and hospital:					
Near (between 5-15 minutes walk)	68(57.0)	51(43.0)	1.28	1	0.25
Far (more than 20 minutes walk)	117(51.0)	114(49.0)			

Table 8 reveals a significant association between pregnant women's attitudes toward prescribed prenatal care medications and their compliance in selected Lagos hospitals. The χ^2 value of 12.935 is statistically

significant ($p=0.002$), leading to the rejection of the null hypothesis that no association exists. These results suggest a relationship between attitudes and compliance among pregnant women.

Table 8: Association between respondents' attitude and compliance to prescribed prenatal care medications (N=350)

	Overall Compliance		χ^2	Df	(p-value)	Remark
	Compliant (%)	Not-Compliant (%)				
Overall Attitude	70(58.8)	49(41.2)	12.935	1	0.002	Significant

Discussion

This study determines factors associated with routine prenatal care medication compliance among pregnant women attending selected general hospitals in Lagos state, Nigeria. The socio-demographic characteristic of this study observe that majority of the respondents are within the ages of 21 -30years, married, with secondary school certificates and husband also has secondary school certificates. Majority of the respondents are self employed, Christian religion, able to buy medication and perceived distance between home and hospital is more than 20 minutes' walk.

This study reveal that respondents' knowledge of prenatal care medication is not a factor. This result is in tandem with Ibebuike, et al, (2019) where knowledge is not a factor affecting compliance to Intake of Antenatal Routine Drugs. this is contrary to Oshinyemi et al. (2024); who found out that knowledge is a factor influencing compliance with routine antenatal medications.

This study indicate that respondents' attitude is a factor associated with routine prenatal care medication compliance among pregnant women attending selected general hospitals in Lagos metropolis, Nigeria. This study is consistent to Kraemer et al., (2023) who noted that, 95% of their respondents believe that prenatal care medications were safe to take

during pregnancy. This study is inconsistent to Abaribe et al (2023) who reported respondents hesitant to adhere to the prescribed regimen due to discomfort associated with taking multiple pills in Nigeria and Ethiopia. This study is at variance with Tefera et al., (2020), who observed that pregnant women have doubts and fears about the potential harm of medications to their babies, as well as concerns about side effects.

This study indicate that respondents' self efficacy is not a factor associated with routine prenatal care medication compliance among pregnant women attending selected general hospitals in Lagos metropolis, Nigeria. This is consistent with Konje et al., (2022) in Nigeria and Ferka, & [Kumi-Kyereme](#), (2023) in Ghana, who revealed that less than half of the respondents adhered to the antenatal medication regimen. This study is in contrast to Konje et al., (2022), who reported that 88.7% of pregnant women indicated compliance with the use of these medications in Ghana.

Conclusion

The result revealed that respondents' knowledge and self efficacy are not factors associated with routine prenatal care medication compliance among the pregnant women. Attitude was found

to be a factor associated with these medication compliance. Interventions aimed at improving prenatal care medication compliance should focus on increasing knowledge about the importance and safety of prenatal care medications, and also addressing misconceptions and concerns. By addressing these factors, healthcare providers can effectively support pregnant women in optimizing their medication adherence and ultimately improving maternal and fetal health outcomes in Lagos, Nigeria, and beyond.

Recommendations

Antenatal counselling services should be strengthened to comprehensively address medication use during pregnancy. This includes providing detailed explanations regarding the rationale for prescribed medications, their intended benefits, potential side effects, and appropriate management strategies to mitigate any adverse reactions. Such counselling should be individualized to meet the specific needs and concerns of each pregnant woman, thereby fostering a supportive environment that encourages open and effective communication between patients and healthcare providers. In addition, efforts must be directed toward enhancing the accessibility and affordability of prenatal care services, including the cost and availability of essential medications. To further promote medication adherence, a combination of behavioral interventions such as appointment reminders, educational reinforcements, and incentive-based programs can be implemented. Technology-driven approaches, including mobile health applications, SMS reminders, and telehealth services, also offer promising avenues for supporting adherence and improving overall maternal and fetal health outcomes.

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