SEX PREFERENCE IN MATERNAL HEALTH IN LOKOJA KOGI STATE

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ABSTRACT

Sex preferences in maternal health still persist despite the strong campaign for gender equality and the desire to have children of both sexes. The study aimed at examining sex preference in maternal health care in Lokoja, Kogi State Nigeria.Secondary data was collected from the hospital, particularly Federal Medical Centre. The result shows that the highest births occurred in the month of September with 11.4% births of 94 males and 81 females. This was followed by births in the months of July and May with 11.1% and 11.0% of the births respectively, reflecting 96 male and 74 female born in July and 101 male and 68 female delivered in May. The lowest female delivery was recorded in the months of June and the highest was observed in February.It also shows that the highest births occurred in the months of June, August and October with similar values of about 11.8% births. Similarly, the highest proportion of males was recorded in these same months ranging from 90, 124 and 115 respectively. This was followed by births in the months of April and July with 11.1% and 11.0% of the births respectively; while female distribution revealed June, October, July and June as the months of the highest female births with figures of 135, 111, 111 and 121 births respectively. It was recommended that; the provision of standard medical equipment and qualified medical personnel is paramount to ensuring that the critical services of maternity are not compromised.

Keywords: Sex, Preference, Maternal health, Equality, Child Preference, Male and Female

Introduction

Sex preferences in maternal health still persist despite the strong campaign for gender equality and the desire to have children of both sexes. Studies shows that the practice of child-sex preference is still on the increase in contemporary Nigeria state, especially the rural areas of the country.Health facility delivery has been described as one of the major contributors to improve maternal and child health outcomes. Maternity care consists of antenatal care (ANC), Delivery care (DC) and Postnatal Care. The National Demographic Survey, 2003 stated that the purposes of these care are (a) to maintain mother and baby in the best possible state of health by identifying problems, actual and potential, at an early stage and constituting appropriate management and (b) to educate the mother and her husband/partner about pregnancy and labour and dispel fears and

ignorance (c) screening process for impaired fatal growth, mal-presentation, anaemia, preeclampsia and other disorder.

In spite of the fact that the government owned health care system is organized to provide accessible health care including maternal health care to all sections of the population, maternal health care utilization is poor for a number of reasons. These are: high user fee charge and inadequate quality of treatment in public hospitals, (2) lack of proximity of government health care facilities and (3) long waiting time for consultation and treatment (Sahoo, 2007). However, the evidence regarding the state of private healthcare facilities and their practices in Nigeria and Lokoja in particular is not encouraging.

In sub-Saharan Africa where 66% of the global maternal mortality occurred, only 56% of all births take place in health facility (Malinga et al, 2020). In Nigeria, the 5 leading causes of maternal death include: obstetric hemorrhage clampsis, Sepsis, obstructed labour and complications of unsafe abortion. Some of the deaths from these causes are preventable. Evidently, there is a substantial variation in the rates of maternal mortality among Nigerian States. The rate of the death is believed to be higher in most Northern States compared to the Southern States. Health facilities or services including immunization services are commonly accepted in most Southern States, where the services tend to be avoided in some of the northern States. Where the services are avoided more pregnant women and nursing mothers tend to lose their lives to deaths that are preventable. In the last few years, some State Governments in an attempt to address the high MMR have made effort to subsidize health services to boost its patronage among pregnant women and nursing mother. Yet the maternal mortality rate is high in most States. Babalola and Fatusi (2009) noted that it is particularly important for studies to explore effective ways of increasing service utilization among lowly educated and poor women who are the least likely to use maternal health services.

Although poor distribution of the health care services and the cost involved to access the services have been identified as the obstacles to mothers choices to health services (Morris et al, 2008), there are several factors affecting the health care utilization by women. Aliyu and Dahiru, (2017) recommended that possible future studies could use the qualitative approach to study issues associated with the low use of postnatal services. There is need to fully understand factors affecting women at making maternal health care choices. This study assesses maternal health care utilization in Lokoja,Kogi State.

Research Hypothesis

H_1: There is a significant variation in the utilization of antenatal, delivery and postnatal care among reproductive aged women in the study area.

H_0: There is no a significant variation in the utilization of antenatal, delivery and postnatal care among reproductive aged women in the study area,

Scope of the Study

The study focused on primarily reproductive aged women; waiting mothers, pregnant women and nursing mothers attending antenatal, delivery and postnatal care. Spatially; the study is limited to secondary data from hospital records as well as In-depth interviews with childbearing women in Lokoja, Kogi State. With respect to time, the study is limited to 10 years data from the period of 2010 to 2019.

Study Area

Physical Characteristics

Lokoja is geographically located on Latitudes $7{\cdot}8^0$ N and longitudes 6.740E and about 55metres elevation above the sea level. Lokoja has two major distinctive features that make it stand out among other cities in Nigeria, situated on the western bank of the Niger River close to its confluence with the Benue River at an altitude of 45-125m above the sea level and sandwiched between a water body and a high plateau ridge, River Niger and Mount Patti (Fig. 3.1). Also the temperature of Lokoja is modified by the presence of River Niger which covers extensive proportion of Lokoja Local Government Area. The area is covered by grass and scattered trees.

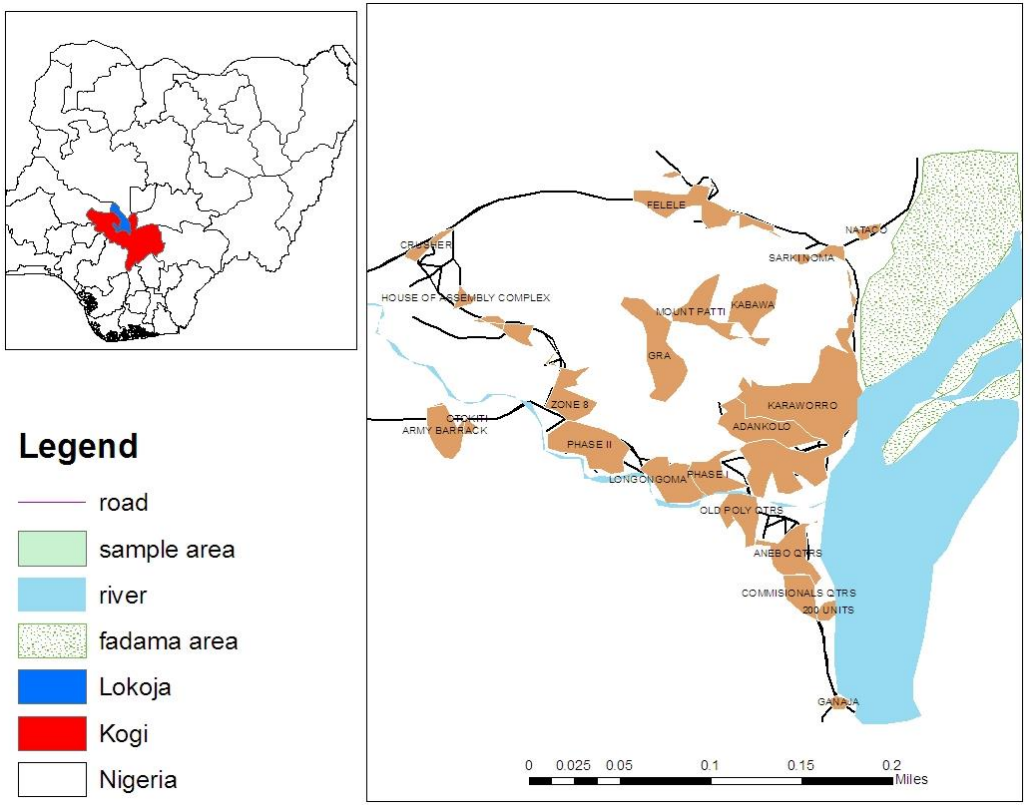


Figure 1: Lokoja: Study area

Healthcare Services

There are two Secondary Health Care (SHC) and a few Primary Health Care (PHC) centres in the area. The Secondary Health Care includes Federal Medical Centre (FMC) and State Specialist Hospital. Aside these two hospitals, there are other government owned health centres. These include; Medical Reception Station, Army Barracks, Primary Health Centre, Zango, Healthcare and Maternity Clinic, Gadumo, Plant Parenthood Federation of Nigeria (PPFN) Clinic, Gadumo, Medical clinic, Federal University Lokoja and Lokoja Government Primary Health Care Centre.

Private health care centers located in the area are: Prime Care Clinic, Adankolo, Destiny Specialist Clinic, Adankolo, Favour of God Clinic, Adankolo, Redeem Clinic, Feyintolu Meezan Orthopaedic Hospital, Adankolo, Niger Specialist Clinic, Adankolo, Flourish and Excel Clinic and Maternity Old Poly Quarters, A-4 Consultants Clinic and Dialysis Centre, Ganaja, Concord Clinic, and Maternity Helping Hands Women Specialist Hospital, zone 8, Gadumo, Zenith Specialist Hospital, Gadumo to mention but a few. There are also a number of school/mission clinics, dispensaries and Spiritual healing/religious homes patronized by waiting and pregnant women.

Overall, while there is evidence that use of skilled maternity care is growing, unattended home deliveries are still widespread. Barriers to seeking optimal maternity care amongst women include cost of services, distance to health facilities, and long waiting times for those seeking care at public health facilities. Abuse and mistreatment of care-seekers by health care providers at public health facilities is also widespread. Other barriers which prevent the women in the area from seeking and receiving appropriate care include insensitive providers, a lack of information on the importance of care and illiteracy, inadequate and perceived poor quality services, and negative socio-cultural practices. The interplay of all these factors has resulted in poor utilization of maternal health services in the area and requires urgent attention.

Research Methodology

Types and Sources of Data

The data used for this study and their sources include;

i. Data on antenatal care; number of monthly antenatal visits.

ii. Data on delivery care; number of monthly deliveries/births.

iii. Data on postnatal care; number of women receiving care after delivery on monthly basis.

iv. Socio-economic and demographic characteristics of women in reproductive age group; namely; age of maternal women, education, religion, ethnicity, household size, occupation, income and occupation; this was collected through In-depth interviews from childbearing women and partly hospital records.

The data above constituted secondary data which was collected from the hospital, particularly Federal Medical Centre exception of item (iv) which is primary data. Other secondary sources constituted the literature sourced from libraries, published and unpublished literatures, open access journals and articles from the internet.

Method of Data Collection

Survey method would be employed to collect the required secondary data. This is so because only data on women within a specific period will be used to generalize for the entire reproductive women population. Specifically, the sample frame for this study was all women in the reproductive age group, who are attending antenatal, delivery and postnatal care in Federal Medical Centre, Lokoja, Kogi state Specialist Hospitaland Kogi State Ministry of Health. The period of 10 years of data is selected because of the large number of women involved in reproduction in the study area. According to NPC (2010) about 50% of the total population is female, and a substantial proportion of this is within the childbearing age.

Reconnaissance survey was carried out prior to the actual data collection. During the reconnaissance survey, the researcher was able to familiarize herself with Key persons in the hospitals and the statistical unit to assist in providing the data. Also, it was at this time that consent letters were distributed seeking for data and soliciting for their cooperation for the successful completion of the data collection.

Methods of data analysis

In this study, both the descriptive and inferential statistics were used to analyse the data collected through registered hospital records and interviews. Tables, simple percentages were used to present the results. Analysis of variance (ANOVA) was employed to test the variation in the utilization of antenatal, delivery and postnatal care among reproductive aged women, while content analysis was used to analyse the interviews on the influence of socioeconomic factors on maternal healthcare utilization.

Results

Sex Distribution of Deliveries from 2010-2019

Table 10 shows the sex pattern of monthly live Births in 2010. The table showed that the highest births occurred in the month of September with 11.4% births of 94 males and 81 females. This was followed by births in the months of July and May with 11.1% and 11.0% of the births respectively, reflecting 96 male and 74 female born in July and 101 male and 68 female delivered in May. Nearly similar values of about 8.5% births were recorded for births in the months of January, March and October. The lowest female delivery was recorded in the months of June and the highest was observed in February.

Table 1: Sex distribution of deliveries in 2010

S/N	Month	Male	Female	Total	Percent
1	January	78	53	131	8.5
2	February	77	76	153	10.0
3	March	45	83	128	8.3
4	April	46	37	83	5.4
5	May	101	68	169	11.0
6	June	53	40	93	6.1
7	July	96	74	170	11.1
8	August	54	56	110	7.2
9	September	94	81	175	11.4
10	October	73	64	137	8.9
11	November	60	61	121	7.9
12	December	34	32	66	4.2
	Total	811	725	1536	100.0

Source: Federal Medical Centre, Lokoja, Kogi State, 2021

Table 2 shows the sex pattern of monthly deliveries in 2011. The table showed that the highest births occurred in the months of June, August and October with similar values of about 11.8% births. Similarly, the highest proportion of males was recorded in these

same months ranging from 90, 124 and 115 respectively. This was followed by births in the months of April and July with 11.1% and 11.0% of the births respectively; while female distribution revealed June, October, July and June as the months of the highest female births with figures of 135, 111, 111 and 121 births respectively. Nearly similar values of about 57, 58 and 59 female births were recorded for deliveries in the months of January, February and November respectively. The lowest female delivery was recorded in the month of December and the highest was observed in June. Also, the lowest male delivery was recorded in the month of December and the highest was observed in August.

Table 2: Sex distribution of deliveries in 2011

S/N	Month	Male	Female	Total	Percent
1	January	68	57	125	6.2
2	February	49	58	107	5.3
3	March	87	79	166	8.2
4	April	90	104	194	9.6
5	May	97	82	179	8.9
6	June	103	135	238	11.8
7	July	80	111	191	9.5
8	August	124	111	235	11.7
9	September	56	70	126	6.3
10	October	115	121	236	11.7
11	November	74	59	133	6.6
12	December	46	39	85	4.2
	Total	989	1026	2015	100.0

Source: Federal Medical Centre, Lokoja, Kogi State, 2021

Table 3 shows the monthly sex distribution of deliveries in 2012. The table showed that the highest births occurred in the months of October, May and March with values of 13.6%, 10.5% and 10.2% births. Nearly similar values of about 8.1, 8.3 and 8.9 percent births were recorded for deliveries in the months of February, June and September respectively. Information on the sex differentials shows that the highest proportion of males was recorded in the months of

March, October, May and April with figures of 140, 138, 125 and 114 respectively. The result further shows that the proportion of females delivered was highest the months of October, May, September, June, April and March with 186, 126, 112, 109 and 104 births respectively. The lowest female delivery was recorded in the month of August and the highest was observed in October. Also, the lowest male delivery was recorded in the month of August and the highest was observed in March.

Table 3: Sex distribution of deliveries in 2012

S/N	Month	Male	Female	Total	Percent
1	January	81	99	180	7.5
2	February	101	96	197	8.3
3	March	140	104	244	10.2
4	April	114	109	223	9.4
5	May	125	126	251	10.5
6	June	94	100	194	8.1
7	July	90	78	168	7.0
8	August	50	60	110	4.6
9	September	102	112	214	8.9
10	October	138	186	324	13.6
11	November	66	70	136	5.7
12	December	76	66	142	5.9
	Total	1179	1206	2385	100.0

Source: Federal Medical Centre, Lokoja, Kogi State, 2021

Table 4 shows the sex differentials of deliveries in 2013. The table showed that the highest births occurred in the months of October, April, June, May and January with values of 15.4%, 13.5%, 12.9%, 12.8% and 12.3% births. Next was March and September with percentage births of 11.7% and 9.6% respectively. Information on the sex pattern shows that the highest proportion of males was recorded in the months of June, October, May, September, April and January with values of 101, 99, 99, 91, 91, and 91 respectively. The result further shows that the proportion of female children born was highest the months of October, April, March, January, May and

June with128, 108, 94, 91, 90 and 90 births respectively. The lowest female delivery was recorded in the month of August and the highest was observed in October. Also, the lowest male delivery was recorded in the month of July and the highest was observed in June.

Table 4: Sex distribution of deliveries in 2013

S/N	Month	Male	Female	Total	Percent
1	January	91	91	182	12.3
2	February	28	29	57	3.9
3	March	78	94	172	11.7
4	April	91	108	199	13.5
5	May	99	90	189	12.8
6	June	101	90	191	12.9
7	July	9	14	23	1.6
8	August	23	12	35	2.4
9	September	91	50	141	9.6
10	October	99	128	227	15.4
11	November	27	32	59	4.0
12	December	-	-		
	Total	737	738	1475	100.0

Source: Federal Medical Centre, Lokoja, Kogi State, 2021

The result in Table 5 showed that in 2014, there were more male births than females with male births constituting 683 of the births recorded in the area. This further means that more males are born in the area than females. A look at the study further revealed that the highest number of births was recorded in October with a larger percentage of the births being females. The result however shows variable pattern of male and female births in all the months in the year under study.The lowest female delivery was recorded in the month of July and the highest was observed in October. Also, the lowest male delivery was recorded in the month of July and the highest was observed in April.

Table 5: Sex distribution of deliveries in 2014

S/N	Month	Male	Female	Total	Percent
1	January	0	0	0	0
2	February	29	31	60	4.5
3	March	43	59	102	7.6
4	April	99	67	166	12.3
5	May	67	59	126	9.4
6	June	50	46	96	7.1
7	July	27	29	56	4.2
8	August	61	61	122	9.1
9	September	90	85	175	13.0
10	October	93	102	195	14.5
11	November	60	61	121	8.10
12	December	64	63	127	9.4
	Total	683	663	1346	100.0

Source: Federal Medical Centre, Lokoja, Kogi State, 2021

The result in Table 6 showed that in 2015, there was slight difference in the number of male and female children born; but with more male births than females with male births constituting 535 of the births recorded in the area. This further means that more males are born in the area than females. Also, the study revealed that the highest number of births was recorded in October with a larger percentage of the births being females. The result however shows inconsistent pattern of male and female births in all the months in the year under study. The lowest number of female children born was recorded in the month of July and the highest was observed in October. Also, the lowest male delivery was recorded in the month of July and the highest was observed in April.

Table 6: Sex distribution of deliveries in 2015

S/N	Month	Male	Female	Total	Percent
1	January	Strike	Strike	0	0
2	February	19	23	42	3.9
3	March	43	59	102	9.6
4	April	76	52	128	11.9

5	May	67	59	126	11.8
6	June	40	34	74	6.9
7	July	14	16	30	2.8
8	August	47	48	95	8.9
9	September	71	71	142	13.3
10	October	70	79	149	13.9
11	November	45	50	95	8.9
12	December	43	42	85	7.9
	Total	535	533	1068	100.0

Source: Federal Medical Centre, Lokoja, Kogi State, 2021

The result in Table 7 showed that in the period under review, there were more male births than females with male births constituting 521 of the births recorded in the area. This further means that more males are born in the area than females in 2016. A glance at the study further revealed that the highest number of births was recorded in October with a larger percentage of the births being males. The result however shows variable pattern of male and female births in all the months in the year under review. The lowest number of female was recorded in the month of August and the highest was observed in March. Also, the least number of male births was recorded in the month of August and the highest was observed in March.

Table 7: Sex distribution of deliveries in 2016

S/N	Month	Male	Female	Total	Percent
1	January	53	59	112	11.0
2	February	46	42	88	8.6
3	March	88	63	151	14.9
4	April	64	62	126	12.5
5	May	39	34	73	7.2
6	June	31	20	51	5.0
7	July	49	48	97	9.5
8	August	13	10	23	2.2

9	September	16	11	27	2.6
10	October	67	58	125	12.3
11	November	45	41	86	8.4
12	December	41	43	84	8.0
	Total	521	491	1012/1043	100

Source: Federal Medical Centre, Lokoja, Kogi State, 2021

The result obtained on the number male and female born in 2017 is shown in Table 8. The result in the Table showed that in the period under review, there were more male births than females with male births constituting 51.3 per cent of the births recorded in the area. This further means that more males are born in the area than females. A look at the analysis further revealed that the highest number of births was recorded in the month of December with a larger number of the births being males. It also shows that male births predominate in almost all the months in the year under investigation.

Table 8: Sex distribution of deliveries in 2017

S/N	Month	Male	Female	Total	Percent
1	January	73	72	145	9.5
2	February	69	63	132	8.7
3	March	75	81	156	10.3
4	April	39	67	106	7.0
5	May	29	33	62	4.6
6	June	95	65	160	10.5
7	July	79	57	136	8.9
8	August	57	47	104	6.8
9	September	31	30	61	4.0
10	October	62	64	126	8.3
11	November	77	84	161	10.6
12	December	90	74	164	10.8

		776	737	1513	100

Source: Federal Medical Centre, Lokoja, Kogi State, 2021

Table 9 shows the sex distribution of deliveries in 2018. The table showed that the highest births occurred in the months of December, January, February, September and July with values of 14.9%, 11.0%, 10.1%, 9.8% and 9.7% births. Next was October and August with percentage births of 9.3% and 8.8% respectively. Information on the sex pattern shows that the highest proportion of male was recorded in the months of December, September, July, February, January and August. The result further shows that the proportion of female children born was highest the months of December, January, February, October, July, March and September with 89, 70, 58,56,53, 51 and 51 births respectively. The lowest number of female births was recorded in the month of November and the highest was observed in December. Also, the lowest number of male children born was recorded in the month of November and the highest was observed in December.

Table 9: Sex distribution of deliveries in 2018

S/N	Month	Male	Female	Total	Percent
1	January	56	70	126	11.0
2	February	57	58	115	10.1
3	March	43	51	94	8.5
4	April	29	47	76	6.6
5	May	-	-		
6	June	49	44	93	8.1
7	July	58	53	111	9.7
8	August	55	45	100	8.8
9	September	61	51	112	9.8
10	October	48	56	104	9.3
11	November	14	21	35	3.0
12	December	81	89	170	14.9
	Total	551	585	1136	100

Source: Federal Medical Centre, Lokoja, Kogi State, 2021

The result obtained on the number male and female born in 2019 is shown in Table 10. The result in the Table showed that in the period

under review, there were more male births than females with male births constituting 51.4 per cent of the births recorded in the area. This further implies that more males are born in the area than females. A look at the analysis further revealed that the highest number of births was recorded in the month of October with a larger number of the births being males. The analysis however shows variable pattern in male and female births in all the months in the year under study.

Table 10: Sex distribution of deliveries in 2019

S/N	Month	Male	Female	Total	Percent
1	January	69	50	119	7.12
2	February	64	56	120	7.1
3	March	69	75	144	8.6
4	April	45	64	109	6.5
5	May	50	60	110	6.55
6	June	88	60	148	8.81
7	July	77	65	142	8.4
8	August	73	75	148	8.8
9	September	94	83	177	10.5
10	October	102	94	196	11.7
11	November	76	69	145	8.6
12	December	53	62	115	6.8
		860	813	1673	100

Source: Federal Medical Centre, Lokoja, Kogi State, 2021

Variation in Maternal healthcare

The On-Way Analysis of Variance (ANOVA) is performed to find out if there is any significant variation in maternal healthcare utilization (Table 20). The result shows there is a significant variation in maternal healthcare utilization ($F = 1.330$, $p>0.05$). This is consequent upon the probability value of 0.000 being lower than 5% significance level. The result further shows that the numbers of antenatal, delivery and postnatal care vary significantly in the study area.

Table 20: ANOVA Result of Variation in Maternal healthcare Utilization

Source of variation	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	1498798.215	4	385679.554	1.330*	0.000
Within Groups	15610504.000	60	270165.067		
Total	17109302.215	64			

*Significant at 5% alpha level

Source: Researcher's, Field Analysis, 2021.

Socioeconomic characteristics of maternal women

The study found that the women that attended antenatal, delivery and post natal care in Federal medical Centre come from different demographic and socioeconomic backgrounds. A pregnant woman who was interviewed at the hospital disclosed that:

I am 25 years old and a petty trader. It is good to come to the hospital for them to check you and your baby. But many pregnant women do not come because of lack of money. Even me that come is not easy but God will help us. For some it is their faith in God, for others it's the insufficient income to visit the health facility for which many women depend on God

Indepth Informant 1, female, Eunic Arome, Felele

The predominant occupation of maternal women is small scale trading and civil service. Unfortunately, due to competing family needs, maternal women barely have enough income for healthcare. This suggests that income is a major determinant of maternal healthcare utilization among reproductive aged women.

Due to large family size and several unmet needs, women are contending with many family needs. As a result, they find it difficult to afford consultation fee, drug purchases, and transport cost to health facilities. The result shows that maternal women who could not afford health care charges or cost resign to fate as explained by several interviewees:

'……I am 35 years and a holder of Higher National Diploma (HND). I graduated from Kogi State Polytechnic 5 years ago. I have been married for the past 7 years. My husband is married to two of us. I have three children. I gave birth two days ago at home and was brought here for checkup. We are poor and barely feed. I gave birth at home because I could not afford the hospital cost. My husband has Six children, if they are sick and hospitalized, how will you get the money for their hospital bill'.

In-depth Informant 2, female, Aisha Bello, New Layout.

The data above reveals the helplessness of men in providing for the healthcare needs of their family members. Typically, male household heads have the primary responsibility of providing for the household. The women can only provide support, when they have the economic ability. However, the socioeconomic situation of the respondents revealed that even a combined income from husband and wife was not usually enough. With household income being unable to support maternal healthcare of their women not to talk of their sick family members, some women constantly had to resort to borrowing, taking them into deeper poverty.

'When I delivered at home, it was my mother-in-law that assisted me. She was the person the bathed my baby. Yes, my mother-in-law was very helpful. When I put to birth, my baby was given water. My mother, mother-in-law and grandmother said I should not be giving her breastmilk only.'

In-depth Informant 3, female, Lami Mohammed, Otokiti.

Conclusion and recommendations

The study has shown that there are wide variations in the pattern of maternal health care utilization in the study area. The trend in antenatal care from 2012 to 2019 revealed 14.4% increase. Pregnant women receive malaria Intermittent Prevention and Treatment. This finding is indicative of the fact that maternal women are aware of the dangers of malaria to the mother and the unborn baby.

The study established the fact that delivery by skilled medical personnel increased by 24.3% within the period under review. The rate of post natal visits in study area increased by 16.7 per cent indicating a fair increase in the number of post natal visitsfrom 2014 to 2019. This finding suggests maternal women visit the hospital after delivery or stay to receive adequate care before going back to their homes. The study clearly shows that a good number of women seeking maternal care visit both secondary and primary health care facilities; but with more women using primary health center's for antenatal and delivery.

The use of registered monthly deliveries in the analysis of births suggests some seasonal effects in the sex ratio of male and female children born. The highest month of delivery for both male and female births was October in all the period under review. The study observed that more females were born in October, while month of births of male children showed variable pattern. Mother-in-laws, grandmothers and mothers were caregivers to women who deliver at home which is very risky.

Based on these findings, the study recommends that the number of people utilizing maternal health services in public hospitals is large and rising; government must continue to encourage maternal women to utilize government health facilities to ensure that women have access to adequate maternal care services in the area.

The study found that a good number of women utilized primary health facilities for antenatal and delivery care. Government must as a matter of urgency strengthen the primary health center's to make them more functional, resourceful and efficient. The provision of standard medical equipment and qualified medical personnel is paramount to ensuring that the critical services of maternity are not compromised. Routine focused health education that would improve the health of the mother and child should be provided to maternal women at home and at the facility and women should be encouraged to use this knowledge to improve their general reproductive health. Mother-in-law, grandmothers and mothers assisting childbearing women should be educated to take their family members to a nearby health facility before, during and after delivery.

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