AN ANALYSIS OF FACILITY ASSESSMENT OF PRIMARY HEALTH CARE IN NIGERIA: A MICRO-EVIDENCE FROM KADUNA SATE

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Abstract
This survey was conducted on facility readiness at the selected 239 facilities to determine the level of site preparedness with respect to human resource (health providers and volunteer community mobilizers), equipment availability and rate of service utilization.The survey of program data spanned over a 3-day period with visits to 115 facilities (40 in the Southern and Northern Zones each and 35 in the Central Zone of the state) and questionnaires administered to 2 Healthcare workers and 5 Clients per facility on their ANC days. 23 enumerators were recruited for data collection. A soft copy quantitative tool scripted on the Open Data Kit (ODK) app was used by the personnel during this exercise. Quantitative and Qualitative Data retrieved from the ODK tool was analysed by the G-ANC SI team using a descriptive analysis methodin Excel 2016 and SPSS version 26.The major findings of this study revealed that 149(68.98%) out of 216 respondents affirmed that their facilities have conducive ANC meeting Space (Conducive to accommodate minimum of 20 pregnant women) while 67(31.02%) said 'no' their facilities do not have that capacity. The study further found out that over 137(63.43%) of the facilities do not have any source of electricity. Similarly, 119(55.09%) health facilities do not have portable and accessible water supply. For a new service delivery model to have a transformational influence on maternal health care, it needs to be available to a large portion of the population. G-ANC should be expended to both private and tertiary hospitals with low ANC census.

Keyword: Primary Healthcare G-ANC, Micro-Evidence, Open Data Kit

Introduction

Antenatal care (ANC) has done little to reduce maternal mortality. However, the potential and ability of antenatal care for reducing maternal morbidity and improving newborn survival and health care have been widely acknowledged. Antenatal care provide an excellent

opportunities to reach pregnant women with medical care services such as vaccination, diagnosis and treatment of infectious diseases, as well as with as with health education program. It has being debated by scholars that despite effectiveness of regular ANC in Kaduna state it has not yield the desired objective (Gross, 2011).

Group ANC (G-ANC), a facility-based alternative service delivery model designed to address these aims, is recommended as a health system intervention in the context of rigorous research (WHO, 2016). In G-ANC, women of similar gestational ages attend ANC together throughout their pregnancies, actively engaging in their own care(Sharma, O'Connor, Rima, 2018). Studies in high-income countries that compare G-ANC to individual ANC show promising but inconsistent results related to increased utilization of care (e.g., attendance at ANC), increased uptake in health practices (e.g., breastfeeding), higher patient satisfaction, and improved health outcomes (e.g., reduced rates of preterm birth). As a result, G-ANC has been adapted and piloted in a number of LMICs (WHO, 2016). One study in Northern Nigeria has reported a small increase in facility-based delivery among those in G-ANC. Other studies of G-ANC in Africa have not yet reported on the quality of ANC, but have reported significantly higher rates of ANC attendance among women in G-ANC compared to routine individual care, and have found G-ANC to be feasible and acceptable to both women and providers (Grenier, Suhowatsky, Kabue, Noguchi, Mohan, Karnad, et al. 2019).

Using G-ANC model a pragmatic cluster-randomized controlled trial in Kenya and Nigeria Grenier, Suhowatsky, Kabue, Noguchi, Mohan, Karnad, Onguti, Omanga, Gichangi, Wambua, Waka, Oyetunji, and Smith, (2019) examine impact of group antenatal care (G-ANC) versus individual antenatal care (ANC) on quality of care, ANC attendance and facility-based delivery. Women who completed follow up was included in the analysis 94 women enrolled in Nigeria and 826 women enrolled in Kenya. They found that in Nigeria women in the intervention arm were more likely to have a facility-based delivery compared to those in the control arm. In both countries women in the intervention arm were more likely than those in the control arm to

receive quality ANC. The study concluded that G-ANC was associated with higher facility-based delivery rates in Nigeria, where those rates associated with individual ANC were low. In both Kenya and Nigeria, it was associated with a higher proportion of women receiving quality ANC and higher frequency of ANC visits. The figure is not adequate compare to the population of pregnant women in Nigeria.

In similar direction, Lori, Ofosu-Darkwah, Boyd, Banerjee, and Adanu(2017) examine whether exposure to group antenatal care increased women's health literacy by improving their ability to interpret and utilize health messages compared to women who received standard, individual antenatal care in Ghana. Descriptive statistics was employed to analyze data from 240 pregnant women in Ghana. The study found that group antenatal care as compared to individual care offers an opportunity to increase quality of care and improve maternal and newborn outcomes. Group antenatal care holds the potential to increase healthy behaviors, promote respectful maternity care, and generate demand for services. Group ANC improves women's health literacy on how to prevent and recognize problems, prepare for delivery, and care for their newborn. Tegegne, Chojenta, Getachew. Smith, and Loxton, (2019) used spatial and multilevel analysis to examine antenatal care uses in Ethiopia. The study found significant variations in the use of ANC services across the different regions of Ethiopia. Region of living and distance were key drivers of ANC use underscoring the need for increased ANC availability, particularly in the cold spot regions.

Using multiple indicator cluster survey Roy and Haque, (2018) examine the effect of antenatal care and social wellbeing on early neonatal mortality in Bangladesh. The study found that Women who received antenatal care during their time of pregnancy are likely to have 18% lower odds of experiencing early neonatal mortality compared to groups who did not receive antenatal care during pregnancy. In terms of social well-being, the woman who comes from the richest family are likely to have 45% lower odds of experiencing early neonatal mortality compared to the poorest one. The study concluded that women's who go for antenatal care and social well-being has a significant effect on early neonatal mortality. Ahmed, El-Sayed,

Martínez-Maestre, and Rafael (2016) examine the effect of frequency antenatal care visits during pregnancy on maternal and fetal outcomes in patients with pre-eclampsia. The study used 150 pregnant women with pre-eclampsia Ismailia General Hospital through. Interview and regression method was used collecting and analyzing data.

The study found that Women who attended an inadequate number of antenatal care visits had a significantly higher risk of post-partum hemorrhage, eclampsia, and intensive care unit admission compared with women who attended an adequate number of visits. The concluded that frequency of antenatal care visits during pregnancy has a significant effect on maternal and fetal outcomes in patients with pre-eclampsia.

Tuladhar and Dhakal, (2011) examine the impact of antenatal care on maternal and perinatal outcome in Nepal. The study used prospective descriptive study of women delivered at Nepal Medical College Teaching Hospital. It was found that among 322 women delivered during period of four months, majority reported of attending more than 4 antenatal visits. The most preferred place of ANC was hospital, women with secondary education and above, business/service holders were 20 -29 years age group. Women attending more than 4 antenatal visits have more chance of full immunization with tetanus toxoid and iron supplementation. Most of the women started attending ANC from their second trimester. Based on this backdrop a study was conducted to analyse facility readiness at the selected 239 facilities to determine the level of site preparedness with respect to human resource (health providers and volunteer community mobilizers), equipment availability and rate of service utilization.

Methodology

Essentially, this baseline survey encompassed a quantitative research undertaken to measure, describe, analyze the readiness and to provide an information base against which to monitor and assess activity's progress and effectiveness during implementation of the expansion phase and after the activity is completed in some selected health care (HC) and primary health care (PHC) from 23 local government areas (LGAs) of Kaduna State.Respondents for this

research were drawn from some selected HC & PHC from the 23 LGAs of Kaduna state. Each Local Government Area (LGA) of a state was taken as a group or cluster from among which purposeful sample of HC and PHC were selected for the survey and three structured questionnaires were administered to three sets of respondents.

Geographical Coverage and Sample Size:

The geographic size was based on the specific thematic area of the exercise:

- ***Readiness Assessment:***

  This assessment was conducted at the 239 facilities selected for the expansion phase implementation across the 23 Local government areas of the state.

- ***Program data:***

  This was conducted at 48% (115) facilities of the selected 239 facilities. The 115 facilities spread across the 3 senatorial zones of the state with 40 facilities selected in the southern and Northern zones while 35 selected in the Central zones.

- ***Attitude and Perception Survey:***

  Questionnaires were administered to 2 Healthcare Provider and 5 Clients at each of the 115 facilities selected for the program data review. This was conducted across the 3 senatorial zones of the state.

The Baseline study focuses on both the readiness of selected facilities and key pre-implementation data at those facilities. Tools were designed and administered on the field by enumerators within the shortest possible period.

Data Analysis and Dissemination

Quantitative and Qualitative Data retrieved from the ODK tool was analysed by the G-ANC SI team using a **Descriptive Analysis Method** in Excel 2016 and SPSS version 26. Findings from the analysis were disseminated to relevant stakeholders via reports, presentations and/or newsletters four (4) weeks from the end of the field exercise.

Analysis and Interpretation of some Key Results

Distribution of Respondents Based on the Patient sitting Space Adequate

In aspect of sitting space in the facility, 68.98% (149) responded positively that the patient sitting space is adequate while 31.02% (67) said otherwise. This shows that the patient sitting space is fairly adequate in the 216 HC facility the survey was carried out.

Table 1: Distribution of respondents based on the patient sitting space adequate

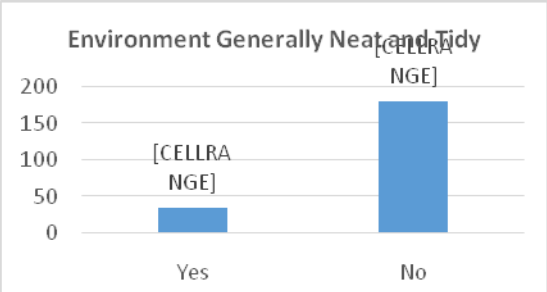
Var.	Frequency	Percentage (%)
Yes	149	68.98
No	67	31.02
Total	**216**	**100**

Distribution of Respondents Based on the Environment Generally Neat and Tidy

On the neatness of environment, over 83% (181) of the respondents said the general environment in the facility is not neat and tidy. In the other hand about 16% (35) respondents indicated that the general environment is neat and tidy in the HC facility. Based on this outcome, it can be concluded that most HC facilities in Kaduna state do not have a neat and tidy environment.

Table 2: Distribution of respondents based on the environment generally neat and tidy

Var.	Frequency	Percentage (%)
Yes	35	16.20
No	181	83.80
Total	**216**	**100**



Distribution of Respondents Based on the Roof Intact with no Leaking Part

Meanwhile,it was observed that 50% (50) said yes, the facility roof is intact with no leaking part while 50% (50) also said no, roof is not intact is leaking. There is a tie here, 50% said roof not leaking same 50% said the roof is leaking.

Table 3: Distribution of respondents based on the roof intact with no leaking part

Var.	Frequency	Percentage (%)
Yes	108	50.00
No	108	50.00
Total	**216**	**100**

Distribution of Respondents Based on the Walls Free of Cracks and Crevices

In the same van, a question was asked on the nature of the walls and over 52% (114) affirmed that the walls are not free of cracks. Meanwhile, 47.22% (102) said yes the facility walls are free of cracks and crevices. This outcome shows clearly that most of the walls in PHC or HC in Kaduna state have cracks walls.

Table 4: Distribution of respondents based on the walls free of cracks and crevices

Var.	Frequency	Percentage (%)
Yes	102	47.22

No	114	52.78
Total	**216**	**100**

Distribution of Respondents Based on the Facility well Ventilated

In addition to the walls, it was observed that over 94% (204) acknowledged that the facility is well ventilated. In the other hand 5.56% (12) indicated that the facility is not well ventilated. The study can deduce that most of the HC facilities in Kaduna state are well ventilated.

Table 5: Distribution of respondents based on the facility well ventilated

Var.	Frequency	Percentage (%)
Yes	204	94.44
No	12	5.56
Total	**216**	**100**

Program Data Review

Table 6: Facility Monthly Summary Form for May 2021 – October 2021

INDICATORS	May 2021	Jun 2021	Jul 2021	Aug 2021	Sept. 2021	Oct. 2021
Total ANC1 Less than 20 weeks	1080	805	980	1150	1180	1250
Total ANC1 Above 20 weeks	1220	970	990	1005	1206	1080
Total ANC 4	1421	2250	1120	1314	1480	1620
Total ANC 8	561	780	920	701	683	760
Deliveries in a facility taken by a Skilled Birth Attendant	760	980	1100	798	820	990
Total Deliveries in the facility	1220	1300	1250	1150	1100	1280
Live births in facility	530	625	540	480	420	390

Number of women Utilizing PPFP (Postpartum Implanon NXT inserted + Post-partum Jadelle inserted + Post-partum IUD inserted)	320	380	410	376	409	360
pregnant women who received LLIN	510	595	480	500	403	553
Pregnant women that received third dose of SP (IPT3-SP)	508	420	460	485	508	515
Number of pregnant women presenting with fever complaints screened with RDT	521	380	305	401	499	510
Number of pregnant women screened for malaria using RDT who tested positive	280	210	180	290	195	295

Percentage of Deliveries taken by a Skilled Birth Attendant

The table below revealed that the highest percent of deliveries taken by Skilled Birth Attendant (SBA), June 2021 recorded 48 percent, May 2021 recorded 43 percent deliveries by SBA. It was further revealed that, the percentage deliveries taken by Skilled Birth Attendant decline in October 2021 to as low as30 percent, July 2012 recorded 43.2 percent, August 2021 recorded 42 percent and September 2021 recorded 38 percent on deliveries taken by a Skilled Birth Attendant within the period of research.

Table 7: Percentage of Deliveries Taken by a Skilled Birth Attendant for May 2021 – October 2021

Percentage of deliveries taken by a Skilled Birth Attendant					
$\frac{\text{Number of deliveries in a facility taken by a Skilled Birth Attendant}}{\text{Total Deliveries in the facility}} \times 100$					
May 2021	Jun 2021	Jul 2021	Aug 2021	Sept. 2021	Oct. 2021
$\frac{530}{1220} \times 100 = 43$	$\frac{625}{1300} \times 100 = 48$	$\frac{540}{1250} \times 100 = 43.2$	$\frac{480}{1150} \times 100 = 42$	$\frac{420}{1100} \times 100 = 38$	$\frac{390}{1280} \times 100 = 30$
43%	48%	43.2%	42%	38%	30%

Percentage of Facility Delivery by PWP

The survey in Table 8 indicate that June 2021 record the highest percent of facility delivery by PW in the year 2012, recorded 46 percent, followed by August 2021 and October 2021that recorded 43 percent respectively. However, it was further revealed that percentage of G-ANC client delivered in the facility fluctuate within the period of research to as low as 37 percent recorded the lowest percent in September 2021. Furthermore, May 2021 recorded 42 percent while July 2021 recorded 38 percent of G-ANC client delivered in the facility within the period of study.

Table 8: Percentage of Facility Delivery by PWP for May 2021 – October 2021

Percentage of facility delivery by PWP					
$\frac{\text{Number of G-ANC clients that delivered at the facility}}{\text{Total Deliveries in the facility}} \times 100$					
May 2021	Jun 2021	Jul 2021	Aug 2021	Sept. 2021	Oct. 2021
$\frac{510}{1220} \times 100 = 42$	$\frac{595}{1300} \times 100 = 46$	$\frac{480}{1250} \times 100 = 38$	$\frac{500}{1150} \times 100 = 43$	$\frac{403}{1100} \times 100 = 37$	$\frac{553}{1280} \times 100 = 43s$
42%	46%	38%	43%	37%	43%

Percentage of immediate postpartum women delivering in facility initiating a contraceptive method before discharge

On women who initiated PPFP, Table 10 discovered that September 2021 recorded 50 percent, highest percentage of postpartum women delivering in facility initiating a contraceptive method before discharged. The survey also revealed that percentage of women who immediate postpartum women delivering in facility initiating a contraceptive method before discharge decline to 36 percent in October 2021. However, May 2021 recorded 42 percent of postpartum women delivering in facility initiating a contraceptive method before discharge. Furthermore, it was revealed that June 2021 recorded 39 percent and July 2021 recorded 37 percent ofimmediate postpartum women delivering in facility initiating a contraceptive method before discharge.

Table 10: Percentage of Immediate Postpartum Women Delivering in Facility for May 2021 – October 2021

Percentage of immediate postpartum women delivering in facility initiating a contraceptive method before discharge					
$\frac{\text{Number of women who initiated PPFP}}{\text{Number of deliveries in facility}} \times 100$					
May 2021	Jun 2021	Jul 2021	Aug 2021	Sept. 2021	Oct. 2021
$\frac{320}{760} \times 100 = 42$	$\frac{380}{980} \times 100 = 39$	$\frac{410}{1100} \times 100 = 37$	$\frac{376}{798} \times 100 = 47$	$\frac{409}{820} \times 100 = 50$	$\frac{360}{990} \times 100 = 36$
42%	39%	37%	47%	50%	36%

Percentage of pregnant women attending ANC who received an LLIN during ANC in less than 20 weeks of pregnancy

Table 11 shows percentage of pregnant women that attend ANC and received LLIN during the ANC in less than 20 weeks of their pregnancy. The survey indicate the highest percentage recorded in June 2021 with 74 percent of pregnant women that attended ANC and received an LLIN during ANC. Though the Table revealed that percentages recorded within the period of study fluctuated. The study further shows that September 2021 recorded the lowest percentage of pregnant women that received LLIN during ANC visit with 34 percent. However, May 2012 recorded 47 percent, July 2021 recorded 49 percent, August 2021 recorded 43 percent and October 2021 recorded 44 percent of pregnant women that received LLIN during ANC visit in Less than 20 weeks of their pregnancy.

Table 11**: Percentage of Pregnant Women Attending ANC in less than 20 weeks of pregnancy for May 2021 – October 2021**

Percentage of pregnant women attending ANC who received an LLIN during ANC in less than 20 weeks of pregnancy					
$\frac{\text{Number of pregnant women who received LLIN during ANC visit}}{\text{Total ANC 1 Attendance}} \times 100$					
May 2021	Jun 2021	Jul 2021	Aug 2021	Sept. 2021	Oct. 2021
$\frac{510}{1080} \times 100 = 47$	$\frac{595}{805} \times 100 = 74$	$\frac{480}{980} \times 100 = 49$	$\frac{500}{1150} \times 100 = 43$	$\frac{403}{1180} \times 100 = 34$	$\frac{553}{1250} \times 100 = 44$

47%	74%	49%	43%	34%	44%

Percentage of pregnant women attending ANC who received an LLIN during ANC in 20 weeks and above of pregnancy

Table 12 indicate percentage of pregnant women that attend ANC and received LLIN during the ANC in 20 weeks and above of their pregnancy. The study indicate the highest percentage recorded in June 2021 with 61 percent of pregnant women that attended ANC and received an LLIN during ANC in 20 weeks and above. Though the Table discovered that percentages recorded within the period of study fluctuated. The study further shows that September 2021 recorded the lowest percentage of pregnant women that received LLIN during ANC visit with 33 percent. However, May 2012 recorded 42 percent, July 2021 recorded 48 percent, August 2021 recorded 50 percent and October 2021 recorded 51 percent of pregnant women that received LLIN during ANC visit in 20 weeks and above of their pregnancy.

Table 12: Percentage of Pregnant Women Attending ANC in 20 weeks and above of pregnancy Form for May 2021 – October 2021

Percentage of pregnant women attending ANC who received an LLIN during ANC in 20 weeks and above of pregnancy					
$\frac{\text{Number of pregnant women who received LLIN during ANC visit}}{\text{Total ANC 1 Attendance}} \times 100$					
May 2021	Jun 2021	Jul 2021	Aug 2021	Sept. 2021	Oct. 2021
$\frac{510}{1220} \times 100 = 42$	$\frac{595}{970} \times 100 = 61$	$\frac{480}{990} \times 100 = 48$	$\frac{500}{1005} \times 100 = 50$	$\frac{403}{1206} \times 100 = 33$	$\frac{553}{1080} \times 100 = 51$
42%	61%	48%	50%	33%	51%

Percentage of PW who received Malaria Intermittent Preventive Treatment third dose (IPT3) in less than 20 weeks of Pregnancy

Table 13 shows percentage of pregnant women (PW) who received malaria intermittent preventive treatment third dose (IPT3) in less than 20 weeks of pregnancy. The study indicate the highest percentage recorded in June 2021 with 52 percent of pregnant PW who received malaria

intermittent preventive treatment third dose. The study further shows that October 2021 recorded the lowest percentage of pregnant women that received LLIN during ANC visit with 41 percent. However, May 2012 and July 2021 recorded 47 percent respectively whileAugust 2021 recorded 42 percent of PW that received third dose of IPT3 in less than 20 weeks of their pregnancy. It was further revealed that September 2021 recorded 43 percent of PW that received third dose of IPT3 in less than 20 weeks of their pregnancy within the period of research.

Table 13: **Percentage of PW who received malaria intermittent preventive (IPT3) in less than 20 weeks of pregnancy for May 2021 – October 2021**

Percentage of PW who received malaria intermittent preventive treatment third dose (IPT3) in less than 20 weeks of pregnancy					
$\frac{\text{Pregnant women that received third dose of IPT (IPT3)}}{\text{Total ANC 1 Attendance}} \times 100$					
May 2021	Jun 2021	Jul 2021	Aug 2021	Sept. 2021	Oct. 2021
$\frac{508}{1080} \times 100 = 47$	$\frac{420}{805} \times 100 = 52$	$\frac{460}{980} \times 100 = 47$	$\frac{485}{1150} \times 100 = 42$	$\frac{508}{1180} \times 100 = 43$	$\frac{515}{1250} \times 100 = 41$
47%	52%	47%	42%	43%	41%

Percentage of PW who received malaria intermittent preventive treatment third dose (IPT3) in 20 weeks and above of pregnancy

Table 14 indicate percentage of pregnant women (PW) who received malaria intermittent preventive treatment third dose (IPT3) in 20 weeks and above of pregnancy. The study shows the highest percentage recorded in August 2021 and October 2021 with 43 percent respectively of pregnant PW who received malaria intermittent preventive treatment third dose. The study further shows that May 2021 and September 2021 recorded the lowest percentage of pregnant women that received LLIN during ANC visit with 42 percent respectively. However, June 2012 recorded 43 percent and July 2021 recorded 46 percent of and July 2021 recorded 41 percent of PW that received third dose of IPT3 in 20 weeks and above of their pregnancy within the period of research.

Table 14: Percentage of PW Who Received Malaria Intermittent Preventive (IPT3) In 20 Weeks and Above of Pregnancy for May 2021 – October 2021

Percentage of PW who received malaria intermittent preventive treatment third dose (IPT3) in 20 weeks and above of pregnancy					
$\frac{\text{Pregnant women that received third dose of IPT (IPT3)}}{\text{Total ANC 1 Attendance}} \times 100$					
May 2021	Jun 2021	Jul 2021	Aug 2021	Sept. 2021	Oct. 2021
$\frac{508}{1220} \times 100 = 42$	$\frac{420}{970} \times 100 = 43$	$\frac{460}{990} \times 100 = 46$	$\frac{485}{1005} \times 100 = 48$	$\frac{508}{1206} \times 100 = 42$	$\frac{515}{1080} \times 100 = 48$
42%	43%	46%	48%	42%	48%

Percentage of pregnant women screened for malaria using RDT in less than 20 weeks of pregnancy

Table 15 revealed the Percentage of pregnant women screened for malaria using RDT in less than 20 weeks of pregnancy. It was revealed that May 2021 recorded 48 percent highest percentage of pregnant women screened for malaria using RDT in less than 20 weeks of pregnancy within the period of research. The survey further shows that the percentage of pregnant women screened for malaria using RDT in less than 20 weeks of pregnancy decline to 47 percent in June 2021. However, July 2021 recorded 31 percent, August 2021 recorded 35 percent, and September 2021 recorded 42 percent. The research again shows that 41 percent was recorded in the month of October 2021 for the pregnant women screened for malaria using RDT in less than 20 weeks of pregnancy

Table 15: Percentage of Pregnant Women Screened for Malaria Using RDT in Less Than 20 Weeks of Pregnancy for May 2021 – October 2021

Percentage of pregnant women screened for malaria using RDT in less than 20 weeks of pregnancy					
$\frac{\text{Number of pregnant women presenting with fever complaints screened with RDT during reporting period}}{\text{Number of pregnant women presenting with fever complaints}} \times 100$					
May 2021	Jun 2021	Jul 2021	Aug 2021	Sept. 2021	Oct. 2021

$\frac{521}{1080} \times 100 = 48$	$\frac{380}{805} \times 100 = 47$	$\frac{305}{980} \times 100 = 31$	$\frac{401}{150} \times 100 = 49.3$	$\frac{499}{1180} \times 100 = 42$	$\frac{510}{250} \times 100 = 41$
48%	47%	31%	35%	42%	41%

Percentage of Pregnant Women screened for Malaria using RDT in 20 weeks and above of Pregnancy

Table 16 shows percentage of pregnant women screened for malaria using RDT in 20 weeks and above of pregnancy. It was revealed that October 2021 recorded 47 percent highest percentage of pregnant women screened for malaria using RDT in 20 weeks and above of pregnancy within the period of research. The survey further shows that the lowest percentage of pregnant women screened for malaria using RDT in 20 and above weeks of pregnancy was recorded in July 2021 with 31 percent. However, May 2021 recorded 43 percent and June 2021 recorded 39 percent. The research again shows that August 2021 recorded 40 percent and September 2021 recorded 41 percent for the pregnant women screened for malaria using RDT in 20 weeks and above of pregnancy

Table 16: Percentage of Pregnant Women Screened for Malaria Using RDT in 20 Weeks and above of Pregnancy for May 2021 – October 2021

Percentage of pregnant women screened for malaria using RDT in 20 weeks and above of pregnancy					
$\frac{\text{Number of pregnant women presenting with fever complaints screened with RDT during reporting period}}{\text{Number of pregnant women presenting with fever complaints}} \times 100$					
May 2021	Jun 2021	Jul 2021	Aug 2021	Sept. 2021	Oct. 2021
$1220 \times 100 = 43$	$\frac{380}{970} \times 100 = 39$	$\frac{305}{990} \times 100 = 31$	$\frac{401}{1005} \times 100 = 40$	$\frac{499}{1206} \times 100 = 41$	$\frac{510}{1080} \times 100 = 47$
43%	39%	31%	40%	41%	47%

Discussion of Major Findings

The major findings of this study revealed that 149(68.98%) out of 216 respondents affirmed that their facilities have conducive ANC meeting Space (Conducive to accommodate minimum 20 pregnant women) while 67(31.02%) said 'no' their facilities do not have that capacity. The study further found out that over 137(63.43%) of the facilities do not any source of electricity. Similarly, 119(55.09%) health facilities do not have portable and accessible water supply. On other hand, the findings revealed that 212(98.15) of the respondents said the facility does not provide any basic health care provision funds (BHCPF) services for them. The study also revealed that 150(69.44%) affirmed that there is no functional drug revolving fund (DRF) system in their health facilities. While only 66(30.56%) out of 216 respondents admitted their facility have DRF. This is a serious challenge facing most of the HC and PHC in the rural areas.

Furthermore, only 16(7.41%) indicated that there is exemption system in their facility while 200(92.59%) out of 216 respondents revealed that exemption system does not exist. On the other hand only 11(5.09%) of staff in the facilities have received training on G-ANC while 205(94.91%) have not received any form of training on G-ANC. The eligible number staff and VCM to be trained on G-ANC would be 205 and 543 respectively. The study also revealed that only 34(15.74%) of the respondent who indicated the facility have functional digital blood pressure devices while 182(84.26%) said their facilities do not have functional digital blood pressure device. On the other hand, 182 said they have functional weighing scale.

From facility readiness assessment show that over 88% of the respondents affirmed that the HC have either VCMs, CHIPs or CORPs while none of the HC has a single medical doctor resident in the facility. It was also found out that over 96% (198) of the HC/PHC facilities in Kaduna state do not have nurses and midwives. Other category of health workers such as JCHEW, CHEWs, CHOPs, Laboratory Technicians, Nutritionists, Pharmacists, among others are grossly inadequate. Most of the health facilities do not have the services of these category of workers. Furthermore, external environment and physical infrastructure are also not adequate. Most (75% of the respondents) of the HC/PHC facilities do not have fence that exposes the

facilities, health workers and patients to danger, especially now that the insecurity is high in the state.

In addition to this 77% of the respondents said there are no security personnel in their health facility. In the other hand, 70.83% (153) respondents affirmed that their health facilities have proper waste disposal system while only 29.17% (63) said their health facilities do not have waste disposal. It was also found out that most HC/PHC facilities use either solar or generator to power their facility. This certainly, will make the running of such facilities more expensive, hence slow down effectiveness and efficiency of the facilities. In line with this, 92% of the respondents affirmed that their health facilities do not run a 24-hour shift. This is not unconnected with the problem shortage in power supply.

On the area of ANC attendance over 20% (101) attended ANC only once before child birth while over 14.83% (74) indicated they attended ANC four times. Only 1.8% (9) had up to eight times ANC attendance. A question was asked whether there is guideline/SOP on the use of SP for IPTp in pregnancy and 61.11% (132) of the respondents mentioned yes that guideline/SOP on the use of SP for IPTp in pregnancy is being used. Furthermore, most respondents revealed that 64.24% (105) pregnant women usually give birth at home while only 26.67% (44) mentioned that pregnant women usually give birth in health facility. Similarly, 70.30% (116) of the health workers have attended capacity building workshops, trainings on maternal, neonatal and child health. This implies that over 70% of the skill birth attendant attended to the delivery.

In the area of ANC clients, the major findings from the study show that majority of the ANC client had their education up secondary level, this mean majority are literate they can read and write. The study also revealed that majority (over 20%) of the ANC client had visited health facility for ANC only once. In the same vain. 83.33% of the respondent mentioned that lack of awareness about breastfeeding as the main reason they disagree with the information received

about breastfeeding. The study revealed that over 77% of the responded mentioned that they prefer to give birth at health facility than any other place. However, majority of women mention that they do not see the reason to attend ANC or post-natal care despite their preference to give birth in health facility.

In another dimension, lack of SP drugs has been seen as one of the major factor affecting the utilization of malaria prevention drugs among pregnant women during ANC. The study revealed that 46.67% (77), 20.61% (34) and 30.91% (51) are availability of SP drugs, cost of the SP drugs and ignorance of pregnant women respectively as factors affecting the utilization of malaria prevention drugs among pregnant women during ANC. Similarly, the study also revealed that 77.32% (167) of the respondent mentioned that their facility have the onsite testing kits for malaria (RDT kit) while 22.69% (49) indicated that they do not have.

Findings from health workers instrument shows that 31% of the respondent affirmed that they provide ANC services to pregnant women. On the other hand, over 47% of the respondent rated ANC attendance low. Hence, the study reveals that the rate of ANC attendance by pregnant women of the community is low. Furthermore, cultural practices, distance and transport fare were seen to be some of the reason of low ANC attendance in Kaduna state. The study reveals that that lack of availability of SP drug in the facility affect the utilization of malaria prevention drug among pregnant women during ANC.

Conclusion/Recommendations

For a new service delivery model to have a transformational influence on maternal health care, it needs to be available to a large portion of the population.G-ANC model should be expended to both private and tertiary hospitals with low ANC census. Some of the major findings of this study show that only 16(7.41%) respondents indicated that there is exemption system in their facility while 200(92.59%) out of 216 respondents revealed that exemption system does not exist in their facility. On the other hand, only 11(5.09%) of staff in the facilities

have received training on G-ANC while 205(94.91%) have not received any form of training on G-ANC. Therefore, as recommended by the Global G-ANC Collaborative, careful reporting of intervention components (for instance, number, structure, and content of meetings; designation and training of facilitators; mentoring of new sites) will aid interpretation and the ability to identify best practices, as well as potential aggregation of data from different studies (Grenier et.al., 2019).

Furthermore, there is need to deploy well trained worker to the HC facilities across the state as many facilities are without health personnel. Most pregnant women are left under the mercy of VCM and unqualified health workers. This will reduce the maternal mortality rate in the health facilities in the state.

Insecurity in the North West is no longer news. In view of this, PHC/HC facilities should be fenced and adequate security personnel should be provided. This will help in reducing external attacks by bandits and hoodlums.

Workers in PHC/HC facilities should be motivated by providing basic incentives in the facility and improvement in their welfare. This would go a long way to reshape and change their attitude towards work.

Additional exploration of G-ANC's effect on facility-based delivery in contexts with varying baseline rates is warranted alongside further research to identify: if availability of G-ANC incentivizes earlier entry to care, if G-ANC participation influences choice of facility for routine facility-based delivery (i.e., at same site where ANC was received), how G-ANC impacts delivery of other services (positively or negatively), and how G-ANC can improve family engagement in care.

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