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Assessment of Challenges Associated with Timely Referral of Complicated Cases During Pregnancy Among Community Health Practioners in Sagbama LGA Bayelsa State, Nigeria

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ABSTRACT

Aim/Objective: This study assesses challenges associated with timely referral of complicated cases during pregnancy among community health practitioners in Sagbama LGA.

Materials and Methods: Structured questionnaire was used to obtain information from all the respondents after seeking their consent and approval from the research and ethics committee of the institution. Simple random technique was also adopted in this study.

Results: Outcome from this study shows age range of 18-24yrs (11.67%),25-34yrs (20.00%),35-44yrs (53.33%), and above 45yrs (15.00%) among the respondents. Married participants (51.67%) were higher followed by single (26.67%) compared with those separated (13.33%) and divorced (8.33%) among the study population. Respondents with B.Sc. level of educational qualification were 43.33% while CHEW was 31.67%. Respondents working in government facilities was 41.67% compared with private workers of 58.33% respectively. However male workers were 28.33% while females were 71.67% among the study population. Timely pre-existing referral cases during pregnancy were 93.33% compared to 6.67% that were not timely referred. Referral from higher to lower facilities was 13.33% while reverse was the case with 86.67% lowers of lower to higher facility. Findings from this study also reveal 70% of response to referral and a non-response of 30% among the respondents. Referred cases during the 3rd trimester was 91.67% in comparison with 2nd (5.00%) and 3rd (3.33%) trimesters. The period of maternal referral was mainly during pregnancy (61.67%) and delivery (30.00%) followed by 8.33% after delivery. The time interval of referred cases was mostly at 10: 00am (63.33%) and less than 10:00am (26.67%) while the mode of delivery of referred cases was 90.00% CS compared with normal vaginal delivery of 10.00% respectively. Furthermore, ambulance services were 66.67% compared with 33.33% facilities with no ambulance services that makes transportation a major hindrance (71.67%) regards to referred cases.

Conclusion: Though this study observed an improved response to referral cases. However more ambulances should be provided to all facilities by the government to reduce the cost and delay in transporting referred cases because this will decrease maternal and child mortality rate.

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Introduction

The practice of having appropriate emergency obstetric referrals from lower health facilities to referral hospitals is an important standard of care for managing mothers in labor, but it has not been optimally successful due to challenges in the obstetric referral systems [1-3]. In order to improve maternal health, there is need to have efficient management of obstetric referrals [4]. The health care system is supposed to follow standard protocols for a successful process of obstetric referral [5,6]. Different levels of healthcare facilities are equipped differently with referral hospitals having more specialized services and capacity to handle more volumes of patient turnover [7,8].

About 800 women die from pregnancy related complications around the world every day [9]. PHC workers are often the first point of contact for pregnant women seeking healthcare services [10-12]. They play a crucial role in providing timely referral of complicated cases during pregnancy and facilitating safe deliveries. The ability of these practitioners to deliver quality care is influenced by their knowledge and skills in timely referral and safe delivery practices [13-15]. There is also a need for general overhaul of community-based facilities to effectively support prompt referral [16,17].

Nigeria has one of the highest maternal mortality ratios globally, estimated at 512 deaths per 100,000 live births [18]. Hemorrhage, hypertensive disorders (including eclampsia), and sepsis are leading causes of maternal death [19]. Complications related to unsafe abortion and lack of access to emergency obstetric care, such as cesarean sections and blood transfusions also contribute significantly to maternal mortality [20]. Preeclampsia, a serious pregnancy complication, has a high prevalence rate in some areas, with headache being a common associated symptom [21-24].

Community health practitioners Act as a bridge between communities and formal healthcare systems, facilitating referrals for women who need specialized care [25,26]. Play a crucial role in educating communities about family planning and safe abortion practices, helping to reduce unintended pregnancies and unsafe abortions. Provide postpartum care and support, including breastfeeding promotion and newborn care [4,27]. Hospitals is registered from emergency obstetric referrals from lower health facilities [16]. While some practitioners among TBAs demonstrate good awareness of complications, many lack the ability to accurately assess and refer cases, leading to delayed or inadequate care and contributing to mortality [28,29]. Community-based interventions have been shown to reduce neonatal mortality by 25%, increase referrals by 40%, and improve early breastfeeding rates [6].

Methodology

Study Design

Descriptive study design was used to conduct this study.

Study Area

Ofoni, Angalabiri, Toru-Orua, Ebedebiri, Toru-Angiama, Bolou-Orua,Sagbama

Study Population

Licensed community health practitioners in both Private and Government health facilities

Inclusion Criteria

Only those practitioners that consented were included in this study

Exclusive Criteria

Those on annual leave, not feeling well, those absent from work and those that do not consent were excluded from this study.

Sample Size

The Taro Yamane's formula was used to determine the sample size of the study.

Using the formula $S = N/1 + N (\alpha)^2$

Where:

S= Sample size

N= Total population size of (CHO 69)

α= Level of Significance (0.05)

Using the formula

$S= N/1+N (\alpha)^2$, $S= 69/1+69 (0.05)^2$. $S= 69/1+69(0.0025)$. $S=69/1.1525 =59.869$

Sample size= 60 approximately

Sampling Technique(s)

Simple random sampling technique through balloting with non-replacement was used to select the participants.

Data Source

Primary

Instrument for Data Collection

Structured questionnaire

Ethical Consideration

Institutional ethical approval and Permission from the Sagbama LGA primary health care unit was obtained including informed consent from the participants.

Data Analysis

SPSS version 24.0

Results

Table 1: Socio-Demographic Characteristics of the Respondents

Variables Age (yrs)	Frequency (n)	Percentage (%)
18-24	7	11.67
25-34	12	20.00
35-44	32	53.33
≥ 45	9	15.00
Total	60	100
Marital Status of the Study Population		
Single	16	26.67
Married	31	51.67
Divorce	5	8.33
Separate	8	13.33
Total	60	100
Educational Cadre of Respondents		
JECHEW	5	8.33
CHEW	19	31.67
CHO	1	1.67
PHCT	8	13.33
BSc	26	43.33
MSc	1	1.67
PhD	-	-
Total	60	100
Employment and Sex Status of the Respondents		
Government	25	41.67
Private	35	58.33
Total	60	100
Males	17	28.33
Females	43	71.67
Total	60	100

Source: Field Survey (2025)

Table 1 above describes the age range, marital status and educational cadre including sex and employment status of the study population.

Table 2: Respondents with Previous Caesarean Section

Variables	Frequency(n)	Percentage (%)
Yes	52	86.67
No	8	13.33
Total	60	100
Timely Pre-existing Medical Referral During Pregnancy		
Yes	56	93.33
No	4	6.67
Total	60	100

Report to Timely Referral from Higher to Lower Facility		
Yes	8	13.33
No	52	86.67
Total	60	100

Source; Field Survey (2025)

Table 2 above describes the number of respondents that have undergone previous cesarean section and timely referral cases from higher facilities to lower facilities.

Table 3: Response to Referral during Pregnancy and Puerperium

Variables	Frequency (n)	(%)
Yes	42	70.00
No	18	30.00
Total	60	100

Field Survey (2025)

Table 4: Age Range of Pregnant Mothers Referred

Variables (age yrs)	Frequency (n)	Percentage (%)
15-20	6	10.00
21-25	12	20.00
26-35	42	70.00
Total	60	100

Field Survey (2025)
This indicates pregnant women referred according to their age range.

Table 5: Trimesters of Referred Cases

Variables	Frequency (n)	Percentage (%)
1st	2	3.33
2nd(preeclampsia)	3	5.00
3rd	55	91.67
Total	60	100
Period of Maternal Referral		
During pregnancy	37	61.67
During delivery	18	30.00
After delivery	5	8.33

(2025) The above indicate different cases referred according to trimesters of pregnancy and the period.

Table 6: Time Interval of Referral Cases

Variables	Frequency (n)	Percentage (%)
6am	-	-
≤10am	16	26.67
10am	38	63.33
≥2pm	-	-
2pm	4	6.67
≥8;30pm	-	-
8;30pm	2	3.33
Total	60	100

Source; Field Survey (2025)

Table 7: Mode of Delivery of Referred Cases

Variables	Frequency (n)	Percentage (%)
Normal vaginal delivery	6	10.00
Caesarean section	54	90.00
Total	60	100
Outcome of Referred Cases		
Live birth	58	96.67
Still birth	2	3.33
Total	60	100

Source; Field Survey (2025)

Table 7 shows the mode of referred cases during delivery and the resultant outcome.

Table 8: Do you give Pre-Referral notice?

Variables	Frequency(n)	Percentage (%)
Yes	52	86.67
No	8	13.33
Total	60	100
Do you have Standard Referral form Paper?		
Yes	30	50.00
No	30	50.00
Total	60	100
Do you have Ambulance Services?		
Yes	40	66.67
No	20	33.33
Total	60	100

Source; Field Survey (2025)

Table 9: Is cost of Transportation a Problem?

Variables	Frequency(n)	Percentage (%)
Yes	43	71.67
No	17	28.33
Total	60	100
Do you have good Referral Skill?		
Yes	34	56.67
No	26	43.33
Total	60	100
Do you have Adequate health Personnel?		
Yes	34	56.67
No	26	43.33
Total	60	100
Do you get report of delay at receiving Facility?		
Yes	36	60.00
No	24	40.00
Total	60	100

Source: Field Survey (2025)

Discussion

Findings from this study shows higher number of respondents that are within the age range of 35-44yrs (53.33%), followed by age 25-34yrs (20.00%) and above forty-five years (15.00%) compared with the younger age range of 18-24yrs of 11.62% respectively.

Most respondents in the study population were duly married (51.67%) while 26.67% were single in comparison with participants that are separated (13.33%) and Divorce (8.33%). Regarding the educational qualification of the study population, most respondents were bachelor's degree holders (43.33%), CHEW (31.67%), PHCT (31.33%), JCHEW (8.33%) and MSc (1.67%) with non-doctorate degree holder.

Caesarean Section

Cases of previous caesarean section was (86.67%) compared with those that have not had caesarean section (13.33%). However timely pre-existing medical referral during pregnancy was a welcome development as the study observed (93.33%) prompt response rate. Referral cases from higher to lower facility were 13.33% while from lower to higher was 86.67% respectively.

Response

Maternal response to referral during pregnancy and after delivery was 70.00% while non-response was 30.00%. Timely response to referral is of vital importance as it save the life of both mother and the unborn child [30]. The age range of pregnant mothers referred was between fifteen to thirty-five years, though age 26-35yrs (7-.00%) was the highest among the study population compared with the least age of 15-20yrs of 10.00%.

Trimester of referral was at its peak during the delivery period of known as the third trimester (91.67%) compared with first trimester (3.33%) as at when pregnancy begin to develop and second trimester (5.00%) as well.

More so, period of maternal referral was 61.67% during pregnancy in relation to 40.00% of referred cases during delivery. Regular checkup and proper examination of women during pregnancy by primary and other health professionals is of vital importance because it will help in the detection and management of any potential complications, ensuring a healthy pregnancy that will save both mother and baby [31-33].

The time interval of maternal referred cases as observe from this study was 63.33% at 10:00am and before 10:00am (626.67%). Referral during this time frame of the day will help to curb the delay problems of mobility to higher facilities that may arise during night period.

Observations from this study also reveal 90.00% mode of delivery cases referred were Caesarean section. Results from this study further shows 96.67% live birth as positive outcome from referred cases by health workers in Sagbama LGA. Health practitioners who promptly give pre-referral notice to pregnant women was 86.67% in relation to 13.33% that do not in this study. However, referral standard form paper was 50.00% in health facilities with ambulance services while 33.33% lack these services. The shortage of ambulance creates a heavy financial burden and delay among pregnant women (71.67%) referred to reach their destination timely [34-38].

Conclusion

This study observes a good response rate to maternal and child health of mothers during pregnancy and after delivery among health Practitioners in Sagbama LGA. However, there is still shortage of ambulance services in most of the health facilities that makes transportation of referred cases difficult in reaching their destination timely.

Recommendations

We hereby recommend the followings

- Government should make it as a matter of urgency to provide ambulances to all primary health centers for swift referral of cases.
- Hospitals should be built in every rural community in Sagbama LGA to prevent traveling through long distances during referral
- Doctors should be attached to every primary health care centers

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