

Developing Acute Care and Referral Systems (ACERS) in Ghana

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Research Question: What are the barriers to emergency obstetric and neonatal care (EmONC) at facilities in the Ghanaian municipalities of Nkwanta South and Gushegu as determined by emergency referral systems and performance of EmONC services?

BACKGROUND

Currently in Ghana, Infant mortality is 23.1 deaths per 1000 live births,¹ and maternal mortality is 308 deaths per 100,000 live births.² While Ghana has a well-organized healthcare system, there are opportunities to strengthen the continuum of care process throughout the emergency obstetric and newborn care (EmONC) system to reduce maternal and neonatal morbidity and mortality.

DESCRIPTION OF ORGANIZATION

The goal of sidHARTE – Strengthening Emergency Systems Program is to promote locally-driven solutions of strengthening the effectiveness and integration of acute and chronic care health systems in resource-limited settings. This goal is pursued by partnering with local government, civil service, and university stakeholders; by strengthening complex adaptive health systems through implementation support and science; by facilitating technical exchange, cascading capacity-building of frontline health workers, and data-driven policy support; and by urban and rural acute care systems strengthening approaches.

TABLES

Signal function	Gushegu Municipal (Northern Region)					Nkwanta South Municipal (Oti Region)				
	Comparison Area		Intervention Area			Comparison Area			Intervention Area	
	Municipal Hospital	Health Center	CHPS with compound	CHPS w/out compound	CHPS with compound	Municipal Hospital	CHPS with compound	CHPS w/out compound	Health Center	CHPS with compound
N	1	2	5	14	5	2	15	3	2	7
C-section	100	0	N/A	N/A	N/A	100	N/A	N/A	0	N/A
Blood transfusion	100	0	N/A	N/A	N/A	100	N/A	N/A	0	N/A
Assisted vaginal delivery	100	0	0	0	0	50	0	0	0	0
Parenteral anticonvulsants	100	50	0	0	20	100	0	0	0	14
Manual removal of placenta	100	50	40	0	60	100	20	0	100	29
Neonatal resuscitation	100	50	0	0	60	100	33	0	0	29
Removal of retained products	100	0	40	0	60	100	0	0	0	14
Parenteral antibiotics	100	50	20	0	40	100	33	33	50	29
Parenteral uterotonics	100	100	40	0	40	100	33	0	100	14

Table 1 : Signal function performance in the 3 months prior to the survey (December, 2020)

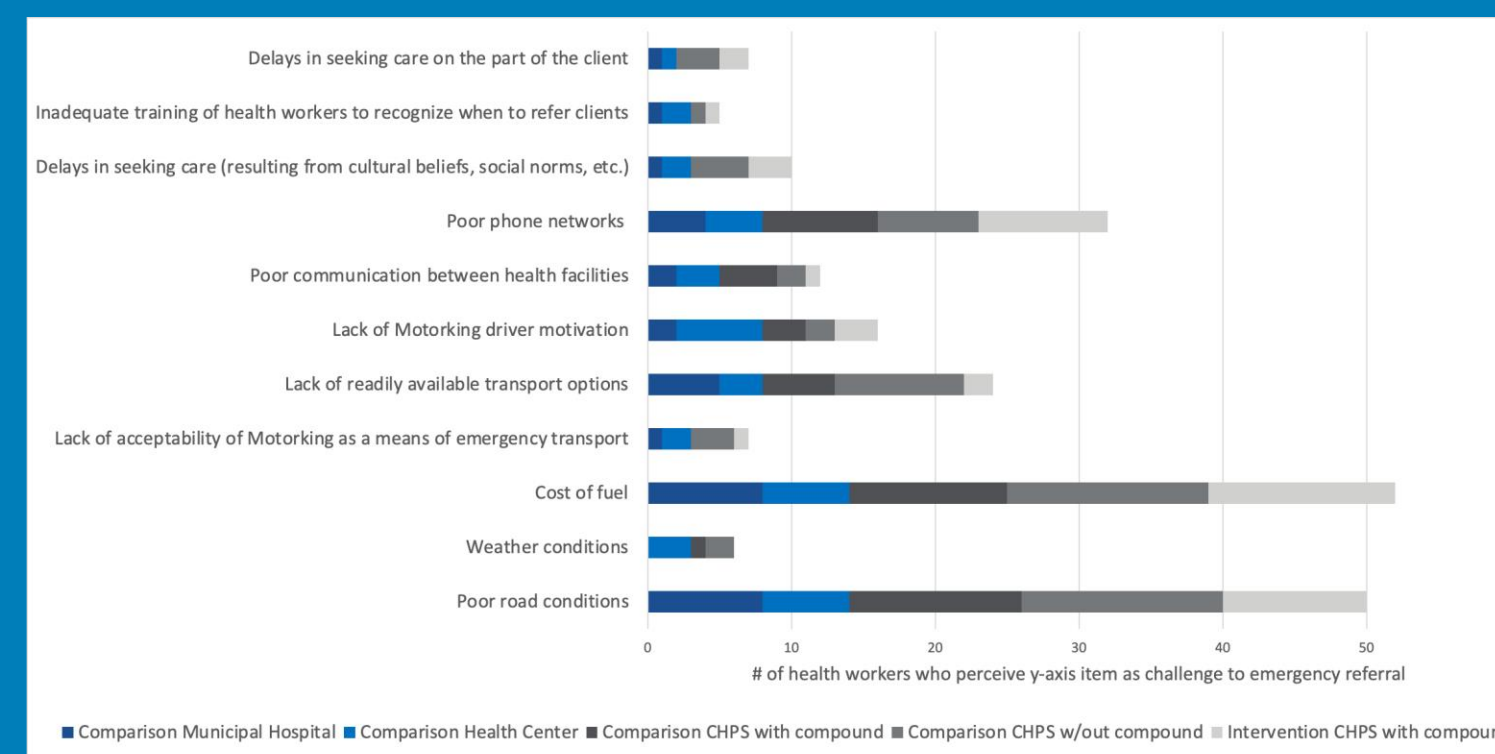


Table 2 : Health worker perceptions of challenges to emergency referral in Gushegu.

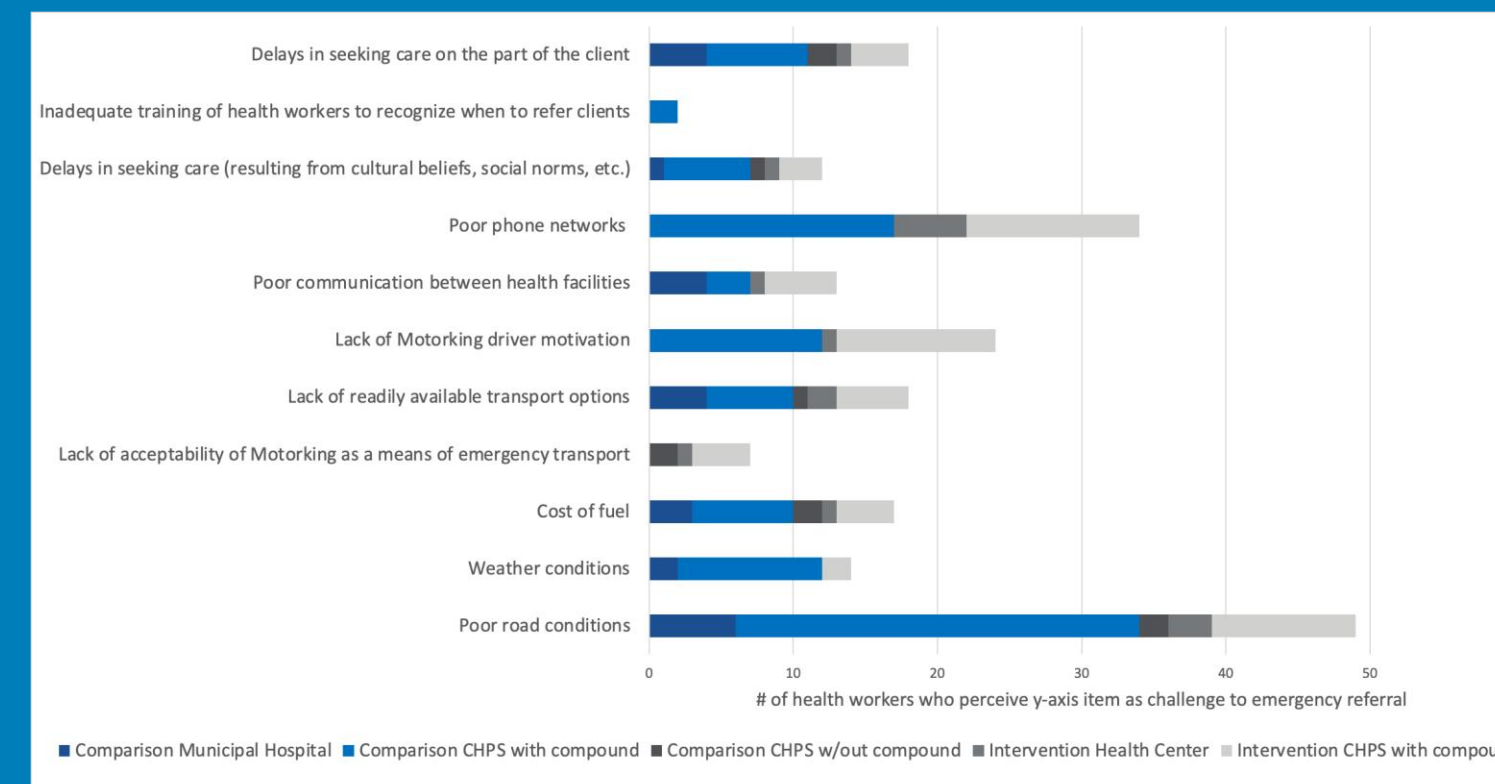


Table 3 : Health worker perceptions of challenges to emergency referral in Nkwanta South

METHODS

A series of mixed-methods baseline surveys were conducted to inform implementation of ACERS interventions, and to serve as a comparison to endline data post-ACERS interventions. These surveys were designed to collect information to inform interventions at different levels of care-seeking delays. The surveys were: women's, health worker, facility, and referral surveys. Data analysis was conducted using STATA and SAAS. Data analysis of the referral and facilities survey were used to answer the research question.

The study identifies gaps in signal function performance across lower-level facilities, referral protocols, and working transport systems for referrals. Poor road conditions, fuel costs, and phone network interruptions inhibit emergency referrals. Only municipal hospitals relative to sub-hospital facilities consistently fulfilled all signal functions relevant to their EmONC status.

DISCUSSION

Findings suggest opportunities for improving women's health seeking behavior and referrals. Furthermore, avenues exist to enhance EmONC by supporting facilities' capacity to perform signal functions corresponding to their rung on the ladder of care.

REFERENCES

1. The World Bank, World Development Indicators (2019). Mortality rate, neonatal (per 1,000 live births) – Ghana [Data file]. Retrieved from <https://data.worldbank.org/indicator/SH.DYN.NMRT?locations=GH>
2. MacroTrends LLC. (n.d.). Ghana Maternal Mortality Rate 2000-2021. MacroTrends. <https://www.macrotrends.net/countries/GHA/ghana/maternal-mortality-rate>.