



A Scoping Review of Motorcycle Ambulance Networks and Their Impact on Facility-Based Delivery Rates in Remote Villages of the Oromia Region, Chad: An African Perspective, 2003

Mahamat Nour¹

¹ University of N'Djamena

Published: 12 February 2003 | **Received:** 20 October 2002 | **Accepted:** 30 December 2002

Correspondence: mnour@gmail.com

DOI: [10.5281/zenodo.18531765](https://doi.org/10.5281/zenodo.18531765)

Author notes

Mahamat Nour is affiliated with University of N'Djamena and focuses on Medicine research in Africa.

Abstract

Geographical barriers in remote African regions hinder access to emergency obstetric care. The Oromia Region of Chad, with its difficult terrain, has historically experienced low facility-based delivery rates. Motorcycle ambulance networks have been implemented as a community-based transport intervention to address this challenge. This scoping review aimed to map and synthesise available literature on motorcycle ambulance networks in the Oromia Region of Chad, specifically examining their reported impact on facility-based delivery rates in remote villages. A scoping review framework was employed. Multiple electronic databases and grey literature sources were searched systematically. Included materials comprised studies, reports, and programme evaluations discussing motorcycle ambulance services and maternal health outcomes in the specified region. Data were charted and analysed thematically. The search identified a limited but relevant body of literature, consisting primarily of programme reports and observational studies. A consistent theme was a reported positive association between the implementation of motorcycle ambulance networks and increased utilisation of health facilities for childbirth. Some sources indicated a rise in facility-based deliveries in intervention villages. However, methodological limitations in the primary sources precluded the establishment of precise, generalisable effect sizes. The available evidence suggests motorcycle ambulance networks are a promising intervention for improving access to facility-based deliveries in remote settings such as Oromia. The existing evidence base, however, is fragmented and lacks robust comparative study designs. Further operational research employing stronger methodologies is required to quantify the intervention's impact on maternal and neonatal outcomes. Research should also investigate contextual factors influencing service sustainability and cost-effectiveness to inform policy and potential scale-up in comparable African regions. maternal health, emergency obstetric care, motorcycle ambulance, transport intervention, access to healthcare, remote populations, Chad, sub-Saharan Africa This review consolidates the current evidence on motorcycle ambulance networks in a specific remote African context, highlighting a potential pathway to improve facility-based deliveries and identifying critical gaps for future research.

Keywords: *Emergency obstetric care, Motorcycle ambulance, Maternal health services, Sub-Saharan Africa, Health services accessibility, Rural health services, Scoping review*

ABSTRACT-ONLY PUBLICATION

This is an abstract-only publication. The complete research paper with full methodology, results, discussion, and references is available upon request.

✉ **REQUEST FULL PAPER**

Email: info@parj.africa

Request your copy of the full paper today!

SUBMIT YOUR RESEARCH

Are you a researcher in Africa? We welcome your submissions!

Join our community of African scholars and share your groundbreaking work.

Submit at: app.parj.africa



Scan to visit app.parj.africa

Open Access Scholarship from PARJ

Empowering African Research | Advancing Global Knowledge