



Rapid maternal death surveillance and response in humanitarian crisis settings: community-level insights from South Darfur, Sudan

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No Conflicts Of Interest

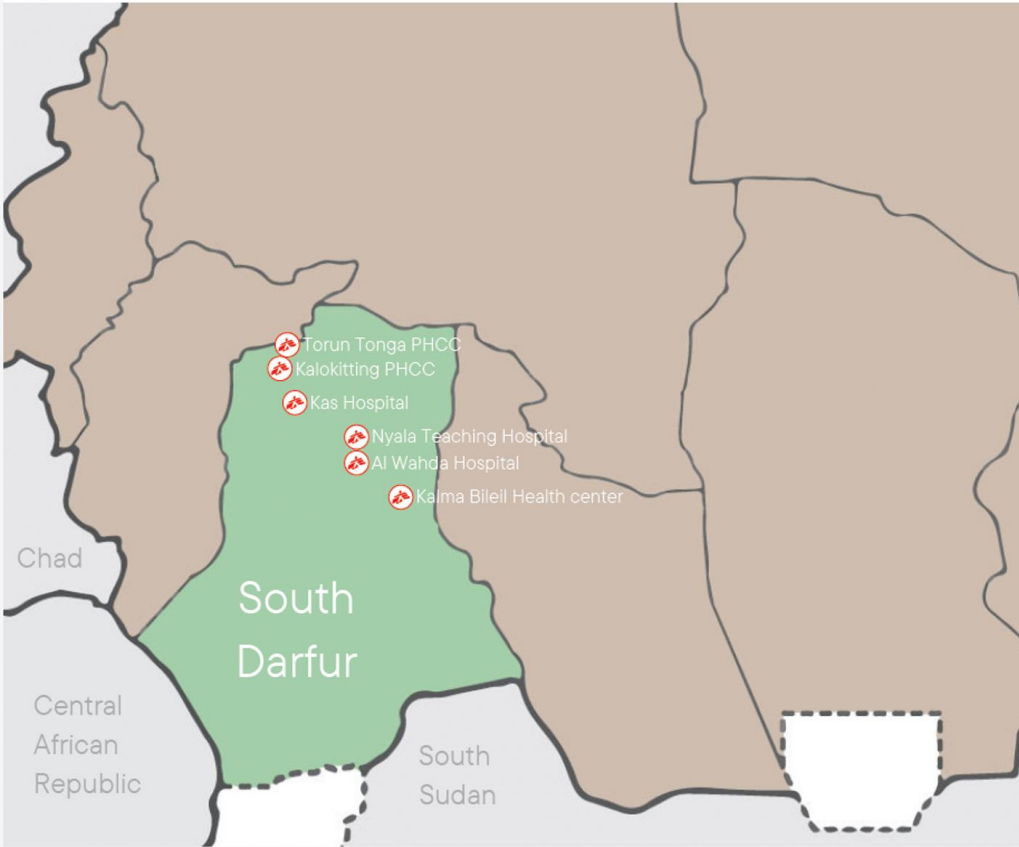
Context: Sudan April 2023 - Present



MSF ACTIVITIES IN SUDAN

South Darfur State

 MSF Supported facilities



Rapid-Maternal Surveillance and Response (R-MDSR)

Part A			
Date of Review		Case Number	
Who is your information source ?	Doctor Midwife Traditional Birth Attendant (TBA) Other health worker Relative Other (specify)		
Who died? (first three letters of name, if known)		Age:	
	Date of Death: Before Birth	Estimated pregnancy gestation when death occurred: or, time since birth (if a postnatal death):	
		Facility	Exact location name:

Part B	
What happened? Briefly describe, using words/information of interviewee e.g. delays, staff issue, complication in management, equipment issue...	
In an “ideal situation” what should have happened?	
According to interviewee & external opinion (MTL/MWAM)	
What can be learnt for the future?	
Why was there a problem? According to interviewee & external opinion	
What actions would help reduce the risk of this happening again?	

Part C	
What can be learnt for the future?	
Why was there a problem? According to interviewee & external opinion	
What actions would help reduce the risk of this happening again?	

COMMENTARY Open Access

Lessons learned from applying a “Rapid Maternal Death Surveillance and Response” tool in conflict-affected Tigray, Ethiopia

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Abstract
Women in humanitarian settings face high maternal mortality, yet Maternal Death Surveillance and Response (MDSR) systems are lacking. Medical teams in Tigray, Ethiopia, designed and piloted a *rapid* MDSR tool. The tool identified actions to improve maternity care within the humanitarian response. Adapted MDSR tools may be beneficial in humanitarian crises however further research is required.

Keywords MPDSR, Humanitarian, Maternal health, Quality improvement, Tigray, MISP, Anaemia, Maternal mortality

Introduction
Ethiopia has made significant progress in reducing its maternal mortality ratio (MMR), demonstrating a 72% reduction between 2000 and 2020 [1]. Nonetheless, it remains one of four countries in the world reporting over 10,000 maternal deaths per year [1]. Tigray region, in

[4, 5]. The conflict prevented aid or international observers from entering the affected areas [6]. Following widespread destruction and looting of health facilities, only 3.6% were left functional [7]. According to the United Nations Populations Fund (UNFPA), 83% of facilities previously able to provide services for pregnant women were no longer capable [8]. The Tigrayan MMR was estimated

Yes /

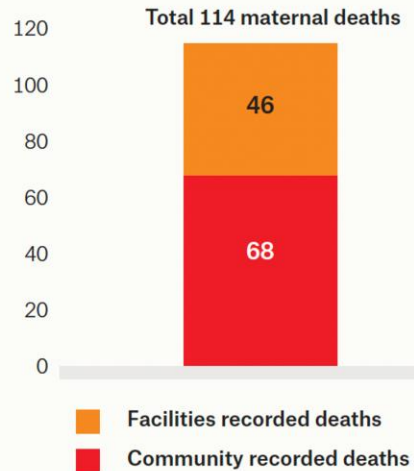
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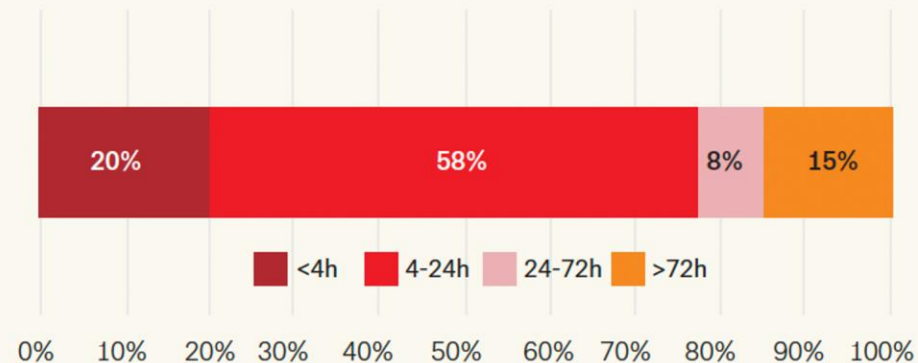
Findings

- R-MDSR was implemented Jan–Jul 2024 in two MoH hospitals — Nyala Teaching and Kas Rural
 - Followed by snowball surveys in three nearby IDP camps, South Darfur
 - 114 maternal deaths were reviewed: 40% facility & 60% community deaths
 - 78% (32) facility deaths occurred within 24 hrs of arrival. Sepsis was the leading cause (not PPH).
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- Findings guided the creation of community-based women’s clinics from Aug 2024, offering ANC, PNC (including home visits), referral, contraception, and sexual violence care. Targeted hospital-based improvements included OT & other infrastructure repairs, IPC focus, lab support, triage improvements, post – op monitoring.

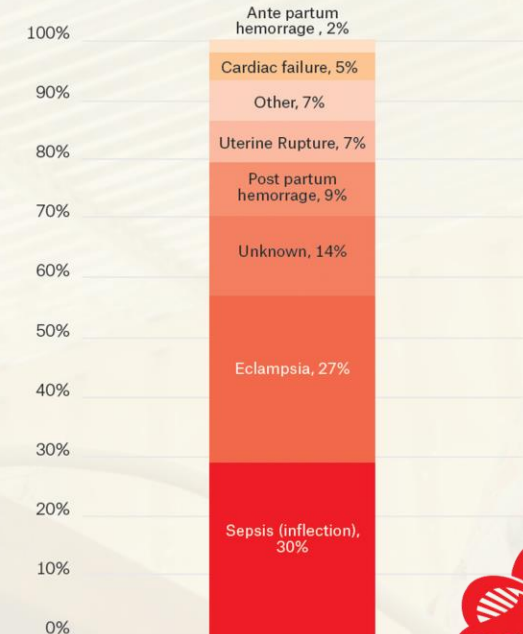
Total maternal deaths reported in MSF-supported facilities and in Nyala IDP community, Jan-Jul 2024



Share of maternal death numbers, per time between presentation to the facility and death



Cause of maternal deaths in MSF-supported facilities, Jan-Aug 2024





Feasibility: Facility & community R-MDSR is adaptable to volatile, resource-limited settings.

Impact: Enabled rapid data collection and analysis leading to evidence-based responses to improve outcomes

Value: Strengthened resource allocation, programme design, clinical priorities and advocacy initiatives.



Conclusion: R-MDSR supports teams to identify maternal deaths & respond to their causes within humanitarian crisis settings

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