



Safe motherhood and childhood in Sierra Leone: key findings from mixed-methods health-seeking behaviour study

Kayla Marie Lavilla¹, Jason Teal², Bernadette Schausberger¹, Mabinty Y. Sankoh¹, Abu B. Conteh¹, Abdul Y. Kamara¹, Zainab Tholley¹, Moses M. Kubai¹, Yassin Jalloh¹, Ernest Jabbie³, Abdul M. Falama⁴, Mabel M. Farma⁴, Kalyan Velivela¹, Sibylle Sang¹, Flaminia Sabrie¹, Norman Sitali¹, Maura Daly¹, Benjamin Black¹, *Grazia Caleo⁵, Kamalini Lokuge⁶

¹Médecins Sans Frontières (MSF), Amsterdam, The Netherlands; ²Qualitative Data Analysis Services, London, UK; ³Ministry of Health and Sanitation (MoHS), Freetown, Sierra Leone; ⁴MoHS, Tonkolili, Sierra Leone; ⁵MSF, London, UK; ⁶Australian National University, Canberra, Australia

Background

- Sierra Leone: amongst the highest in maternal, under 5 child mortality
- In 2010, Sierra Leone introduces Free Healthcare Initiative
- Bylaws and fine system to deter deliveries at home
- MSF and Sierra Leone Ministry of Health and Sanitation (MoHS) shared partnership model since 2016
- Program evaluation by MoHS, MSF, and Australian National University (ANU) in 2021

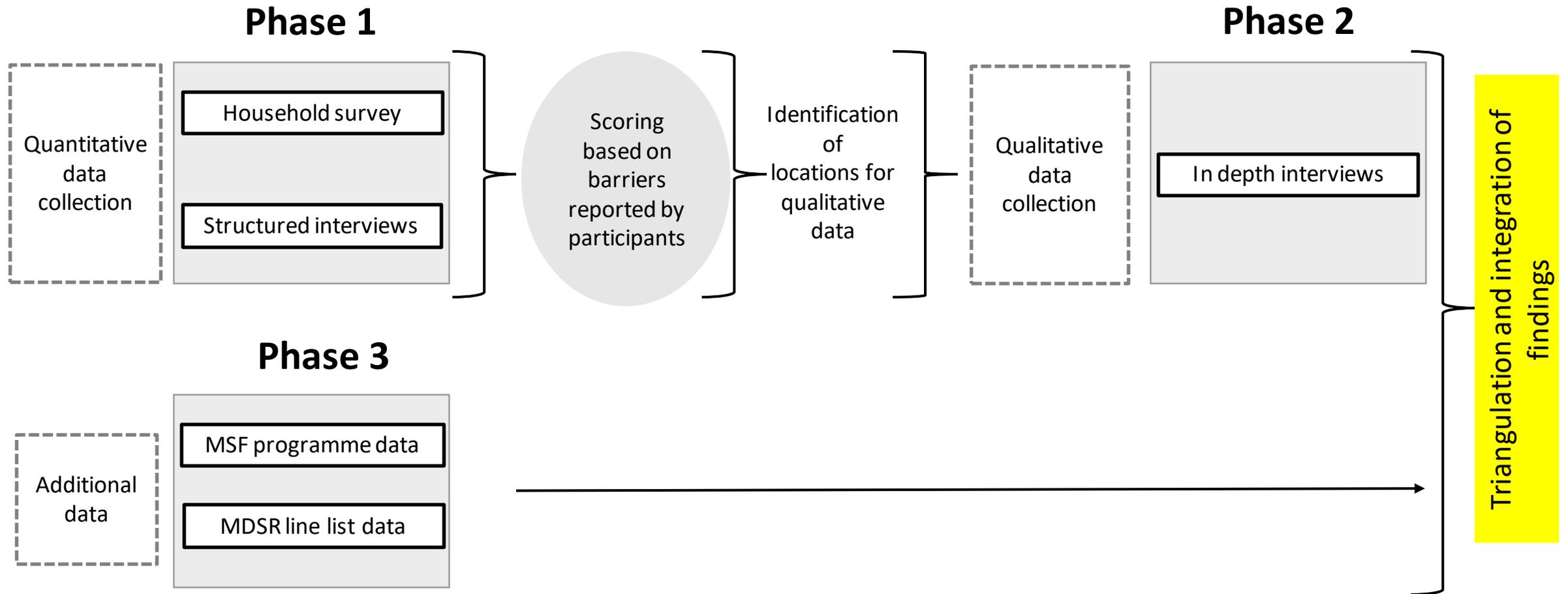


Photo courtesy of Mohammed Sanabani, Sierra Leone, 2022

Research rational and objectives

- 2016/2017 Health-Seeking Behaviours (**HSB1**) study:
 - Barriers and access to care
 - Maternal and child health outcomes
 - Health providers and community perspectives
- 2021 (**HSB2**), sequential mixed-methods study:
 - Evaluate progress since 2016/2017 (**HSB1**) study, remaining barriers
 - Compare MSF-OCA PHUs supported and unsupported catchment areas
 - In addition, the **HSB2** study explored:
 - Female genital mutilation (FGM), family planning, and adolescent reproductive health
 - Sensitivity of the district Maternal Death Surveillance and response system (MDSR) in capturing maternal deaths

Design of HSB2 study: sequential mixed-methods



Participants

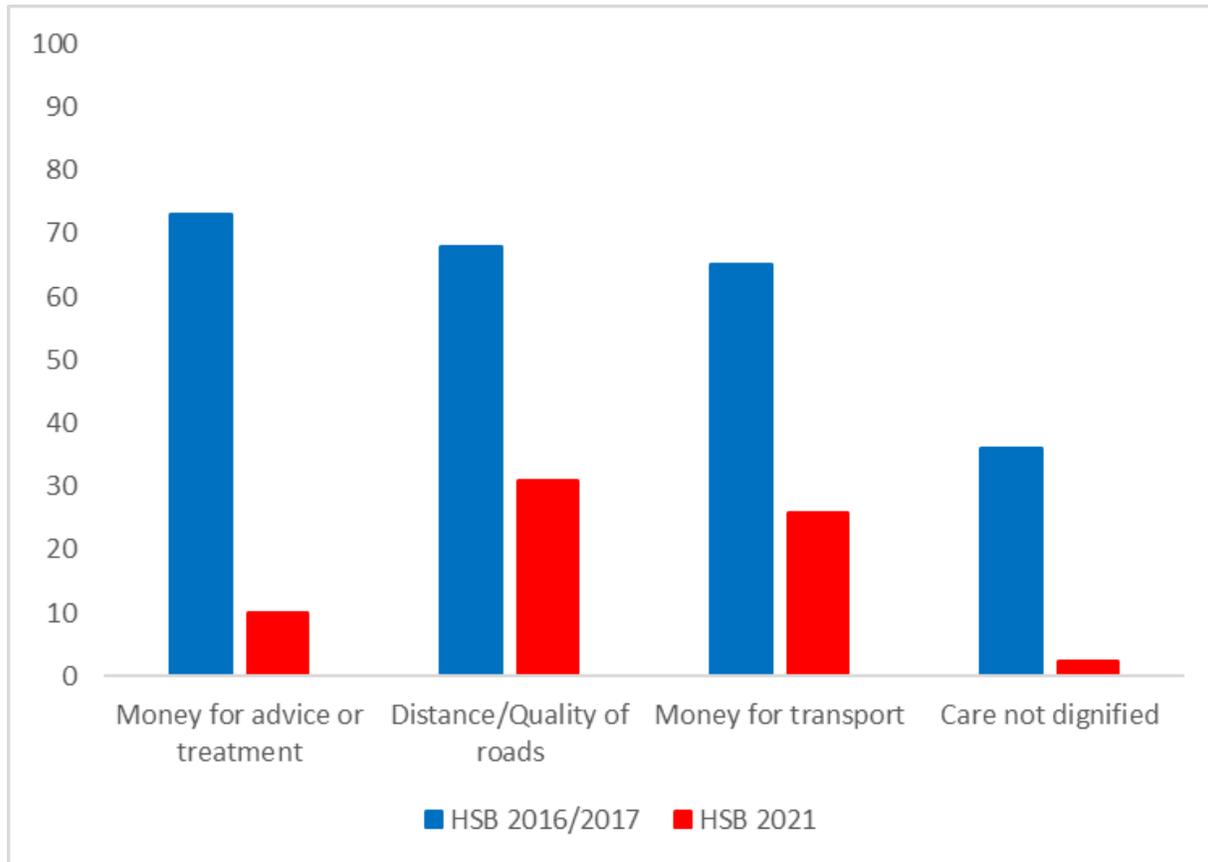
- 60 clusters/villages: 30 in areas supported by MSF, 30 in unsupported.
- 1,164 women who had a pregnancy in previous 2 years, including 110 (9.5%) adolescents aged 15 to 19 years.
- 1,177 care givers (of 1,559 children <5 years).
- 59 structured interviews to enumerate and explore circumstances of maternal deaths.
- 42 in-depth interviews (IDIs): mothers, carers of children <5, adolescents, community leaders, health care workers.



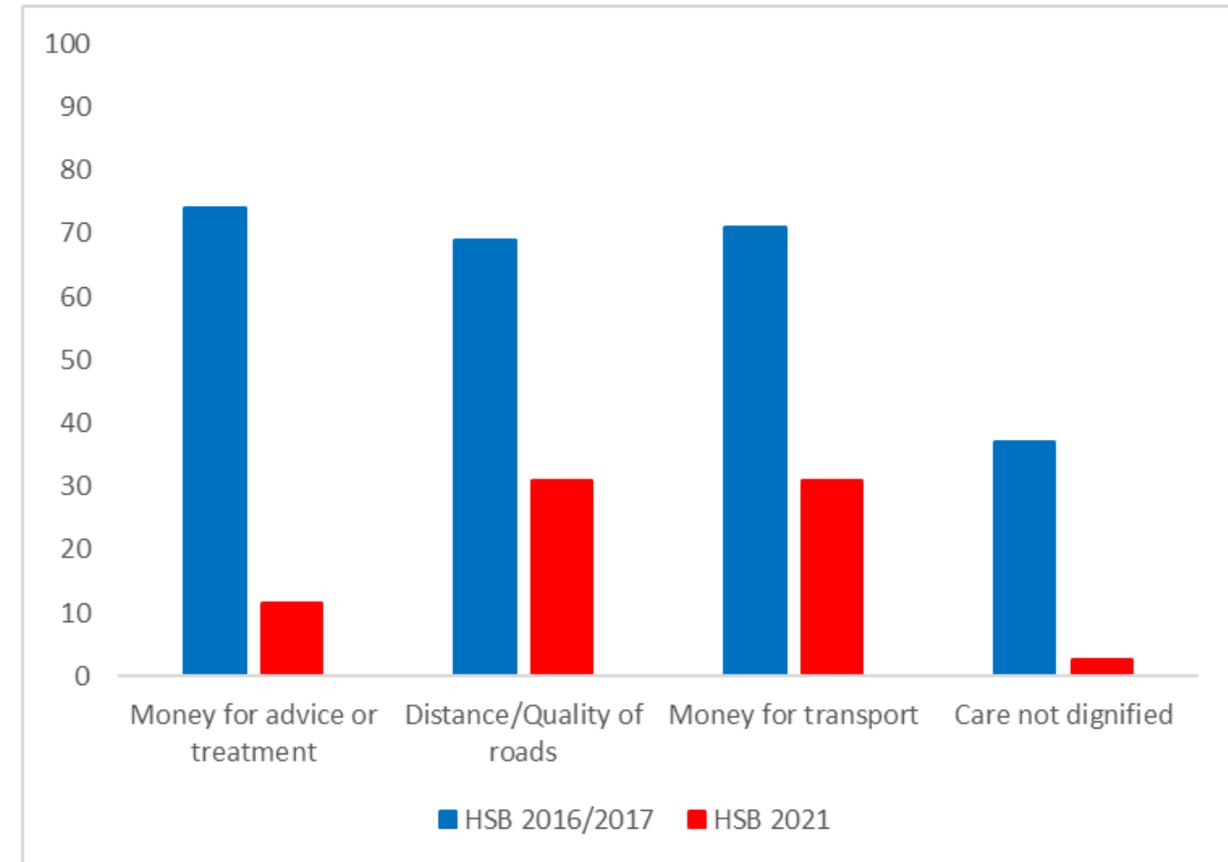
Photos courtesy of Kayla Marie Lavilla, Sierra Leone, 2021

Decreases in maternal & child barriers to care from 2016/2017 to 2021

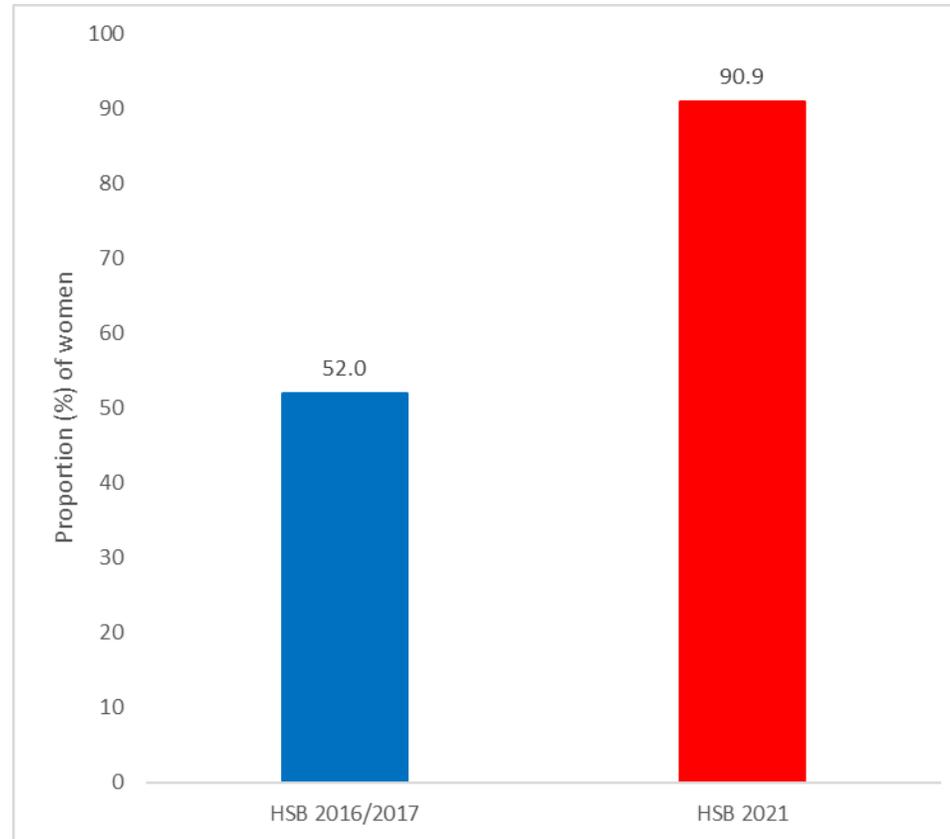
Pregnant women reporting ≥ 1 barrier decreased from 90% to 46%



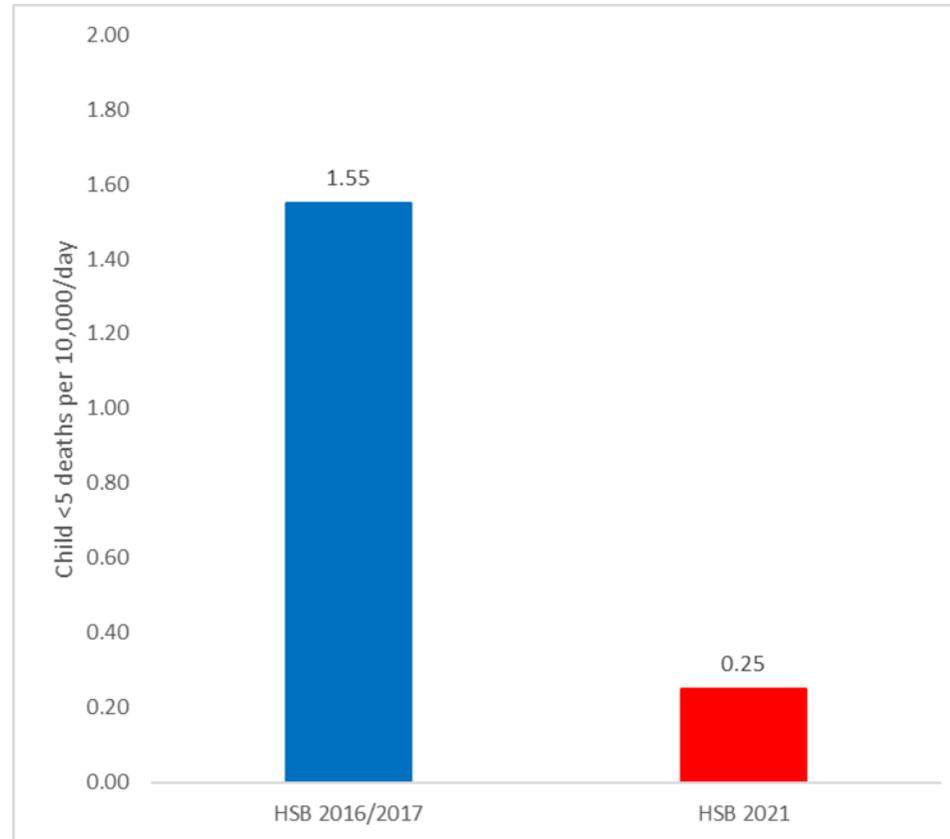
Carers reporting ≥ 1 barrier decreased from 90% to 52%



Increase in women delivering in a health facility from 2016/2017 to 2021



Decrease in Under 5 child mortality from 2016/2017 to 2021



Keys differences: MSF unsupported vs supported, 2021

Indicators	Unsupported	Supported
Experienced at least one barrier that delayed or prevented access to care during most recent pregnancy or for labour or childbirth	50.5% * (95% CI:46.5-54.5)	40.8% * (95% CI:36.8-45.0)
Delivering outside a health facility	10.5% (95% CI: 8.3-13.2)	7.4% (95% CI:5.5-9.9)
Stillbirths (in the two years prior to the survey)	4.5% * (95% CI: 3.1-6.5)	1.4% * (95% CI: 0.6-2.8)
Complications during labour or delivery	10.9% (95% CI: 8.6-13.6)	7.2% (95% CI: 5.3-9.7)
Under 5 mortality rate	0.44 per 10,000/day (95% CI:0.2-0.7)	0.17 per 10,000/day (95% CI:0.1-0.3)

* Difference is statistically significant.

Sensitivity of MoHS Maternal Death and Surveillance Response (MDSR)

40% of maternal deaths were not captured
by the MDSR surveillance system

Sanction and fine

“They will fine us one hundred thousand leones (100,000 (10,779 USD)) and we will beg them that we don’t have that kind of money things are not easy.

The distance is too far and we cannot find motor bike on time that is why the baby was delivered at home and that is why you need to help us in this community in terms of the hospital because women are ready to give birth to children free of charge but we don’t have money to go”

(TBA, supported area)

Contraception needs

40% of adolescents (15-19) who previously experienced a pregnancy in both areas have an **unmet need for contraception**



Photo courtesy of Kayla Marie Lavilla, Sierra Leone, 2021

FGM/C

96.6% of women surveyed reporting being circumcised

82.3% of women report that the practice should be continued

Cultural norms & societal pressure

“Well for us the mothers we will take it that it will be shameful if my daughter is not initiated into FGM/C so I will let her get initiated so that she will not be ashamed among her fellow women.”

(Carer, female, unsupported area)

“Well, our people were holding the tradition/belief that if a girl child/woman don't go through the FGC then that individual will not have luck to married.”

(Healthcare worker, CHW, male, unsupported area)

Strengths and Limitation

Strengths

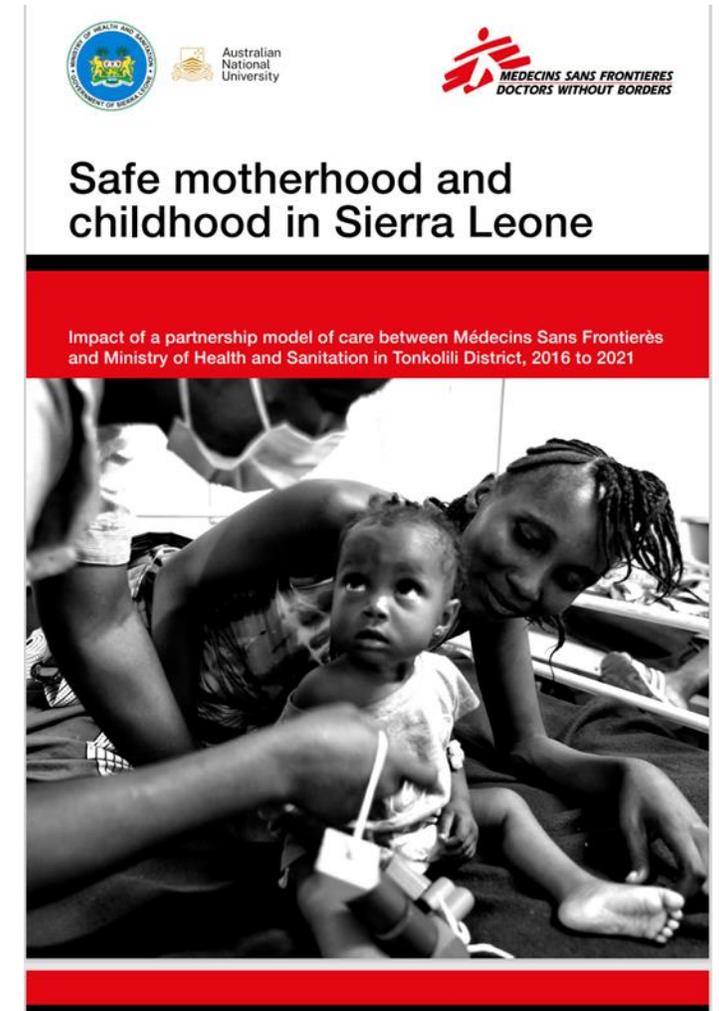
- Cross-comparison of multiple methods and data sources
- Validated and piloted tools used in HSB1 adapted for HSB2 – trends across time, comparison between areas
- Literature supports many of the documented findings on barriers

Limitations

- Recall period was two years for mothers
- Self-reported survey data may have been subject to misclassification or misreporting
- Study not designed to provide precise maternal mortality estimates

Conclusions

- Since 2016/2017, considerable progress has been made with better health outcomes in the community
- The MSF-MoHS shared partnership model of delivering free and accessible care at primary and referral levels has played a pivotal role in improving access to care
- Less improvements have been documented in catchment areas without MSF support
- Progress made must not overshadow areas that require intervention including adolescent reproductive health, stillbirths, and access to contraception
- The study results have been presented at the Sierra Leone Health Summit in April 2022 to inform practice and policy



Acknowledgments

Sierra Leone MoHS & Tonkolili DHMT at District and PHUs level, for their hard work to deliver care

Tonkolili communities and study participants, for their warm welcomes and contributions to this work

Study team: Epidemiologist, Survey Supervisors, Surveyors, Anthropologist, Research Assistants, Transcribers, and Health Promoters/Mobilisers

MSF-Holland Sierra Leone Mission, especially Mile 91 & Magburaka projects and Coordination

MSF OCA, Manson Unit
Australian National University



Photos courtesy of Kayla Marie Lavilla, Sierra Leone, 2021