

## RESEARCH BRIEF

### BACKGROUND

Evidence demonstrates that midwives educated and regulated to international standards could help to prevent roughly two-thirds of all maternal and newborn deaths.<sup>1</sup> Despite this, severe shortages of midwives persist across low- and middle-income countries, particularly in conflict-affected settings.

In these contexts, midwifery is hindered by inadequate staffing, poor infrastructure, supply shortages, education gaps, and issues of public trust.<sup>2</sup> Gender inequality, limited recognition, restrictive scope of practice, and economic hardships further compromise quality care. Insecurity exacerbates these issues leading to expanded job responsibilities, inconsistent salaries, safety threats, and potential trauma.<sup>3,4</sup> These conditions impede career progression and deter people from pursuing a career in midwifery.

This brief outlines an ongoing midwifery cohort study led by Johns Hopkins Center for Humanitarian Health, Somali Research and Development Institute (SORDI), and the Institute of Human Virology, Nigeria (IHVN) – partners in the EQUAL research consortium. While high-income countries like the UK, Australia, New Zealand, and Sweden, have executed prospective nursing and midwifery cohort studies, no such study has been undertaken in conflict-affected settings, where health workforce turnover and dropout rates are significantly higher due to the additional challenges midwives face in these settings.<sup>5</sup>

### STUDY OVERVIEW

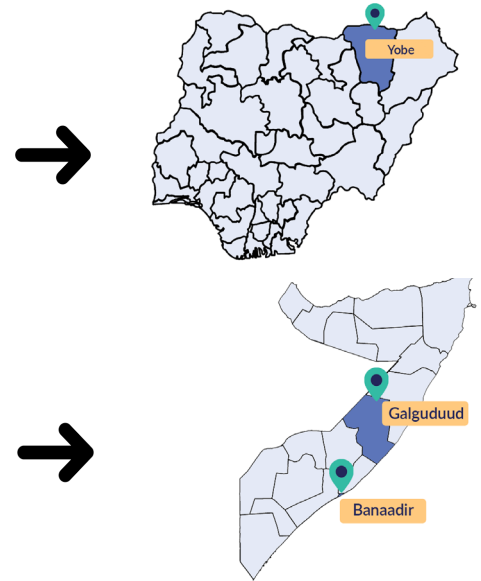
The EQUAL research consortium is conducting a prospective multi-cohort study of midwives in NE Nigeria and Somalia. This research aims to:

- 1** Generate evidence on factors affecting midwifery students' and early career midwives' aspirations, workforce participation, performance, and retention by tracking a cohort of students and graduates over time.
- 2** Document early career midwives' experiences working in conflict-affected areas, including changes in responsibilities, personal and professional stressors, and support networks during periods of increased insecurity.
- 3** Understand midwifery students' perceptions and experiences of the learning environment and generate recommendations on how to improve midwifery education in study sites.

## Study locations

In **Nigeria**, the research is being conducted in Yobe State located in the Northeast region of the country. Yobe has been heavily affected by the Boko Haram insurgency resulting in widespread displacement, social and economic hardship, and severe food insecurity. The region experiences poor maternal and newborn health outcomes, partly due to limited access to quality care. To address this, Yobe State introduced a two-year program to train "community midwives," aiming to enhance skilled care in rural areas.

In **Somalia**, the research is underway in Banaadir and Galguduud regions. Across the country, the security situation remains volatile with ongoing unrest coupled with the growing impacts of climate change and persistent shortages in skilled healthcare workers. Somalia has an estimated shortage of 20,000 midwives.<sup>6</sup>



## Design and Methodology

This is a prospective multi-cohort study of midwifery students and early career midwives running from 2023 until 2025. The study employs a sequential explanatory mixed methods design using qualitative methods – focus group discussions and in-depth interviews – to explain and expand survey findings.

The study will include up to 1000 participants, with 500 from Nigeria and 500 from Somalia. This includes final-year students from nine institutions in Somalia—seven private midwifery schools, one community school in Mogadishu, and one in Galgaduud—and students from Shehu Sule College of Nursing & Midwifery in Damaturu, covering both the three-year Basic Midwifery program and the two-year Community Midwifery program.

Data collection started with the first cohort of students assembled in June 2023 and a second cohort in June 2024 in Nigeria and in June 2023 and October 2023 in Somalia. Each cohort undergoes a baseline survey, with follow-up interviews and focus group discussions and in-depth interviews planned at one-year intervals to track changes and gain deeper insights. Figure 1 outlines the process while table 1 provides additional detail on the methodology.

**Figure 1: Cohort study timeline and process**



**Table 1: Data collected by method**

Method	Information Collected
<p><b>Surveys</b></p>	<p><b>Students</b></p> <ul style="list-style-type: none"> <li>• Demographic characteristics</li> <li>• Challenges during pre-service education</li> <li>• Reasons others drop-out from pre-service education</li> <li>• Excitement and concerns about becoming a midwife</li> <li>• Post-graduation plans</li> <li>• Personal and perceived community attitudes towards midwifery</li> <li>• Impact of conflict and violence on academic experience</li> </ul>
	<p><b>Graduates</b></p> <ul style="list-style-type: none"> <li>• Challenges experienced</li> <li>• Support received by midwifery graduates</li> <li>• Perceptions of a job satisfaction</li> <li>• Sources of professional motivation</li> <li>• Working conditions</li> <li>• Changes in employment status and location</li> <li>• Benefits received</li> <li>• Workplace violence and impact of armed conflict</li> <li>• Health and occupational injuries</li> </ul>
<p><b>Focus Group Discussions</b></p>	<p><b>Midwifery Students</b></p> <ul style="list-style-type: none"> <li>• Student experiences</li> <li>• Challenges faced as a student, including conflict</li> <li>• Future career plans and goals</li> </ul>
	<p><b>Recent graduates</b></p> <ul style="list-style-type: none"> <li>• First midwifery job experience</li> <li>• Exploration of challenges identified in survey</li> <li>• Impact of conflict on professional experiences</li> <li>• Factors affecting motivation identified in survey</li> <li>• Influence of personal and professional experiences on career goals</li> <li>• Recommendations for retention strategies and improve working conditions</li> </ul>
<p><b>In-depth Interviews</b></p>	<p><b>Students who withdrew from midwifery program</b></p> <ul style="list-style-type: none"> <li>• Reasons for dropping out of the program</li> <li>• Impact of conflict on academic experience</li> <li>• Plans after leaving the program</li> <li>• Recommendations for program improvement</li> </ul>
	<p><b>Midwives who stop working as a midwife</b></p> <ul style="list-style-type: none"> <li>• Reasons for leaving the job</li> <li>• Experience working as a midwife</li> <li>• Benefits and challenges of practicing midwifery</li> <li>• Impact of conflict on professional experiences</li> <li>• Future career plans</li> <li>• Recommendations for improving working conditions</li> </ul>

For more information visit [www.EQUALresearch.org](http://www.EQUALresearch.org) and contact Hawa Abdullahi ([hawa.abdi@sordi.so](mailto:hawa.abdi@sordi.so)), Emilia Iwu ([eiwu@ihvnigeria.org](mailto:eiwu@ihvnigeria.org)), and Shatha Elnakib ([selnaki1@jhu.edu](mailto:selnaki1@jhu.edu))

## Acknowledgements

This brief was prepared by study partners from the Somali Research and Development Institute (SORDI), Johns Hopkins Center for Humanitarian Health, and the Institute of Human Virology Nigeria (IHVN). Other members of the EQUAL research consortium leading studies in the Democratic Republic of Congo, Nigeria, and South Sudan include the International Rescue Committee (IRC) and the Catholic University of Bukavu (UCB). Funding for this work is provided by UK International Development from the UK government.

## References

- <sup>1</sup> State of the World's Midwifery. (2021). In UNFPA. Retrieved from <https://www.unfpa.org/sowmy>
- <sup>2</sup> Homer CSE, Castro Lopes S, Nove A, et al. Barriers to and strategies for addressing the availability, accessibility, acceptability and quality of the sexual, reproductive, maternal, newborn and adolescent health workforce: addressing the post-2015 agenda. *BMC Pregnancy Childbirth* 2018; 18: 55.
- <sup>3</sup> Filby A, McConville F, Portela A. What prevents quality midwifery care? A systematic mapping of barriers in low and middle income countries from the provider perspective. *PLoS One* 2016; 11: e0153391.
- <sup>4</sup> WHO. Midwives' voices, midwives' realities: findings from a global consultation on providing quality midwifery care. Geneva, Switzerland: World Health Organization, 2016.
- <sup>5</sup> Turner C, Bain C, Schluter PJ, Yorkston E, Bogossian F, McClure R, Huntington A; Nurses and Midwives e-cohort Group. Cohort Profile: The Nurses and Midwives e-Cohort Study--a novel electronic longitudinal study. *Int J Epidemiol.* 2009 Feb;38(1):53-60. doi: 10.1093/ije/dym294. Epub 2008 Jan 17. PMID: 18202083
- <sup>6</sup> UNFPA Somalia [Internet]. 2021 [cited 2024 Jun 19]. Somalia's maternal health workforce faces a shortage of midwives willing to relocate. Available from: <https://somalia.unfpa.org/en/news/somalias-maternal-health-workforce-faces-shortage-midwives-willing-relocate>