

**Tier 2 Pilot Grant Letter of Intent: Establishing Proof-of-Concept
Winter 2023**

Project Information

Please provide the following information.

Proposed Project Title	Overcoming gender-based barriers to women in the healthcare workforce in northern Nigeria: a randomized evaluation of Girls 4 Health
Approximate Budget Request	\$64,900

Applicant Information

Please provide the following information for each member of the proposed project team:

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Overview of Proposed Research Plan

Please provide a description of how you intend to develop preliminary data or proof-of-concept. Limit your description to no more than 500 words.

Nigeria's healthcare system is underperforming and underdeveloped (Welcome 2011), but the problem is most severe in northern Nigeria (Wollum et al. 2015). Country-wide, Nigeria has less than 15% of the necessary doctors to meet World Health Organization standards (Ighobor 2023), yet northern Nigeria has even fewer health workers and health training institutions than other regions, despite having a larger population and higher levels of ill health (Adamu et al. 2018).

These deficits manifest severely in maternal and child health; despite having 2.5% of the world's population, Nigeria has 13% of global maternal deaths (NPC and IFC, 2014). Gender mismatch likely

worsens the problem of understaffing. Cultural norms lead women to prefer seeking care from women (Ajayi et al. 2023), but the healthcare workforce in northern Nigeria is male-dominated (Adamu et al. 2018). Estimates suggest that only 10-15% of the skilled healthcare workforce is female (PATHS 2 2010).

Strengthening the female healthcare workforce has considerable potential to improve health outcomes in northern Nigeria by increasing antenatal care and facility-based deliveries (Uzundu et al. 2015). Girls 4 Health (G4H), a project by a community organization called the Centre for Girls' Education (CGE) in northern Nigeria, targets the first step of this process: convincing and enabling high-performing adolescent girls to pursue careers as skilled health care workers.

The study team and CGE will conduct a proof-of-concept randomized control trial of G4H in 28 northern Nigeria secondary schools from January 2024 to June 2025 to evaluate whether G4H's provision of encouragement and tutoring can empower secondary school girls to enter tertiary training institutions and become health workers. This project builds on Dr. Cohen's three-year, multi-project collaboration with CGE (e.g., Cohen et al. 2023) and adds Dr. Sherr's expertise in implementation science in sub-Saharan Africa.

Funding from PHI would enable us to add an August 2024 midline survey to the evaluation. The midline survey will help the study team avoid dropout-based attrition, collect data to evaluate implementation quality (Proctor et al. 2010), and gather intermediate attitudinal and behavioral outcomes to enrich data quality and increase statistical power. We expect to secure a combined \$23.5k in matching funds from the School of Public Health, the Center for Studies in Demography and Ecology, and the Evans School.

Within the midline, we would also test individual-level treatments, building on evidence that low-cost, short-duration behavioral treatments can have large effects on adolescents' academic performance (Hoff & Pandey 2006; Riley 2022) and aspirations (Vervecken & Hannover 2015). Participants in treatment schools will be split between a control group, a conventional self-affirmation treatment, and a counter-stereotyping self-affirmation treatment. The design will enable us to evaluate the absolute and relative effectiveness of self-affirmation and counter-stereotyping in encouraging girls to succeed in the (locally) gender-atypical field of healthcare.

This funding would allow us to not only strengthen the G4H evaluation with a midline survey, but also to identify whether and how psychological barriers are hindering girls' uptake of healthcare training opportunities in northern Nigeria and should be targeted in future programming.

References:

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