

Final Project Report to the End Fund on: Female Genital Schistosomiasis (FGS) Training Workshops to Catalyze Action

4 March 2024



Nicole Vecchio, Amy Nwoku, Caroline Pensotti, Kari Eller, Isis Umbelino -Walker, Charlotte Mbuh, Reda Sadki and Julie Jacobson

Contents

Executive Summary	3
Background	4
Workshop overview	5
Learning Phase 1- FGS Course, May 4-17 th 2023	6
Action Plans	8
Learning Phase 2- Impact Accelerator, November 2023	9
Lightning Chats	12
Lightning Chat 1	12
Lightning Chat 2	13
FGS Peer Support Community	14
Analysis Methodology	15
Findings and Insights	16
Impact: Capacity building and professional development	16
Impact: Action plan development and implementation	18
Impact: Cross-border knowledge exchange	21
Impact: Amplifying the reach	21
Challenges and Adaptations	21
Next Steps	23
Conclusion	24
Annexes	25
Annex 1: Case studies	25
Case Study 1	25
Case Study 2	26
Annex 2: Composite Vignettes	28
1. From Integration to Impact:	28
2. Toward Action Plan Completion	29
Annex 3: Acknowledgements	31
Annex 4: Additional FGS Opportunities	32
FGS Opportunities for Further Impact	32
Annex 5: Qualitative Analysis Methodology	36
Writing the Composite Vignettes	36

Executive Summary

In 2023, Bridges to Development (Bridges) joined forces with The Geneva Learning Foundation (TGLF) to orchestrate a unique digital learning event focused on Female Genital Schistosomiasis (FGS). This ground-breaking workshop was designed to engage health professionals across Francophone Africa, equipping them with the tools to combat, diagnose, treat, and raise awareness of this chronically neglected disease within their spheres of practice and amongst the communities they work with. Locally driven solutions are at the core, fuelling our mission to drive change and foster empowerment amongst health workers on the frontline.

Building upon the success of a previous online peer training course conducted in both English and French, followed by in-person trainings in Ghana and Madagascar, this workshop took things to the next level. We incorporated the latest research and policy developments into new content, ensuring that participants were at the forefront of knowledge and innovation.

The response was nothing short of phenomenal. With a staggering 1,686 applications received; we selected a dynamic cohort of 757 passionate individuals from 20 different countries.

Applying TGLF's digital peer learning-to-action model¹ to the FGS context, the workshop was split into two phases over 7 months. Learning Phase 1 focused on teaching the participants the core competencies for FGS management as well as integrating FGS into health programs and fostering community engagement. Participants were encouraged to not only incorporate these practices into their current work but also to extend beyond where possible. There were 470 attendees and 255 certified completers in the first phase. Surveys before and after the course showed significant increases in confidence and awareness among participants and action plans designed to take local action in each participants individual setting were completed by the 255 completers. Learning Phase 2, the Impact Accelerator, built on the cohort of successful completers and provided motivation and support for implementing action plans developed in Phase 1. In Phase 2, 97 participants made progress on their plan with 21 others fully completing their action plans during the course, demonstrating the program's effectiveness in facilitating change and supporting learners.

Participants exhibited high levels of intrinsic motivation and a steadfast dedication to tackling local challenges head-on, bringing new energy into the digital learning arena. The integration of FGS into existing healthcare programs emerged as a visionary strategy, allowing for maximum impact even amidst resource constraints. Driven by a strong commitment, participants dedicated not only their time but often also their own financial resources into driving forward progress and supporting their peers. Data showcased a remarkable readiness among participants to personally finance (28.7%) or co-finance (9.8%) activities, underscoring their unparalleled dedication.

Despite challenges such as personnel shortages, time constraints, and limited resources, participants were determined to effect change and to share what they had learnt with their communities. **Their collective efforts bore fruit, with an astounding outreach to over 49,000 individuals through awareness campaigns and the training of over 2,600 colleagues.** This monumental achievement signals a resounding triumph in the widespread dissemination of crucial information on FGS.

Beyond these numbers lies the workshop's most significant achievement: a vibrant, interconnected community of FGS champions. This network transcends geographical boundaries, health system levels, professional categories and organizational affiliations, fostering a rich exchange of insights and fortifying the global fight against FGS through new connections with the Global Schisto Alliance's Community of Practice.

^{1.} Watkins, K.E. and Marsick, V.J., 2023. Chapter 4. Learning informally at work: Reframing learning and development. In Rethinking Workplace Learning and Development. Edward Elgar Publishing

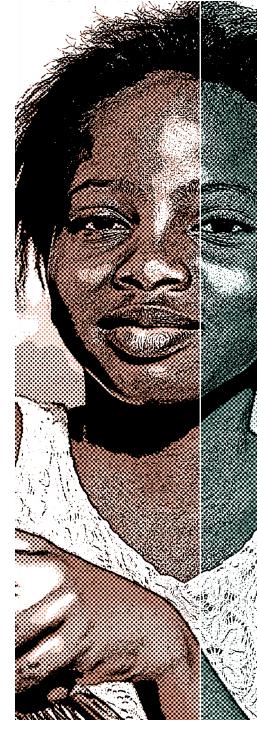
Going forward, it is essential to ignite further advancements, nurturing this dynamic community of practice and reinforcing the collective endeavour to combat FGS thereby transforming individual efforts into a widespread movement for change.

Background

FGS is a chronic complication of schistosomiasis infection which affects an estimated 56 million women and girls globally and is associated with an increased risk of HIV and HPV infection.² FGS is preventable and treatable with the medication, praziquantel.³ Despite its prevalence, FGS remains inadequately reported, underdiagnosed, and largely untreated. A combination of factors including lack of awareness, limited access to healthcare, stigma, and insufficient diagnostic tools contribute to the underdiagnosis of FGS. Addressing these barriers is essential to improving detection and treatment rates for this neglected disease. FGS represents a silent and disregarded epidemic, disproportionately affecting populations already burdened by HIV and cervical cancer in Africa and parts of the Middle East. It epitomizes the struggles of marginalized women and girls, who face a multitude of interconnected health, sociocultural, environmental, and economic obstacles. It is essential to increase detection and proper treatment of FGS, so women and girls no longer suffer the consequences of misdiagnosis and mismanagement and suffer the impacts of this treatable and preventable parasitic disease.

This course was aligned with the FGS Competency Framework, developed through a virtual interactive workshop conducted by Bridges and TGLF in close collaboration with the World Health Organization (WHO) Department of Neglected Tropical Diseases (NTDs). Full details of the competencies developed can be accessed here.4 This framework provides a consensus view on what health professionals need to be able to know and do to diagnose, treat, and prevent FGS. It establishes the competencies that are required to address FGS at various levels in the health system in endemic settings.

The competencies were used as the basis for an online workshop that was developed and implemented by Bridges and TGLF in 2021, in both English and French as part of the FAST (FGS Accelerated Scale Together) Package project. This current course built upon that peer training and the experience gained as part of that course. The Bridges team reviewed and revised the training materials from 2021 to ensure that the course included the latest research and FGS policy developments as well as reflected lessons learned from an in-person training in Ghana and Madagascar in 2022 following the online training.



^{2.} UNAIDS, 2019. No more neglect. Female Genital Schistosomiasis and HIV. Sourced: No more neglect – Female genital schistosomiasis and HIV – Integrating sexual and reproductive health interventions to improve women's lives (unaids.org)

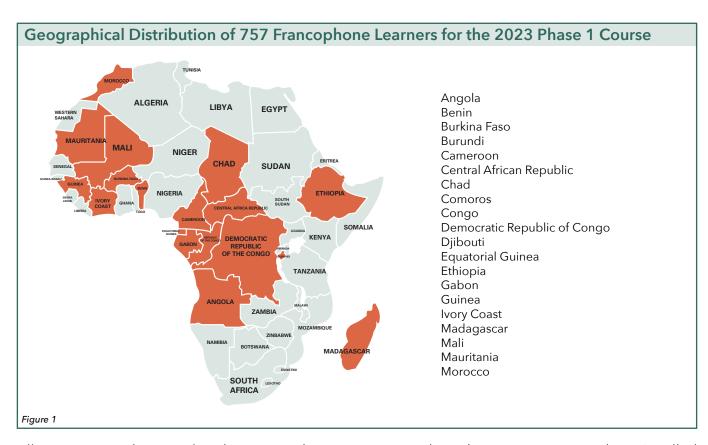
^{3.} WHO, 2015. Female genital schistosomiasis: a pocket atlas for clinical health-care professionals. Sourced: https://iris.who.int/bitstream/handle/10665/180863/9789241509299 eng.pdf?sequence=1

^{4.} Jacobson, J., Pantelias, A., Williamson, M. et al., 2022. Addressing a silent and neglected scourge in sexual and reproductive health in Sub-Saharan Africa by development of training competencies to improve prevention, diagnosis, and treatment of female genital schistosomiasis (FGS) for health workers. Reprod Health 19, 20. https://doi.org/10.1186/s12978-021-01252-2

Workshop overview

TGLF's peer learning model is largely peer-driven but guided and supported by Subject Matter Experts (SMEs) to adapt to the FGS context. Learning is acquired through peer learning, remote learning, social learning and networked learning.⁵ Nine SMEs were actively engaged throughout the workshop content development and implementation of the Learning Phase 1 and five engaged in Learning Phase 2. They included experts from the WHO NTD team, the national NTD program manager of Madagascar, FAST package project team members, and clinicians and OB/GYNs with expert knowledge of FGS. The SMEs were provided a stipend in acknowledgement of their time and contributions to the course.

In March 2023, we launched the call for applications for the FGS Francophone course on the TGLF website; and on Bridges, TGLF and partners' Twitter and LinkedIn accounts; and **received 1,686 applicants.** We selected a total of 756 participants from 19 Francophone African countries and 1 person from France based on criteria including ability and availability to connect, gender, diversity, balance of health system tiers and professional roles, including both providers with ability to perform pelvic exams and those not performing pelvic exams with preference given to Democratic Republic of the Congo (DRC) and other END Fund prioritized geographies. Because of the selection criteria, the demographics of the 757 participants are not reflective of those who applied to join the course as we ensured that we over-selected for females to have gender equity, prioritized OB/GYNs, and country selection was weighted toward END Fund program countries. However, through the selection we tried to ensure geographic diversity that included a broader set of countries that adds to the richness and breadth of the peer-based experience for all participants.



All participants who completed Learning Phase 1 were invited to take part in Learning Phase 2, called the Impact Accelerator. There were 146 applications from 17 countries (see Figure 3) to join the Impact Accelerator, and all were accepted.

5. Watkins, K. E., Sandmann, L. R., Dailey, C. A., Li, B., Yang, S. E., Galen, R. S., & Sadki, R. (2022). Accelerating problem-solving capacities of sub-national public health professionals: An evaluation of a digital immunization training intervention. *BMC Health Services Research*, 22(1). https://doi.org/10.1186/s12913-022-08138-4



Learning Phase 1- FGS Course, May 4-17th 2023

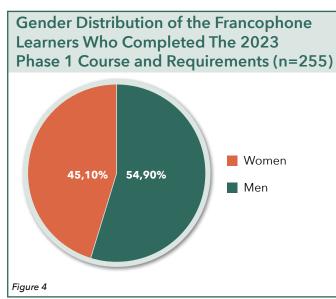
Learning Phase 1 was an online workshop held between May 4th and 17th 2023, conducted over a total of eight online learning sessions, combined with independent project development offline and online peer review. The format of the online sessions followed the TGLF model. It began with a brief introduction to the subject matter followed by small-group discussion of case studies prepared by SMEs as well as realworld challenges identified by learners. This provided opportunities for learners to share experiences and knowledge with each other, with SMEs playing the role of "guides on the side" providing feedback grounded in their own experience, and guidance based on the best available global guidelines on FGS. Alongside the synchronous learning sessions, learners worked independently to develop their own action plans, and then to peer review each other's action plans. The goal of these action plans was for learners to identify what they could do within their own spheres of influence to address FGS. Each learner was then asked to review the action plans of three peers providing comments and feedback that could help them improve. The action plans were then presented during the final meeting where SMEs commented on the plan and gave specific technical advice. Learners then revised their plans, using primarily peer feedback complemented by expert guidance. A learner earned a certificate of completion if they prepared and submitted a draft and final version of their action plan and had peer reviewed other action plans. You can find the introductory presentation from Dr Amadou Garba Djirmay of the World Health Organisation here. A total of 757 participants representing 20 countries were selected for Learning Phase 1. Of these, 470 health professionals from 24 countries attended the workshop.

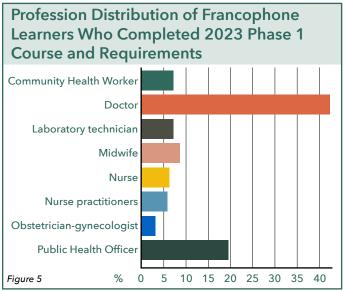
The objective of Learning Phase 1 was to train health care providers in Francophone Africa to integrate FGS into their work by improving their ability to i) assess risk factors, prevent, diagnose and manage the disease and ii) develop an action plan to integrate FGS into their practice and establish and maintain a culture of awareness in their context.

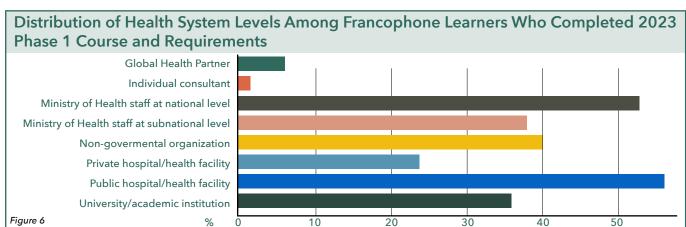
The training content in Learning Phase 1 covered six main topics seen in Figure 3. Focus group work utilizing case studies divided the group into two cohorts for those who perform pelvic examination and those who do not so that skills and learnings could be focused on the knowledge and practice most relevant to each cohort. However, discussion on the case studies happened with the entire group so learnings and insights across cohorts could be shared.



There were 255 certified completers of Learning Phase 1, meaning they had prepared and submitted an action plan and had peer reviewed at least other action plans, attended the sessions, and completed all pre and post surveys. Figures 4 - 6 provide a clear breakdown including gender, job titles, and roles within the health system for the Francophone learners who completed all the course requirements. Men outnumbered women among the learners who completed all requirements. The most common job title was 'Doctor,' followed by 'Public Health Officer.' Learners were predominantly affiliated with public health institutions and government health departments. The distribution of learners suggests a broad representation across different professional roles and organizational types.







An output of Phase 1 was an <u>FAQ document</u>, in which the SMEs responded to a compilation of the participants' frequently asked questions during the course. This FGS FAQ has been published on the Zenodo website to continue to be a reference that is easily available to current and future learners. Further details about the results of the Learning Phase 1 can be found in the <u>June 2023 Periodic Narrative Report</u>. Further detail about action plan development and deployment is in the following paragraphs and the *Findings and Insights* section of this report.

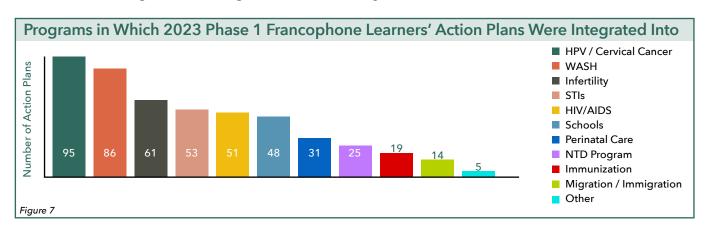
Action Plans

A key output from Learning Phase 1 was the production of feasible action plans, developed by each participant, which focused on what they could do to address FGS within their own sphere of influence. Further guidance around action plan development included special consideration of resources available to them and thinking about integration into existing programs, as this interdisciplinary strategy can maximize impact with fewer resources.

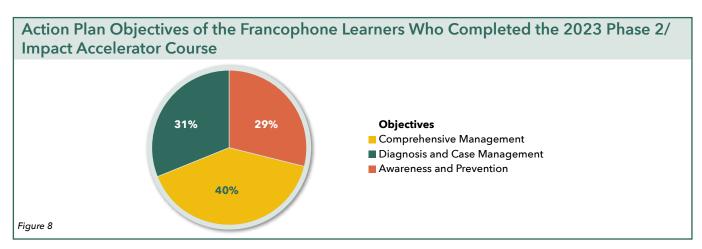
During the workshop, a rubric was employed as a crucial guide to assist learners in developing and reviewing FGS action plans. The rubric served as a comprehensive tool that outlined specific instructions, criteria, and guiding questions for learners to develop each section (e.g., context in relation to FGS, rationale for action including challenge identification, and specific action steps) of their plans and for reviewers to provide focused, constructive feedback. Each criterion within the rubric was associated with a numerical scale (0-4), allowing reviewers to assess and provide targeted advice on improving the action plans, while authors could use it for self-assessment to enhance their drafts before final submission. This structured approach, a key part of TGLF's peer learning model, ensured clarity, consistency, and quality in developing FGS action plans. Each action plan was peer-reviewed by up to three other participants and a selection presented to the SMEs or reviewed in written form for their technical advice and feedback.

Peer review is an important element in the peer learning process. As mentioned above, following submission of the draft version of their action plan, each learner is asked to perform three peer reviews by sharing ratings and additional comments based on specific criteria provided by the rubric. Reviewers' feedback is shared anonymously with the author. Building on the peer-review feedback from peers and guidance from SMEs during online sessions, learners revise their action plan to submit a final version that they would be implementing. Currently, the platform Peergrade is used by TGLF to manage the peer review process. In total, 232 action plans were developed by health professionals from across 20 countries in Francophone Africa.

Of the 232 action plans developed, 82% include a plan for integration with another program, such as HPV/cervical cancer, WASH, infertility, STIs, HIV/AIDS, schools, perinatal care, NTD program, immunization, migration/immigration, or other (Figure 7).



Participants who completed Phase 1 were invited to apply for Phase 2, the Impact Accelerator. In reviewing the 145 action plans of participants who applied for the Impact Accelerator, we grouped them according to three broad objectives shown in Figure 8. The Awareness and Prevention group combines objectives related to raising awareness about FGS and preventive measures. Diagnosis and Case Management group includes objectives focused on improving diagnostic capabilities, treating FGS cases, managing patient referrals, and registering cases for tracking and monitoring purposes. Comprehensive Management group objectives are multifaceted, encompassing awareness, prevention, diagnosis, treatment, case referral, and registration.



Learning Phase 2- Impact Accelerator, November 2023

After completing Phase 1 of learning, the participants remained connected and updated via the Telegram channel and communications from TGLF. To maintain engagement and enthusiasm leading up to the Impact Accelerator scheduled for November, the participants were invited and encouraged to attend TGLF's "Teach to Reach 9" event. At this event, 16 former FGS course participants shared their experiences. The session attracted considerable interest, with registrations from 1342 English-speaking and 2209 French-speaking members of the FGS community. They had Zoom attendance of 379 individuals with additional participants able to view on other platforms such as YouTube, Facebook, Twitter and Linked In and also, for those with bandwidth issues, on TGLF's podcast.

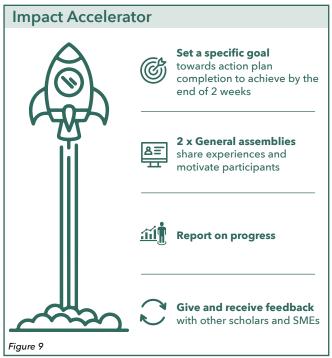


The Impact Accelerator, Phase 2 of the course, was initiated to further support participants who completed the initial training and aimed to bring the learners together to assist participants in actualizing their action plans developed during the first phase. All 255 completers of the Learning Phase 1 were invited to join this Phase 2, designed to offer technical assistance, foster peer learning, and strengthen the network of Francophone healthcare workers focused on FGS. The Impact Accelerator received 145 applications from 17 countries, all of which were accepted. These participants were from a diverse group of Francophone African countries, mirroring the distribution seen in Phase 1, with the majority of participants hailing from the Democratic Republic of Congo, as this country was specifically targeted in Phase 1.

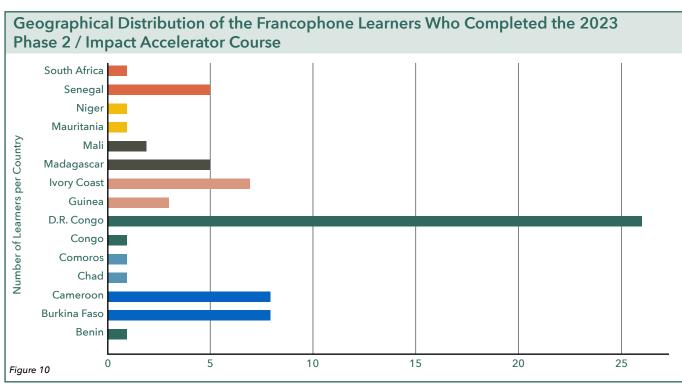
The Impact Accelerator took place from November 6th to 21^{st,} 2023, and included 2 General Assemblies and 2 Lightning Chats, during which learners were invited to share their progress against their action plans with other participants and receive support from their peers and SMEs. This was complemented by offline work on the participants' action plans and direct peer to peer communications. The General Assemblies are available on the TGLF YouTube channel, here:

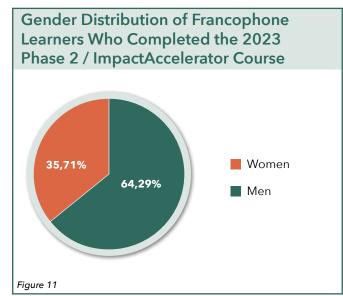
- <u>1st General Assembly on November 6, 2023</u>
- 2nd General Assembly on November 13, 2023

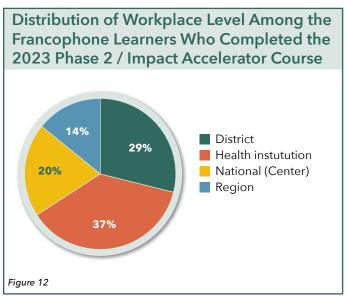
As the Impact Accelerator is designed to help participants make progress on their action plan, they are encouraged to set a goal each week on something that they can do to move forward towards achieving their full action plan. The process for the Impact Accelerator is shown in Figure 9 below.

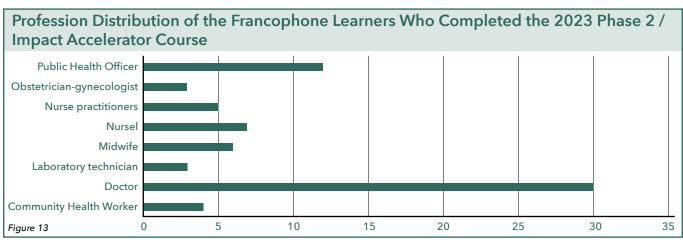


By the end of Phase 2, 21 participants had completed their action plans and 97 others made progress on their plan. We look further into factors that supported action plan completion in the Findings and Insights section. 71 participants achieved a certificate of completion in the Phase 2 course, meaning they completed the activities designed to help them implement their action plans and completed the post-course survey. The figures below show the countries, professions, and health system levels of the completers. The gender distribution among participants was 64.6% male and 35.4% female, aligned with the composition of the completers, 64% male and 36% female. Again, we found that those that completed the Impact Accelerator came from across the health system and health professions as seen in Figure 10 through 13 below.









Lightning Chats

Bridges and TGLF held a series of online 'Lightning Chats' to further connect participants and facilitate discussion on implementation of action plans, successes, challenges faced and plans for the future. SMEs were also invited to participate to provide feedback and guidance.

Two participants were invited to speak: Annie Maloba from DRC and Boris Tiako from Cameroon.

Lightning Chat 1

Recording available here

Annie Maloba from DRC, is a Public Health specialist and chief researcher at the Institut Supérieur des Techniques Médicales in the town of Kamina, province Haut Lomami, where she also teaches students.

Diagnosis for schistosomiasis, including pelvic examinations, colposcopy and urine tests, are available at her nearest referral hospital in Kabondo-Dianda. Cases of infertility, STIs, and cervical cancer are treated at the facility each month. However, there is a lack of awareness about FGS both within the facility and amongst community health workers (CHWs). Essential



medications such as praziquantel for FGS treatment are not available, and mass drug administration for schistosomiasis has never been conducted in the province.

Annie's primary focus for her action plan was to train 80% of health workers at Kabondo-Dianda hospital to be able to diagnose and treat FGS. She also planned to sensitise 80% of women of reproductive age (WRA) in her local area about the disease and to hold training sessions for CHWs to be able to recognise FGS symptoms and risk factors. Annie held training and sensitisation sessions at Kabondo hospital for clinicians as well as CHWs. She described a high level of engagement, particularly amongst CHWs who hold a key facilitation role, bridging gaps between communities and health services.

Following implementation of her action plan, Annie revealed that awareness of FGS in the local community had increased, and health workers had begun to focus on the importance of behaviour change and health education to prevent NTDs. She revealed a tragic case of FGS misdiagnosis which resulted in one patient being referred for a full hysterectomy. Despite ongoing challenges with misdiagnoses and lack of awareness, Annie feels she has contributed to improved knowledge and skills among healthcare providers and community members as a result of attending this digital peer learning workshop.. She feels positive about the future and intends to keep working hard to raise the profile of FGS.

Lightning Chat 2

Recording available here

Boris Tiako, from Cameroon, is a public health specialist currently working in health promotion and disease prevention, with a focus on communicable diseases such as TB and HIV. He works at Monatélé district hospital, on the banks of the Sanaga River in central Cameroon, 80 km north of Yaoundé.

He told us that an estimated ten million Cameroonians are affected by intestinal worms - two million of those by schistosomiasis. Women and girls of reproductive age constitute the most vulnerable group: "These parasitic diseases result in stunted growth, decreased intellectual development, increased morbidity, vulnerability to other diseases,



and even infertility... the impact of the infection on girls and women is particularly severe..."

Boris feels that one of the main challenges in his country is lack of awareness and education amongst the local population on schistosomiasis prevention. Overall, the level of knowledge and awareness of FGS among Boris' colleagues, CHWs, and the community at large, is very low. The district has some Praziquantel supplies, but not enough for the whole population, and the last mass drug administration campaign took place in 2022. He has also noticed that FGS can be associated with social stigma and cultural taboos, which can prevent patients from seeking medical care or sharing their diagnosis with their family and community. He emphasises the importance of combatting stigma.

His action plan focused on three main activities:

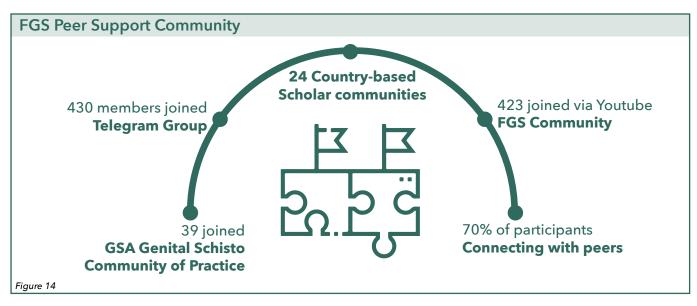
- Raising community awareness on FGS through social mobilization using radio broadcasts
- Training all staff at Monatélé District Hospital, especially midwives and doctors, to be able to clinically diagnose FGS. He organised 6 sessions of 5-day training covering both theory and practice, including pelvic examination. As a result, 20 healthcare personnel were successfully trained on FGS.
- Organising an FGS screening campaign where 250 women aged between 15-60 were screened for FGS

Boris feels that the training he received on FGS has enhanced his expertise in several key areas, deepening his understanding of FGS causes, symptoms, diagnostic methods, and treatment options. He also feels the training has bolstered his communication skills, enabling him to effectively convey information to FGS patients, and provide them with emotional support throughout their treatment journey. He recognises the significance of interprofessional collaboration in managing FGS, and the importance of issues such as confidentiality, informed consent, and respecting patients' rights in the context of FGS care.

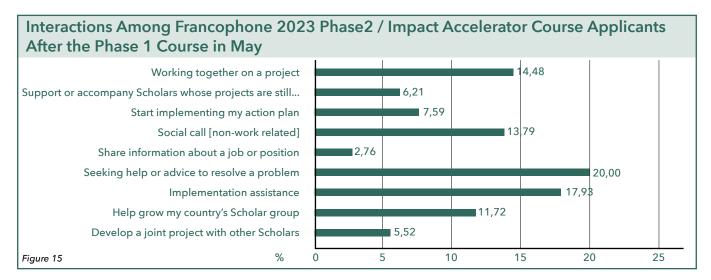
FGS Peer Support Community

Another key objective of the project was the creation or strengthening of an FGS peer support community. Given the substantial engagement and collaboration among participants following Phase 1 of the course in May 2023, this objective was met. A total of 39 individuals joined the GSA Genital Schisto Community of Practice, 430 members signed up for the Telegram group (which provides information about FGS related events and news as well as a platform for peer interactions), and TGLF's evergreen Special Event on FGS brought 423 new individuals to the TGLF FGS Community since the course began.

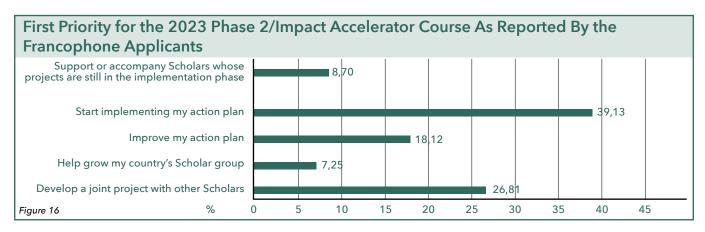
There are country-based communities of TGLF scholars in 24 countries. While these were established for immunization health workers, many have welcomed alumni from the FGS courses as well. Their coordination has been supported by TGLF in the provision of Telegram, WhatsApp or Zoom platforms to enable connection. As one of the country-based communities, there is an established DRC TGLF alumni network which was a focus for the FGS course. This group has successfully integrated interested FGS alumni and connected with the FGS Society of Nigeria and FGS Scholars in Côte d'Ivoire. There are also active groups in Burkina Faso, Cameroon, Guinea, Mali, and Ivory Coast. Each of these networks has its own unique level of engagement and activities, tailored to the interests and needs of its members.



Between Learning Phases 1 and 2, 70% of participants who applied for the Impact Accelerator reported connections with peers, with an average of six peer connections each. The motivation behind these connections was further illuminated in the pre-survey for the Impact Accelerator. A significant portion of the participants (77.2%) contacted their peers after Phase 1 for collaborative purposes including activities such as developing joint projects, providing implementation assistance, supporting ongoing projects, and working together on a project (Figure 15). The highest individual category is for seeking help or advice to resolve a problem, constituting 20% of the contacts. This indicates a proactive approach among participants in leveraging their network to overcome challenges. The participants' commitment to collective growth is also reflected in the substantial percentage of interactions aimed at expanding their local Scholar groups (11.7%). The patterns of interaction between participants signify a robust and engaged community with a clear inclination towards collaboration, shared growth, and the practical application of skills. The propensity for cooperative engagement is further evidenced by the participants' response regarding the importance of the Impact Accelerator course. Those who participated in the Impact Accelerator highlighted the value of collaboration and the support received from peers as a notable aspect of the program (refer to Figure 15 and 16).



As their first priority during the Impact Accelerator, 42.8% of applicants prioritized collaboration and partnership, indicating a recognition of the amplified impact achievable through collective efforts (see Figure 16). This preference for collaboration, along with a noted interest among some participants in expanding their national scholar networks, underscores an appreciation for the benefits of a larger, interconnected community of practice. Such a community can enhance knowledge exchange, provide broader support, and potentially drive systemic changes, reinforcing the project's foundational goal of fostering an effective FGS peer support community.



Analysis Methodology

In order to analyse the impact of the FGS course on the participants we used a mixed methods approach with both qualitative and quantitative data analysis. Most of the data was gathered through a pre-course survey and a post-course survey for each of the 2 Learning Phases (4 surveys altogether). The surveys allowed us to measure learning of FGS case management, awareness of the disease and confidence in teaching others about FGS. We also gathered information about the progress on the implementation of their action plans, the reach of their impact through community awareness, training colleagues on FGS, treating women, how they felt about the course and the impact it has had, as well as the challenges participants were facing and their successes.

The survey data was analyzed in Microsoft Excel and R Software by comparing distinct respondent segments, such as those who completed their action plans versus those who did not. Descriptive statistics were used to summarize and highlight differences between these groups. Insights were then interpreted and presented visually through charts, providing a clear and accessible overview of the findings. This approach allowed for an effective examination of key aspects within the survey data.

A thorough qualitative analysis was conducted on all open-ended survey responses. Analysis followed a six-phase process of identifying patterns and themes. In the first phase, the author familiarized herself with the data. Scholar responses were organized into two groups, those who successfully completed their action plans and those who did not. The author then read through all scholar responses several times and met with the FGS team to ask clarifying questions. In the second phase, the author created a list of preliminary codes and discussed them with the FGS team in comparison to the Personal and Professional Development Framework/PPDF.7 In the third phase, the author combined the codes and discussed nuances of their descriptions with the FGS team, leading to the creation of the FGS Challenges, Strategies, and Results (CSR) Framework. The FGS team also conversed about group differences and possible themes. All scholar responses were then coded and totaled according to the CSR Framework, and example scholar responses for each code were identified. In the fourth phase, possible themes were revisited in a review of all the data. In the fifth phase, two themes were identified along with codes to support them. The two themes, "implemented through integration" and "developing stronger takes time," respectively connect to the scholars who completed their action plan and the scholars who did not. In the sixth phase, scholars' responses representing the two themes were identified. Using each group's example scholar responses per code and theme, initial drafts of two composite vignettes,8 ⁹ 10 were written with assistance from ChatGPT. The initial drafts were heavily revised and additional parts were written by the author. Detailed information on the process of writing the vignettes with ChatGPT¹¹ assistance is found in Annex 5. Written from a first-person perspective, the vignettes (Annex 2), represent the complexity of scholars' experiences around the two themes. Although the vignettes are fictional, the use of verbatim quotes throughout centers participants' voices and deepens the reader's understanding of the context.

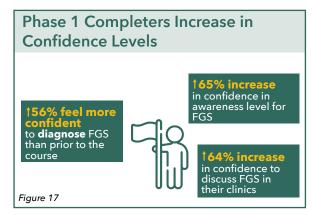
We have also prepared two case studies to evidence the impact of this unique learning approach on two participants, a nurse from Cameroon and District Medical Officer from the Côte d'Ivoire. Both narratives tell the personal story of what these individuals gained from the online workshops and how they have put this into practice in terms of diagnosis, community engagement, active case finding, peer education, advocacy and health education. Both case studies can be found in the appendices of this report.

Findings and Insights

Impact: Capacity building and professional development

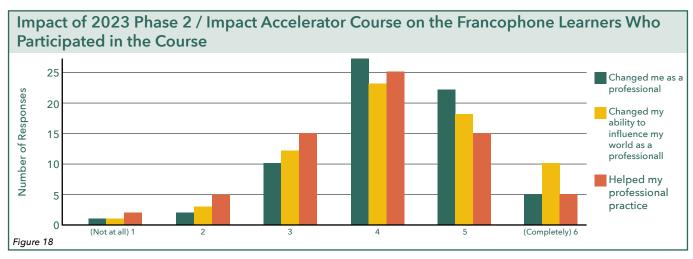
The key purpose of this course was to empower health professionals to be able to prevent, diagnose, treat and raise awareness about FGS. Surveys that were completed before and after Learning Phase 1 showed the impact of this course on the learners' confidence levels in FGS management (increase by 56%), their awareness level of FGS (increase by 65.8%) and their confidence to discuss FGS in their clinical settings (increase by 64%) (Figure 17). It is of note that the baseline survey showed a high awareness of FGS than the course conducted in 2021 so the knowledge gained built onto a pre-existing knowledge base for some learners.

- 6. Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3(2),* 77-101. https://doi.org/10.1191/1478088706qp0630a
- 7. The Geneva Learning Foundation/TGLF. (2024). Listening and Learning at Teach to Reach 9 (IA2030 Listening and Learning Report 5). [Report under review].
- 8. Jasinski, L., Nokkala, T., & Juusola, H. (2021). Reflecting on the value of vignettes in higher education research: Toward a preliminary typology to guide future usage. *European Journal of Higher Education, 11*(S1), 522-536. https://doi.org/10.1080/21568235.2021.1999841 9. Knight, R. L., Mackintosh, K. A., Hudson, J., Shelley, J., Saynor, Z. L., & McNarry, M. A. (2023). Battling the unknown: Using composite vignettes to portray lived experiences of COVID-19 and long-COVID. *PloS one*, 18(4), e0284710. https://doi.org/10.1371/journal.pone.0284710
- 10. Fader, N., Legg, E., & Ross, A. (2020). Finding a sense of community in youth soccer: A composite vignette of the refugee experience. Journal of Park and Recreation Administration, 38(2), 2-20. https://doi.org/10.18666/JPRA-2020-9981
- 11. OpenAl. (2024). ChatGPT (Feb 25 version) [Large language model]. https://chat.openai.com

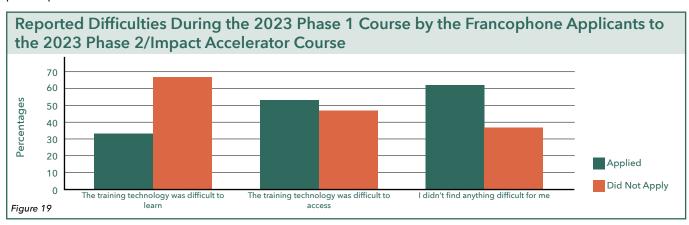


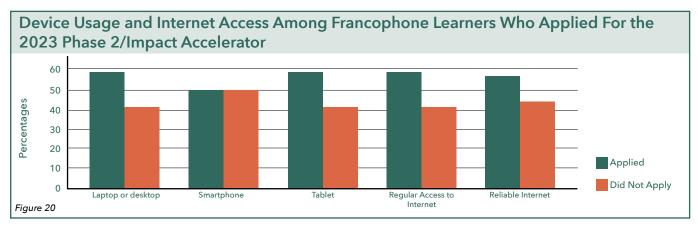
We also found that participants had a high level of intrinsic motivation to help their community and develop professionally. This is demonstrated by the fact that so many voluntarily attended the training, dedicated their time and efforts to developing 232 feasible action plans to make a positive impact in their local area on FGS and continued to engage throughout the Impact Accelerator to progress their action plans. 294/295 completers of Phase 1 also would recommend that a colleague take the course.

The course's impact on professional growth was positively perceived by participants in the post-Impact Accelerator survey, with high scores across the following three questions: "My participation changed me as a professional", "My participation changed my ability to influence my world as a professional", and "My participation helped my professional practice" (Figure 18).



We reviewed the data to see what differences there are between individuals that completed Phase 1 and did not apply for Phase 2 (the Impact Accelerator), and those that did apply to see if there were differences between the groups. People who did not find anything difficult with the Phase 1 course were more likely to apply for Phase 2, with 62% of that cohort applying (Figure 19). Interestingly technology being difficult to access was not a predictor of whether someone would apply. Another area we looked at was on the availability of computer or reliability of access to the internet (see figure 20). Although there were slightly higher percentages of people with access to a computer or a tablet, smartphone users continued to participate and did not self-select out. Similarly lack of regular or reliable access to the internet showed slightly lower applications at 42% and 43%, but even lack of access did not deter participation.



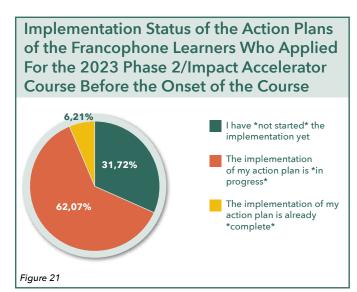


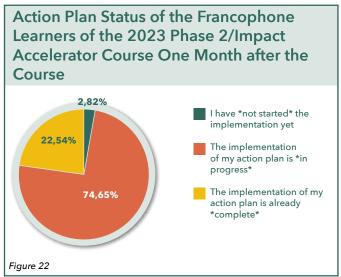
One of the most remarkable findings from this course, was that everyone who participated benefited from, increased knowledge and awareness with a majority taking action and making significant progress even when action plans were not fully completed. This was true regardless of professional affiliation (e.g. doctor, nurse), where they worked within the health system (e.g. regional, global, local), reliable access to the internet, type of device used to participate, country, or gender. The ability to have an effective tool that can reach across all of this diversity and provide value to all categories is a remarkable feat and shows the potential for the approach to be used in other areas as well.

Impact: Action plan development and implementation

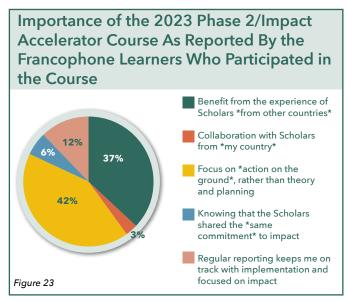
Action plans were developed as part of the Phase 1 and those classified as completers put forward a fully reviewed action plan. In depth follow up on the status of action plans happened when completers were invited to participate in Phase 2, the Impact Accelerator. At that time, progress on action plan implementation and details on progress and challenges was obtained as part of the pre- and post-survey. Therefore, the analysis on action plan progress and impact is focused on the cohort applying for the Impact Accelerator where this data is provided.

The Impact Accelerator demonstrated significant influence on participants' action plan implementation. In the pre-survey (see Figure 21), only 6% of participants had completed their action plans, but this figure rose to 22% post-course (see Figure 22), with the action plans *in progress* increasing from 62% to 73%. This indicates the course's effectiveness in advancing action plan implementation, building opportunities for professional development, increasing motivation, focus and clear goal setting.



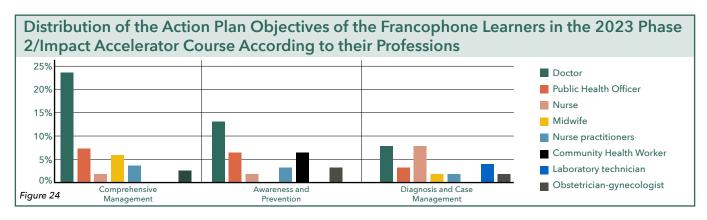


Overall, 93% of participants acknowledged the course's contribution to their action plan implementation, with 95% highlighting the value of the General Assemblies in this context. The emphasis on practical application resonated with 41% of participants (see Figure 23), underscoring a strong appreciation for the tangible, real-world skills and knowledge gained.



In analyzing the factors that made participants more likely to succeed in the implementation of their action plans, we found data that suggests that the course structure and instruction were designed intentionally to help participants achieve success. For example, action plans were generated by the learner from their work and experience and when action plan objectives were analyzed based on the profession of the participants, it is evident that they aligned (see Figure 24). The emphasis on "Awareness and Prevention" by Community Health Workers and Public Health Officers, alongside the preference for "Diagnosis and Case Management" by Laboratory Technicians, underscores a strategic alignment of action plan

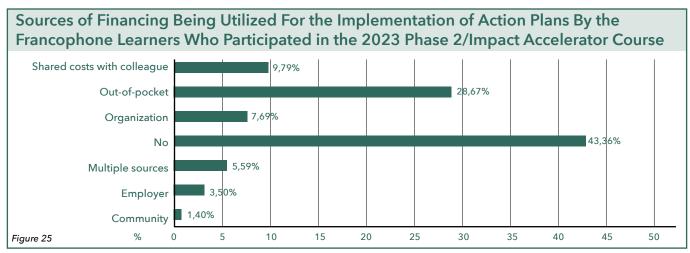
objectives with professional responsibilities. This alignment not only illustrates the thoughtful selection of action plan objectives by healthcare professionals but also emphasizes the necessity of role-specific strategies in enhancing healthcare delivery. Despite the diversity of experience and professions of the learners, the course design was able to accommodate their complementary contributions and overlap between categories by different groups.



This is also supported by the Impact Accelerator data on whether the participant's role includes pelvic exams. For those with objectives focused on "Diagnosis and Case Management," 60% reported conducting pelvic exams as part of their duties. This figure rose to 68.4% among participants with "Comprehensive Management" objectives, indicating a higher likelihood of pelvic exams being integral to their roles. Conversely, only 35.9% of participants focusing on "Awareness and Prevention" included pelvic exams in their professional activities, suggesting a lesser emphasis on direct clinical intervention within this group. Furthermore, when asked if their action plan was part of their job, 77% noted that it was. These patterns underscore a significant correlation between the focus of participants' action plans and their day-to-day professional responsibilities, which aligns with the goal of creating feasible action plans.

The distribution of funding sources for the Impact Accelerator action plans also provides insightful observations. A significant majority, 43.36%, reported not requiring any external funds to implement

their plans, a trend that was consistently reflected among both those who completed their action plans and those who did not. This indicates a common inclination towards developing initiatives that rely minimally on external financial resources. Among the remaining participants, the data reveals a variety of funding sources as shown in Figure 25. This distribution underscores the diverse strategies employed by participants in resource mobilization, with a clear preference for self-funding and minimal reliance on external financial aid. This trend suggests that the course effectively encourages the development of action plans that are feasible within the participants' immediate resource environments, thereby enhancing the practicality and implementation potential of these projects. The data also supported a somewhat surprising finding of willingness of the participants to self-fund out of pocket (28.7%) or co-fund (9.8%) activities demonstrating a high level of commitment and intrinsic motivation.



We found that the both the cost as well as the complexity, in terms of time needed to complete the action plans, might play a significant role in their completion rates. The data revealed a stark contrast in the median costs associated with the action plans, where those who completed their plans incurred significantly lower expenses, with a median cost of \$175 USD, compared to a median of \$500 USD for all participants and the same median for those who did not complete their action plans. This suggests that completed action plans were less costly and potentially less complex, making them more feasible for implementation, especially for participants with budget constraints. Time investment further underscores the complexity factor. Completers spent a median of 2 hours initially, versus 4 hours for non-completers, indicating possibly less complex plans. Therefore, the course data indicates that simpler, less costly action plans were more likely to be completed within the timeframe of the project.

Some Impact Accelerator participants reported that their action plans have been integrated in an official NTD plan or in the work plan of another program. This indicates a substantial level of alignment and acceptance of these action plans within official health programs and initiatives, showcasing their relevance and potential impact on NTDs or related health areas. The data also showed that more of the action plans that were completed (76.2%) had been integrated into an official plan. On the other hand, there was no significant difference between integration in an official plan (50.8%) and no integration (49.2%) for action plans that had not been completed. This suggests a strong correlation between completion of an action plan and being integrated in official plans.

Participants also shared with us numerous challenges when implementing their action plans, including a lack of personnel and limited resources. In the qualitative analysis, we reviewed all of the open-ended survey questions about each learner's experience with action plan implementation and noted which key challenges and strengths were discovered. From this analysis, we have found that they often had to juggle multiple responsibilities within their roles and shortages of essential supplies and medicines which hindered progress. Some found that a lack of community information made it difficult to tailor interventions to community needs. Health workers often found themselves waiting on responses, such

as research results or approvals, before they could proceed, which slowed down the implementation process. Coordinating responses among various stakeholders often proved complex and time-consuming. Securing funding for even small necessities like transportation or printing posters presented a significant barrier for some participants. Concerns about site safety and stability also disrupted some plans, especially in volatile regions. Addressing reluctance or resistance among community members or healthcare staff added another layer of complexity.

Impact: Cross-border knowledge exchange

The course's multi-country focus was a standout feature, with 37% of participants valuing the opportunity to learn from peers in other countries ranked as highest value. Analysis indicates significant appreciation for the course's discussions that focus on practical application and emphasis on international collaboration and idea sharing. This highlights a strong preference for international collaboration and practical, real-world application of knowledge and skills acquired during the program (see Figure 23).

Impact: Amplifying the reach

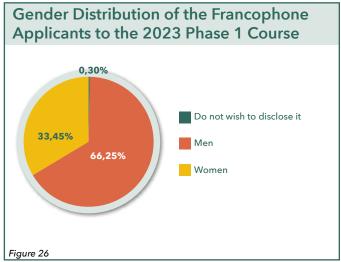
Irrespective of whether participants had completed their action plans, in their applications for the Impact Accelerator, 145 respondents provided details on their involvement with cascade training of health workers and outreach amongst community members since the conclusion of the Learning Phase 1. When asked how many people they had trained or planned to train on FGS, analysis showed a cumulative total of 19,198 individuals would be reached. Subsequently, in the post-workshop survey following the Impact Accelerator, 71 participants reported reaching out to a total of 49,098 individuals through awareness-raising efforts, indicating widespread dissemination of information on FGS and increased numbers after the Impact Accelerator. Additionally, these 71 participants contributed to peer education by training a total of 2,684 colleagues, reflecting knowledge transfer to professionals likely to be directly involved in managing and treating the condition. Participants also noted that they had already treated 2172 women for FGS (excluding one outlier that likely was an MDA figure) and the number of women treated will continue to grow as participants complete their action plans and train more practitioners about this disease. The substantial number of individuals informed about FGS post-course suggests that the participating in this training effectively motivated participants to engage in extensive outreach activities.

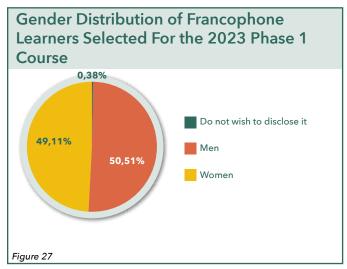
Challenges and Adaptations

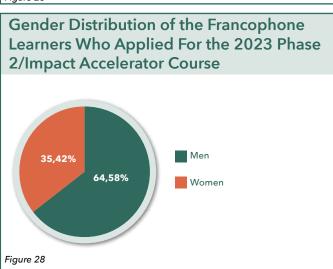
Overall, we find that the FGS training course has been successful and we are confident in the positive impact that it has had in teaching healthcare workers how to manage the disease, raising the profile of FGS, building a collaborative peer network and creating opportunities for community engagement and professional development.

We have, however, encountered some challenges along the way and have strived to adapt and will need to continue to do so to overcome them. A key challenge that we note was ensuring gender equity in the provision of the course. Out of the original 1686 applicants to the course, 66% were male, and only 34% female (Figure 26). We made sure to over-select for females to facilitate gender equity for those enrolled in the course (Figure 27), and the completers of Phase 1 (n-255) continued to be almost balanced (55% male / 45% female) but you could see a slight trend. With the Impact Accelerator in

Phase 2, we still saw fewer females (only 35%) signing up for the Learning Phase 2 (Figure 28). It would be good to further understand this gender disparity and why the drop out occurred.





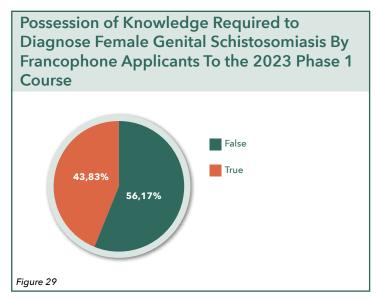


Another important challenge is the difficulty in accessing praziquantel which impacts the ability for the healthcare workers to help those at risk or infected with FGS. This issue came up in the discussions throughout the course, so a question around access was added to the final survey, and we found that 21% of Impact Accelerator completers did not have praziquantel available in their area. This is an area that will require action if we are going to improve the health of affected women and girls.

Another challenge to note is that we could not meet the demand for training. There is a

huge overall need to train healthcare providers about FGS, as demonstrated by the awareness and FGS management knowledge data coming from the pre-course survey (see Figure 29). Many healthcare workers that were interested in learning about FGS were not included in the course in order to keep the number of participants manageable to ensure the best outcomes for the learners. This includes 989

applicants that were not selected to join this course, those that started the course but were not able to finish it, as well as 423 individuals that have joined the FGS Community through the TGLF "evergreen" Special Event on FGS. We are continuing to engage these individuals in FGS communications through the TGLF platform and social media channels and we will reach out to them in future as opportunities for learning arise. The learners have helped with further outreach but more needs to be done to systematically address this gap.



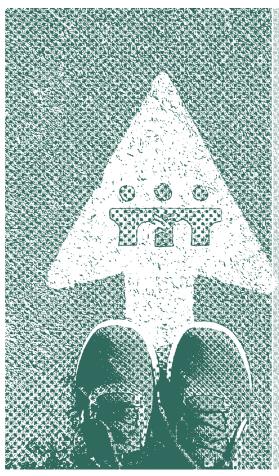
It is important to recognize that the enduring impact of these learners hinges on their ability to implement lasting institutional changes in their workplaces. While they effectively reach numerous healthcare workers, educating them on FGS management and integrating their action plans into local NTD or other program strategies, their progress largely stems from personal motivation and commitment. However, to sustain this momentum, healthcare system endorsement is essential. This ensures that, should these individuals transition to new roles—as illustrated in a case study—there is a maintained institutional record emphasizing the ongoing importance of FGS training and awareness.

Next Steps

The inspiring progress of the FGS scholars in the online training highlights several potential opportunities to continue to move this work forward. First there are activities that would be directly interacting with the FGS scholars included in this most recent Francophone training. A second set of opportunities build off the progress made with a broader set of scholars. And a third area moves into addressing gaps that have been highlighted through this work with the FGS scholars and beyond.

Working with the Francophone FGS scholars:

1. The two-week Impact Accelerator is referred to as a launchpad by TGLF. It is used as an opportunity to support Scholars and encourage them to continue to pursue the implementation of their action plans. As part of the Impact Accelerator, TGLF has the opportunity to reconnect with participants every six months to discover if they have made progress, especially amongst those who had not yet started or completed implementation. This would be an opportunity to further gather information on progress and have some focused low-cost interventions. This could also provide an opportunity to potentially follow up on the reasons for the gender imbalance in those completing the course.



- 2. There is the opportunity to follow up in supporting the development of a francophone FGS network inspired by the work of the FGS Society of Nigeria. A similar program of work in support of this creation of a network in the francophone countries could yield great returns.
- 3. Several of the Francophone identified action plans have elements that could benefit from further follow up and potential seed funding. The action plans and potential impact could be mapped, and opportunities aligned with the END Fund goals could be pursued.
- 4. An in-person training that would be designed to take the FGS scholars who have been introduced to FGS and its issues in endemic countries, could be developed and implemented similar to the trainings that occurred in Ghana and Madagascar. This would further develop an SME pool that could be tapped for future activities in francophone countries.
- 5. As part of opportunity one or as a standalone, seed funding could be provided to support FGS scholars to participate and strategic meetings in the region to share their experience and knowledge on FGS with a broader audience. This could further amplify the impact on training of health care providers and potential reach to affected individuals within the francophone countries.

Activities with the broader set of FGS scholars:

- 1. Activities 2 through 4 above could be applied to the broader set of FGS scholars who have been trained through the online FGS course. This would not limit the potential applicants to being part of the cohort trained through the END Fund resources.
- 2. A meeting in the region could be convened that would bring together the FGS scholars and global FGS experts and researchers to review progress, highlight challenges, and identify new opportunities, and target research to continue progress.
- 3. There is the opportunity to run a further course in English as was done here in French to reach more of the learners who have expressed interest but could not be accommodated. A course in Portuguese could also be conducted as the Lusophone countries have not had the opportunity to receive this training.

A broader list of potential opportunities and needs to continue progress are presented in Annex 4.

Conclusion

The project effectively trained healthcare providers across Francophone Africa, teaching them to manage FGS using an innovative TGLF peer learning model. This strategy facilitated substantial knowledge gains, equipping participants to prevent, diagnose, treat, and care for women and girls suffering from or at risk of FGS. Furthermore, it encouraged turning knowledge into action through the implementation of action plans supported by peer networks, forging meaningful, self-sustaining connections and learning for health care workers throughout Francophone Africa. The course's impact has been significant, demonstrated by the achievements of the 71 participants who completed both phases. Collectively, they have achieved a 692-fold increase in awareness through their outreach actions about FGS and a 38-fold increase in the number of healthcare workers trained. This substantial growth underscores the course's remarkable return on investment and its broad-reaching benefits in enhancing FGS case management. This approach to training was successful at reaching across professional, health system and national boundaries in a shared learning environment. With learners willing to give of their time and their own financial resources to take action against FGS with 32% off participants paying out of pocket to support their plans.

Direct benefit to the participants included developing the knowledge and mindset to:

- Improve FGS diagnosis, treatment, and prevention in their context.
- Compare and share best practices with peers and global experts to improve FGS diagnosis, treatment and prevention.
- Learn from their peers through both formal and informal dialogue as well as giving and receiving feedback.
- Connect with a national and global community committed to improving FGS diagnosis, treatment, and prevention.
- Earn a certificate of participation to demonstrate their learning and practice.
- Develop their digital skills to collaborate and learn remotely.

The course also produced valuable educational materials including FAQs, recordings of the General Assemblies and other live sessions and introduction to FGS seminars. These resources are readily available to those who want to deepen their understanding of FGS, extending the course's reach and impact beyond immediate participants. Links have been provided embedded in this report for easy access.

Annexes

Annex 1: Case studies

Case Study 1

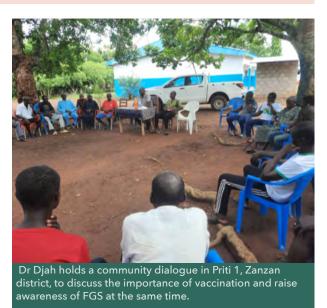
Enhancing Healthcare Management and Community Engagement in the fight against Female Genital Schistosomiasis in Ivory Coast

Dr Olivier Djah, a medical doctor with over 10 years' experience, is the District Health Director responsible for overseeing healthcare operations in Zanzan district, in the northeast of Ivory Coast. His role includes coordinating district activities, supervising and training healthcare personnel, managing resources and overseeing logistics.



Impact of FGS Training:

Having participated in the online training on FGS with Bridges to Development and the Geneva Learning Foundation, Dr. Djah developed a keen interest in the disease and is actively raising awareness among healthcare professionals in his local area to improve detection and reporting within their field of operation. He emphasizes the importance of collaboration amongst healthcare professionals, integrating FGS awareness into consultations, encouraging referrals, and advocating for the inclusion of FGS diagnosis, treatment and care in annual action plans. While his role focuses on coordination rather than direct patient care, Dr Djah now oversees FGS-related health education for patients and their families through community dialogues, feedback mechanisms, and patient surveys.



Dr Djah's role community health through implementation of Ministry of Health directives - organising campaigns (including praziquantel distribution to treat schistosomiasis), vaccination programs, and promoting essential public health practices such as hand washing and mosquito nets. He leads community dialogues and mobilisation efforts ahead of health campaigns and has used these platforms to sensitise the community on FGS. He has also included FGS awareness in the district's action plan and aims to involve healthcare workers under his supervision to enhance FGS surveillance in different localities.



What the future holds:

Dr Djah has ambitious plans including setting up a laboratory for FGS diagnosis, establishing FGS referral systems, and involving Community Health Workers in active case finding. A firm commitment to improvinghealthcare management and community engagement in tackling FGS. Through collaboration, advocacy, and personal growth, he hopes to make a significant impact in the fight against this neglected tropical disease, ensuring a healthier future for his local community.

Case Study 2

Raising the profile of Female Genital Schistosomiasis in Cameroon: the importance of prevention and health education

Alain Dakan is a Reproductive Health Nurse Specialist in Limbe, southwest Cameroon. His career spans from Community Health Worker to his current position as Health Promotion and Community Engagement Manager with Médecins Sans Frontières (MSF).

Alain's assesses the health needs in humanitarian crises, including host communities and internally displaced persons, developing health promotion and community engagement strategies coordinating MSF services. He engages with patients, ensuring person-centred care and fostering trust within the community. He gathers his team to plan and implement activities, including community sensitisation activities, case referrals and epidemiological surveillance.



Alain holds an information session for health workers in Limbe, Cameroon to raise awareness of FGS.

Impact of FGS Training:

The FGS online training with Bridges to Development and the Geneva Learning Foundation was a pivotal experience, equipping him with the skills needed for effective community engagement, and helping build professional connections the scholar network. FGS awareness is low amongst health workers and the community in Limbe - a coastal city in Cameroon - and this training not only broadened Alain's understanding but also strengthened his ability to integrate FGS diagnosis, management and surveillance with other health services. After

completing the training, he was able to support colleagues to diagnose and treat a case of FGS in a young woman - an experience which has stayed with him.

Alain faces numerous challenges including community resistance, volatile environments, supply shortages and limited mobile network but he remains committed to raising the profile of FGS both with colleagues as well as the communities he works with. He recently organised an online workshop to raise awareness of FGS amongst health workers and takes every opportunity to emphasise the importance of educating, diagnosing, and managing patients with the disease. Alain feels the training he received has significantly enriched his professional practice. "It has deepened my understanding of the disease, enhanced my ability to recognise FGS symptoms, to differentiate between STIs and FGS, and improved my patient management skills…with a focus on prevention, education, and patient care".

What the future holds:

Alain recently started his new role with MSF, but FGS is not currently included in MSF's annual strategic plan. He hopes to change this by raising awareness and identifying cases amongst the communities he works with. He believes in the transformative impact of continuous learning and professional development and remains committed to encouraging active patient participation in decisions regarding their health.



1. From Integration to Impact:

Accelerating FGS Health Initiatives Through Action Planning

Participating in the learning cycle brought me to a newfound understanding and sense of professional growth. I learned that in my country Female Genital Schistosomiasis (FGS) is "a neglected disease," and I learned about "its symptoms, complications, how to diagnose, treat, and prevent it." Conversations I had with other scholars in "FGS endemic and non-endemic areas" allowed me to "have a global look at the epidemiology of FGS in the world" to discover how it has been "previously ignored and yet common in our community." I felt compelled to share about it with my colleagues and I developed "PowerPoint presentations on FGS." After listening to what I had learned, they, too, were "convinced like me that a few things can be done to further protect women and girls against certain diseases." As we saw it, one of "the major challenge(s)...is to get health workers to make the clinical and/or presumed diagnosis of FGS and to declare them in the reporting of the health facility's activities." To carry out our action plans at the level we envisioned, we knew this would mean raising awareness and capacity building with key health leaders, and also, the community. Most importantly, we knew that our ability to accomplish our goals was linked to the strategic integration of our activities to the existing healthcare framework. We set to work "sensitizing the zonal medical officer, hospital director, and data manager of the health zone...Despite the challenge of "not hav(ing) enough resources," they suggested leading "advocacy with the partner who supports the fight against Neglected Tropical Diseases (NTDs) and certainly capitalize on the resources given for other NTDs." Working together, we began training the providers of the maternity department of the hospital."



Trainings took place during regular clinical meetings and focused "on the aspects of prevention, patient orientation, diagnosis, treatment and evolution of FGS" using the "World Health Organization atlas" as a guide. Then, we went to other health zones, making our way through the entire province. "The zonal medical officers (were) made aware" and screening protocols are now in place in the "respective health centers." We also set up a "WhatsApp alert group" for real-time reporting of suspected FGS cases. The result was a profound increase in the capacity to screen for and treat FGS, as evidenced by the first six reported women "who presented with persistent gynecological manifestations" being relieved of their symptoms. It was shared that one of the women "came to the maternity ward to be screened for precancerous lesions." After treatment (praziquantel 600mg), "she had no lesions around the cervix." In several health zones, we were able to advocate to make praziquantel "free of charge," an act we would like to become a reality throughout the province. These women's living testimonies of healing in their communities helped pave the way for others to come forward, but we knew that we must also go to them.

We organized "communications through radio" and collaborated with community relays, nongovernmental organizations "agents of the youth centers, and the medico-school." They worked more on the prevention and awareness side doing activities like going door-to-door, facilitating "community dialogues," and printing "posters on FGS." Despite very little or "no funding," they worked "in a staggered manner," integrating activities into their current work, and doing others as they can. This has not been easy as there is "almost nothing as a budget for this fight" to help with "transport, communication, and sometimes accommodation and catering." These expenses are "because traveling throughout the entire province cannot be done on foot, and even less by a person. It takes a team of people," but they have been "keen" to help and have done so at their "own expense." With so many activities going on and planned, support and guidance from experts during the learning cycle were invaluable in "choosing actions" and fellow scholars' advice "strengthened our capacity...to work effectively and efficiently." Through our efforts, we have seen a "change in behavior of the population" and we have now broadened our "differential diagnosis hypotheses." Having learned about and felt the "immense social impact (infertility, separation of couples, stigmatization, discrimination, etc.)" of FGS's neglect, we have not waited to act. "Bilharzia (FGS) is an important parasitic endemic in the world" and "the accelerator was like a watchdog, or a rooster who came to encourage us to run ahead of time," helping us to realize our collective vision. Through shared commitment, the ripeness of our situation, and the structures in place we found at the ready to support us, we have accomplished our plans and improved health outcomes.

2. Toward Action Plan Completion

Advancing FGS Health Initiatives Despite Complexities

Obtaining support for our action plan was fraught with cultural, administrative, and political hurdles. My initial requests for aid were met with silence, and my colleagues and I were left to wonder about how best to advance. We planned big, hoping to include "gynecologists, reproductive, maternal and child health personnel, Neglected Tropical Disease program agents, etc....Unfortunately, the campaign ended" before my plan could "be validated by all partners." The path forward was challenging, hindered by the fact that the major "activities I was counting on to integrate are done once a year." At the time, we did not "see any activities on the ground" that would be an alternative entry for the plan as it was originally written. Our minds raced with many questions.

What should we do "to build accountability and obtain the trust of stakeholders"? What was the best way "to work together to achieve" the results we hope to see from our action planning? And where could we begin when we were "blocked at the level of authorizations"? Yet, in the face of adversity, we found strength in unity, and we started organizing "as quickly as possible to unroll" the possibilities we could not yet see. We



met with health and community leaders to begin raising awareness and we began searching "for data or usable documents on Female Genital Schistosomiasis (FGS)" related to our community. Documents like "a survey of the population," or a map "of FGS endemic zones," should have been available although it seemed like national health leaders were also waiting on funding in a cycle that had us all spinning. Our pleas "for the acquisition of Praziquantel," were heard, but to our dismay, the medication was unavailable when the technical and financial partners also withdrew their support for the same reasons. The launch had inspired us into action, however, at every turn, it felt like we hit a wall.

It was our reflections and conversations with a "world of" scholars and experts from the Impact Accelerator that helped us refine our plan. We began adapting our activities, which led me to "many other ideas" I had not previously considered. "At each session, we took some time to wait" when needed, and focused on "small goals," so that larger or more complex parts of our plan could take root. We persevered, doing what we could, when and where we could. "Flash sessions on FGS during morning work meetings in health structures" occurred without our planning and other opportunities like "endof-year meetings of women's associations" presented themselves. We used these opportunities to help clarify "the confusion between FGS and sexually transmitted infections" and asked anyone listening to help further disseminate the information. I conducted surveys to ascertain the extent of affected women in my area, and following advice from my mentor, I made a written "request to the hierarchy to obtain authorization to implement our plan." I sent the letter with the results of the survey to my direct boss who then forwarded it to the ministry. We received a response! The reply "asked us to train staff in the use of this medication and on FGS." Valuing our own training through the learning cycle, where we shared and helped each other, we decided to hold the training by discussing "FGS widely in the form of a debate, where everyone gives their point of view based on experience and scientific data." One important finding from the debate was that "it is important to listen to the people...to learn more from their professional experiences," a sentiment we echoed, and we made plans for future online trainings to continue conversations.

With each additional event and action, we began to gain momentum, joining "forces with other health professionals" and making "do with what little we could raise," to do more. We held a community "education session...in French and the local language." At the end of the session, "a mother who has had problems with her genital area for a very long time...accepted (a consultation) and...the diagnosis was made (that) she had been suffering from neglected FGS. We resumed our conversations and counseling followed along with treatment. Sometime later, she came back to the hospital to tell me how very well she feels now and also confided that she knew two or three other women who had the same symptoms. (She) asked me if they could come with her. I took my hat off to her and made her an ambassador for the search for suspected FGS cases in her community."

We drew up these blueprints for change in our communities one line at a time, and today, we continue to modify them as we go. Based on what we learned, we submitted a proposal to conduct research and we're eager to hear back as our proposal was pre-selected! This work for us has meant slow but steady networking and collaboration, and we know this happens over years, not days. Big goals require time and "we are asking...to integrate FGS into the national program," to provide chemoprevention, and to offer preventative care before and beyond the campaign. The hierarchy's initial reluctance "to encourage its popularization and encourage providers to take ownership of it" is starting to wane. We have proven ourselves trustworthy and we are finding ways to work together, "taking advantage of the activities planned to move the line." Our initial feelings linked to the "cancer that we feared" in our communities are showing signs of the "disappearance of all the lesions observed at the start." We are now moving into a new phase of our action plan, and we will not stop. The barriers to implementation we face are high but "the inequalities and barriers these women face when it comes to accessing adequate care and treatment" are higher. Rest assured, "the plan is underway."

Annex 3: Acknowledgements

As this course is based on peer-learning, we must firstly acknowledge the contributions of the participants throughout the course, especially the peer review process and sharing about their experiences, challenges and progress. The sharing of personal experiences is a key learning opportunity as well as motivation for other learners.

We would also like to thank the Subject Matter Experts for their invaluable contributions throughout various stages of the course, including the review process, course briefings and debriefings, action plan evaluations, the creation of the Frequently Asked Questions document, and their presence during live sessions. Workshop participants gained a lot from the opportunity to engage with and learn from leading figures in the fight against FGS.

- Alison Krentel
- Ashley Preston
- Bodo Sahondra Randrianasolo
- Clara Fabienne Rasoamanmihaja
- Dirk Engels
- Amadou Garba Djirmay
- Louis-Albert Tchuem Tchuenté
- Mbolatiana Raharinivo
- Angela Schuster

SMEs Phase 2:

- Amadou Garba Djirmay
- Bodo Sahondra Randrianasolo
- Dirk Engels and
- Mbolatiana Raharinivo

We are grateful for the TGLF team, especially Reda Sadki and Charlotte Mbuh for developing and leading the digital peer- learning process and the exceptional facilitation of the live sessions.

Report writing and overall analysis:

- Isis Umbelino- Walker
- Nicole Vecchio
- Caroline Pensotti
- Julie Jacobson
- Amy Nwoku

Quantitative Analysis:

- Amy Nwoku
- Isis Umbelino-Walker

Qualitative Analysis:

• Kari Eller

Reviewers:

- Charlotte Mbuh
- Reda Sadki

Graphic Design:

Moses Kas

FGS Opportunities for Further Impact

For discussion | 1/18/2024

1. Develop a comprehensive education/training guide for FGS:

Bridges to Development has led and supported the development of training competencies to improve prevention, diagnosis, and treatment of female genital schistosomiasis (FGS) for health workers. Most of the current activities to tackle the knowledge gap amongst health care workers are set on in-service training (people already in the health workforce). There is a need to train and equip the new generation of clinicians and frontline health workers to properly identify and manage FGS. This will assist in breaking the cycles of misdiagnosis and improper treatment, resulting in severe reproductive health complications, impacting the lives of women and girls. With the interest and awareness generated with recent activities and trainings, we have the opportunity to (i) tailor FGS competencies to preservice training (medical and nursing schools) and (ii) create educative tools and curricula building on the online training materials developed through the FAST package, COUNTDOWN, the CIFF FGS Integration project, WHO Atlas and beyond.

We aim to develop a comprehensive curriculum on FGS for healthcare providers. The developed curriculum will be adapted to medical school, nursing school, and public health for broad use and application.

2. Evaluation of the integration of FGS into STI guidance dissemination in Africa. (partnering with Teodora Wi at WHO and Malawi)

In October 2023, as part of the FIG coordination group, Bridges and Frontline AIDS engaged with the NTD and STI teams at WHO to support them with the preparation and inclusion of slides on FGS into the STI guidance dissemination in Africa. A collection of slides were provided for potential inclusion by the WHO STI team, led by Teodora Wi, to incorporate into her presentation introducing the new WHO STI guidance and treatment algorithm in AFRO

In early 2024, Malawi became the first country to incorporate FGS into their National Guidelines for Syndromic Management of STIs incorporate FGS into their STI algorithms. Caroline Pensotti attended the planning meeting for the integration in January 2024. This provides a real time example of integration and how it is put into practice at a national level.

We would now like to follow up and see what worked and explore the outcomes of including FGS in STI guidance.

- a. This follow up would include working with Teodora Wi and her team to see how FGS information can continue to be included in guidance and training for the schisto endemic regions of Africa. Additionally we would engage with the audience that has received the guidance to determine whether there is retention of any information on FGS as well as any programmatic changes due to new awareness on the crossover of FGS and STIs and additional data or support that would support integration We would also explore other opportunities to place the guidance on inclusion of FGS in resources that are available to the STI country teams.
- b. Second, we would like to work with Malawi and evaluate the progress of integrating FGS into the STI evaluation and treatment guidelines. This could provide a case study to support other countries that would similarly like to move ahead.

3. Build on the FGS scholars' network inspired by the UN AIDS initiative "Let Communities Lead" - empowering scholars to take a leading role in FGS initiatives to foster sustainability and inclusive decision making as well as culturally appropriate responses e.g. a speakers' fund to share expertise, diverse perspectives, and valuable insights. Foster the emergence of leadership and connect health workers globally.

Bridges to Development, in partnership with the Geneva Learning Foundation, developed and implemented a series of online, interactive, peer-to-peer training course on FGS targeted at health professionals working at all levels of the health system. These workshops have resulted in a powerful, dynamic, and well-connected network of scholars working to tackle FGS across sub-Saharan Africa.

We would like to establish a speaker's fund to do two things:

- Further empower scholars to take a leading role in FGS initiatives to foster sustainability and expand the reach. The fund will serve as a resource to bring experts, thought leaders, and experienced professionals to conferences, workshops, and symposiums dedicated to FGS research and interventions. This increases share learning among scholars and those working on the frontline. This direct engagement not only enhances the depth of discussions but also inspires collaboration and networking opportunities among attendees, strengthening the overall fabric of the scholars' network.
- Second provide funds for targeted meetings for global experts into meetings like FIGO annual
 meeting and 1 to 2 key sexual and reproductive health meetings to highlight the FGS issue and
 increase global level support and interest. By facilitating the participation of influential speakers,
 the fund contributes to the dissemination of cutting-edge knowledge, sharing of best practices,
 and the exchange of ideas and opportunity for further integration into services.

A speaker's fund would play a pivotal role in raising awareness and mobilising support for FGS-related initiatives. By sponsoring speakers who are experts in the field, the fund can attract a diverse audience, including policymakers, healthcare professionals, and funding organisations. This heightened visibility can lead to increased advocacy, resource mobilisation, and collaboration on a broader scale. Ultimately, a well-supported speakers fund not only enriches the scholarly discourse on FGS but also contributes to building a global alliance of stakeholders committed to addressing the multifaceted challenges associated with FGS.

4. Support development of an FGS society in DRC using the experience in Nigeria, in order to: create awareness about FGS among health professionals and communities, conduct research, active case finding, treatment, case recording, integration with other SRH services, include FGS in curriculum development for healthcare workers.

The most recent END Fund supported francophone FGS course included many healthcare workers from DRC. The Geneva Learning Foundation (TGLF) also has shared that a group of scholars from other TGLF workshops (namely immunization, but some FGS) has established a weekly meeting to share updates with each other as a community of practice. Building on the recent FGS course and the existing community of practice, as well as END Fund's active NTD presence in DRC, we would like to support health care workers in DRC to create an FGS Society of DRC.

This would build on experience in Nigeria. In March 2022 Bridges supported FGS scholars from Nigeria to take an informal WhatsApp group (Nigerian FGS Network) and create a formal FGS Society of Nigeria. The main support provided for the launch of the Nigeria Society included facilitating: network building; the development of a mission, vision and values for the Society; establishing a governance structure; the deployment of training to 5 hospitals in 5/6 of Nigeria's geopolitical zones; the creation of a website for the Society and support to officially launch the Society. The strategic planning for engagement, the pilot

programming sensitization, and the launch activities generated a 618.75% increase in membership, meaning that 345 people had joined the Society to promote change and end the neglect in Nigeria shorty after forming. The Society remains active and growing and is giving a voice to endemic providers in anglophone settings. A similar network in francophone countries would be equally powerful.

5. Convene a meeting for experts in NTDs, HIV, gynaecology, and related fields to look at what has been achieved globally since the 2019 meeting in Liverpool, gaps in research, platforms for integration and collaboration, sharing of best practice, successes, challenges and next steps.

In 2019, a gathering of specialists in NTDs, HIV, gynaecology, and related disciplines took place in Liverpool, UK. The objective of this meeting was to pinpoint key research inquiries concerning the assessment, management, and regulation of FGS, aiming to shape the focus of subsequent operational research on this significant yet chronically neglected gynaecological disease. The session also explored avenues for involvement with vulnerable local communities, domestic gynaecological services, and HIV programs.

Much progress has been made and it is time to a follow up meeting for experts in NTDs, HIV, gynaecology, and related fields to take stock of global advancements in FGS interventions and research since the 2019 meeting in Liverpool. This gathering will provide an invaluable opportunity to assess the progress made in understanding and addressing FGS and related health issues. By collectively examining achievements, experts can identify areas where significant strides have been made, fostering a sense of shared accomplishment. The meeting will serve as a platform to identify gaps in research, pinpointing areas that require further exploration and investment to enhance our understanding of FGS and related health challenges and serve as a forum to outline the next steps in the collective effort to combat FGS, providing a roadmap for future research, intervention, integration, and collaboration strategies.

This meeting could be done in collaboration with multiple partners and build on existing meetings or be a stand-alone.

6. Technical support for Global Fund applications to address FGS integration into other services.

Could include: Disease understanding, Strategic planning, health system analysis, training and capacity building, diagnostic and treatment protocols, community engagement, data collection and reporting, collaboration with stakeholders, advocacy and policy support

We propose to create a cadre of experts to provide technical support to countries applying for Global Fund resources to include FGS. The opportunity is summarized in *Briefing note: Opportunities for Global Fund support for NTDs*, compiled by Dirk Engels. To tap into this funding, there is a gap in supporting countries to include it in their funding requests that signals demand and the ability to further scale. The support from a group with FGS knowledge working with people who understand the Global Fund application process would allow countries to submit successful proposals. There are supporters within the Global Fund and partners as well as countries that are interested, Malawi, mentioned above being one that could be a first wave of this work.

7. TGLF FGS training workshop (English & Portuguese)

To date, Bridges to Development and The Geneva Learning Foundation have developed and implemented two French and one English fully online, interactive, peer-to-peer training course on FGS targeted at health professionals working at all levels of the health system. The purpose of this course is to train health care providers to be able to integrate FGS into their clinical practice by improving their ability to assess risk factors, prevent, diagnose, and manage FGS. Each healthcare professional

develops an FGS action plans to implement in their setting which has had tremendous ripple effects. For the primary courses, we have had a total of 3213 applicants to the course of which 1241 were accepted, 788 attended the multi-day workshops and this all culminated in the healthcare professionals developing 468 local and feasible solutions to tackle FGS. An additional 201 attended the various Impact Accelerator courses and 111 completed them.

As you can see from the number of applicants there is much more demand from healthcare professionals to learn about FGS. It would be impactful now that awareness has increased to conduct a second course in English like the one just completed in French with END Fund support.

There are also more than 60 million people in Lusophone Sub-Saharan African countries that have not been able to take part in these courses so far, so an offering of this course in Portuguese would be very beneficial to increase FGS awareness and skills for the healthcare professionals in those countries.

Annex 5: Qualitative Analysis Methodology

Writing the Composite Vignettes

To write the composite vignettes, the author began by teaching ChatGPT how to edit scholar responses (Step One below). She later used her own further edited version of these ChatGPT produced edits to ask it to create initial drafts of the vignettes (Step Two below). The vignettes found in Annex 2 reflect the author's final edits and additions.

Step One ["CommunityHealthImpact"]: Teaching ChatGPT how to Edit Scholar Responses

The author provided one unedited complete scholar response and the version she edited of the same response for grammar and flow of ideas to ChatGPT¹² to learn how to edit. She asked ChatGPT to analyze its structure using the following prompt: "I want to teach you how to edit a quote. First, I will share with you the unedited text. Then, I will share with you the edited text. Pay attention to how I reordered the words. Next, I will give you a new unedited text and ask you to do the same. Put quotation marks around the original text only." ChatGPT then produced its own version of a different complete, unedited scholar response. The author reviewed ChatGPT's edited response and made further edits to allow ChatGPT an opportunity to refine its editing process. ChatGPT termed this editing process "CommunityHealthImpact." The remaining scholar responses were then edited by ChatGPT with final edits from the author in review of the scholars' original responses. This process was repeated for all selected scholar responses.

ChatGPT described the "CommunityHealthImpact" editing steps as:

1. **Clarify the Objective:**

Start by understanding the primary goal of the text. For "CommunityHealthEdit," the objective was to highlight the success of a community health initiative and its impact.

2. **Identify Key Elements:**

Recognize the crucial components of the story:

- The challenge or problem being addressed.
- The actions taken to address the challenge.
- The results and impact of those actions.
- Personal reflections or future steps.

3. **Reorder for Coherence:**

Arrange the text to follow a logical sequence that starts with the problem, moves through the actions taken, and ends with the results and impacts.

4. **Highlight Personal Investment:**

Emphasize the individual's commitment and personal resources that were invested, showing the dedication to the cause.

5. **Use Direct Quotes:**

Place quotation marks around the original text to maintain the authenticity of the quoted material.

6. **Showcase Collaboration:**

If the text mentions partnerships or collaborative efforts, bring attention to these to underscore the collective effort.

7. **Reflect on the Outcome:**

Ensure that the text ends with a reflection on the success and the broader implications for the community.

8. **Maintain the Voice:**

Keep the original voice and tone of the author, making sure that any edits do not alter the intended message.

Step Two ["ImpactCreationVignette"]: Teaching ChatGPT how to Write Vignettes

Next, the author fed ChatGPT three edited responses around the code "addressing reluctance" and asked it to create a vignette using the following prompt: "Now, I'm going to paste three stories into the chat. Please create a vignette about addressing reluctance from the stories. Make sure to keep quotation marks around text as they are in the stories. The vignette should pull information from each text and be about 1/2 page long. Use as much detail as possible. Use first-person to write the vignette." The term "ImpactCreationVignette" was created by ChatGPT as a shortcut for this process. The vignette produced by ChatGPT was reviewed by the author in comparison to the three edited responses. The author made further edits and returned the edited vignette to ChatGPT to refine its process of creating vignettes.

ChatGPT described the "ImpactVignetteCreation" editing steps as:

- 1. **Define the Purpose**: Clearly identify the aim of the vignette. Are you showcasing the success of a project, illustrating the benefits of a program, or highlighting an individual's journey? Understanding the purpose will guide the content and tone of the narrative.
- **2.** **Gather Information**: Collect all relevant data, stories, testimonials, and any quantitative or qualitative evidence that illustrates the impact. This could involve interviewing stakeholders, reviewing project reports, or collecting feedback from beneficiaries.
- **3.** **Choose a Narrative Style**: Decide on the perspective and voice of the vignette. First-person narratives can offer a personal and intimate view, while third-person narratives provide a broader perspective. The style should align with the vignette's purpose and audience.
- **4.** **Incorporate Key Elements**: Effective vignettes typically include:
 - **Context**: Set the scene by providing background information. Describe the initial challenges or the situation before the initiative began.
 - **Action**: Detail the activities, strategies, or interventions undertaken. Explain how these actions were implemented and who was involved.
 - **Impact**: Highlight the outcomes and changes resulting from the action. This could include changes in behavior, improvements in conditions, or statistical evidence of success.
 - **Reflections**: Share insights or lessons learned. Reflect on what worked well, what could be improved, and the implications for future projects.
- **5.** **Use Engaging Storytelling**: Craft the narrative to engage the audience emotionally and intellectually. Use vivid descriptions, direct quotes, and relatable scenarios to make the story come alive.

- **6.** **Edit and Refine**: Review the vignette for clarity, coherence, and impact. Ensure it communicates the intended message effectively and resonates with the target audience.
- 7. **Share and Utilize**: Determine how and where to share the vignette to achieve its purpose. This could be through reports, presentations, social media, or other platforms relevant to your audience.

Using the edited responses from the group that completed their action plan (theme one), along with all quotes represented in the CSR Codebook for the same group, the author asked ChatGPT to create an "ImpactCreationVignette." The vignette created by ChatGPT was treated by the author as an initial draft, reviewed, heavily revised, and then extended with other scholars' contributions from the same group that were not provided to ChatGPT. This process was then repeated for the group that did not complete their action plan (theme two). The decision to begin with Al-generated initial drafts was made to help populate quotations at random from the selections that may otherwise have not been chosen by the author due to the number and length of participant responses. Additional participant quotes added by the author further supported scholarly representation.

Final Project Report to the End Fund on: Female Genital Schistosomiasis (FGS) Training Workshops to Catalyze Action 4 March 2024



Improving education and health as critical bridges to sustainable development in low and middle-income countries.

www.bridgestodevelopment.org

A Swiss and US nonprofit, tax-exempt organization